The purpose of the Games Project Manual is to provide guidance to the students enrolled in KXG361 & KXG362 Games Project A & B at the University of Tasmania during 2012.

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Introduction

Games Project furthers a student’s understanding of game development at both a technical and professional level. Students undertake a significant game development project using skills acquired from completing previous Games Technology and Computing units. The student develops the critical professional skill of working within a project team on a task of substantial size and dealing with the associated challenges of communication and team management.

Games Project is broken into two units, KXG361 Games Project A and KXG362 Games Project B, which must be completed over consecutive semesters in the same year. Students work on the same project in both units, unless circumstances prevent this.

Each student is placed into a project team of approximately 7 students; you will be involved in forming your own teams. Team size may vary due to class or project size.

Dr Ian Lewis is going to fulfill the role of external producer for each team. The teams are responsible for formulating the game. The producer will supply key design elements; all elements must have a significant presence in the game. The key elements will be announced in the first lecture before the teams are formed.

In Games Project A the team will take a game project from a suitable concept to a satisfactory prototype culminating in a significant game design document and pitch to the review panel. If the project is given a green light by the review panel, it will be developed into a full playable game in Games Project B.

Students are strongly discouraged from working on the game concept before the unit commences; game concepts are to be formulated by the team after the first lecture. Likewise, students are discouraged from working on the project over the semester break as you should be doing exams in other units and you need a rest.

In both units each student will get an individual grade. This grade will be made up of a team component and an individual component. To pass each unit a student must get at least 45% of the marks allocated for each component and greater than 50% overall. Please see the assessment section for more information.

Each team member is responsible for:

- A professional approach to the project and to the other members of the team;
- Doing the tasks allocated to them at the team meetings by the specified date;
- Keeping all appointments with lecturers and team members;
- Contributing at team discussions and hence increasing team intellectual property.

Good communication between everyone leads to success!
Learning Outcomes

On completion of this unit, you should be able to:

1. in development of a substantial game, demonstrate foundational computing knowledge of:
   - programming, algorithms & data structures
   - systems and applications
   - historical and current trends

2. apply knowledge of computing and project management principles and technical skills to guide the development and implementation of a substantial game by:
   - using abstraction and computational thinking
   - evaluating strengths and weaknesses of potential solutions
   - creating artefacts using a variety of templates, techniques and tools
   - following a recognised software development methodology
   - adapting existing and emerging computing technologies.

3. act professionally by:
   - communicating in different modes to diverse audiences
   - adhering to professional and ethical codes of conduct
   - working independently and collaborating in diverse teams
   - considering economic, social, legal, and ethical consequences

Generic Attributes

Knowledge
- Students will be able to apply previous project management, systems analysis, and software development knowledge and independently learn new skills to build a significant game while adhering to deadlines;
- Students will be able to investigate and overcome issues and challenges associated with constructing a substantial piece of software;
- Students will develop research skills to identify and use appropriate systems design and development tools and other resources;

Communication Skills
- Students will demonstrate strong oral and written skills through effective teamwork situations, be able to organise and present well-structured information using communication technologies as appropriate;

Problem-solving
- Students will develop effective problem-solving skills, be able to conceptualize problems and be able to find, acquire, evaluate and manage and use relevant information in a range of media to formulate a significant game;
- Students will have ability to interact effectively with others in order to work towards a common outcome;

Global Perspective
- Students will be able to demonstrate mastery of skills appropriate to professional practice in preparation for the transition to an ICT working environment;
- Students will be able to recognise the critical importance of the field of project management in the development of software systems;
- Students will have ability to interact with members of the ICT industry;

Social Responsibility
- Students need to be able to acknowledge the social and ethical implications of their actions and appreciate the impact games can have on society.
Team Management

Lecturers will form the teams, but you can indicate some of your preferences for team members. Teams will have approximately 7 members, though this may vary due to the class size or project size. The University of Tasmania encourages students to work with students of different nationalities to promote intercultural experiences.

Lead Team Roles

You should think carefully about whom you allocate to the following roles. You may do an initial allocation in the first four weeks, but be prepared to change it at the end of the concept phase as you become more familiar with each other. These roles need to be filled all year. There are other coordination roles for various items that need to be filled for a short term (described elsewhere). You should rotate roles each semester so that you each get different experiences or if you find some team members are not performing well to the detriment of the team (you can rotate roles during semester if you need to).

Project Manager: A project manager manages the team, sets the agenda for and controls the meetings, and liaises between all stakeholders. Their main role is managing task allocation across all aspects of the project; the different leads (below) should supply the tasks and the project manager should allocate tasks at the formal team meetings (task allocation should be as fair and democratic as possible). The project manager ensures that the team submits any required forms. The project manager maintains the task schedule and system component charts for the project. The project manager should take responsibility for the release schedule and post-mortem analysis. The project manager needs to be a good communicator but also have good management skills.

Lead Programmer: The lead programmer locates useful tools and software needed for the project during the concept phase and is responsible for the technical requests document. This person coordinates the technical prototypes during the design phase. They generally implement the starting codebase. They identify implementation modules to be allocated at team meetings. They also maintain program directories, source code, and handle the duties of configuration management during the implementation phase. They are not solely responsible for developing the software, just the coordination/integration. The lead programmer is normally a student with a strong Computing background (particularly in programming).

Lead Designer: The lead designer is the person who coordinates the concept and design of the project. This person is normally one of the main visionaries of the game. The lead designer is responsible for collating/archiving the Concept Document and Design Document. They identify sections/documents to be allocated at team meetings. They are not solely responsible for developing the documents, just the coordinating/collating. They need to have good written skills, and know how to produce professional documentation using Word.

Lead Artist: The lead artist is a visual artist who creates the bulk of the art for the project. The lead artist oversees the art production, maintaining the artistic vision for the game, ensuring the visual consistency of the artwork throughout the project. This person coordinates the prototypes of the art (both paper and digital versions) for the project during the design phase. This person coordinates and maintains the Artwork appendix in the design document. They identify artwork assets to be allocated at team meetings. They are not solely responsible for developing the artwork, just the coordination/consistency.

Team meetings
Each team is required to have one formal team meeting each week. At this meeting you should discuss the project as a whole, check progress on individual tasks and allocate tasks for the coming week. The task schedule should be updated to reflect work completed and work allocated. The project manager should organise times for weekly meetings.

It is important that you have other regular team meetings to work together on assessed items. Changes to the task allocation can only be made if everyone affected is present and the changes should be recorded in the task schedule as soon as possible (otherwise task allocation changes should be made at the next formal team meeting).

Your conduct at team meetings forms part of your assessment for professionalism. This is an individual mark. You should make sure every individual has an opportunity to contribute and that the minutes are accurate.

Workload
KXG361 and KXG362 are time demanding units. You should work steadily on your project throughout the semester. To achieve a passing grade each person should be prepared to work for at least 8 hours per week for 26 weeks (208 hours). If you want to achieve a higher grade you should expect to put in more than 8 hours a week. University guidelines suggest you should spend 10 hours a week on a unit.

Students tend to overemphasize the importance of project, and spend too much time on it, to the detriment of other units and outside commitments. People who put in more than 20 hours a week have their priorities wrong.

The workload is spread out over the entire 26 weeks of the year, if you don’t put in the hours one week, you will find you have to make it up in later weeks. Do not just do work the week it is due. Marks are allocated steadily throughout the unit so leaving all the work to the end of semester (or near a deadline) will not result in a high mark.

Your work habits form a proportion of your individual professionalism assessment. You all get the same mark for the team component, but team members do peer assessment of each other that influences the individual component.

It is important that teams try to balance the workload so that each student is making an even contribution. It may turn out that some students in a team are simply aiming to pass the unit, while others are aiming for a HD. This means the HD student needs to be doing more work of a higher quality or work of a harder nature, but not taking work off the other students. Other team members will influence your mark.

It is the team’s project manager’s responsibility to make sure all the tasks are allocated. The decisions about who does what should be made in a collegial manner at a team meeting. The project manager should discuss (not dictate) task allocation.

This unit provides the experience of working in a team environment. This means that if one person has commitments elsewhere, or is ill, then the rest of the team needs to cover for them. It is essential that if you are going to be absent for any part of the unit that you let the rest of your team (and the unit coordinator) know as soon as possible. This means you can do extra work early to make up for the time and that they can adjust their loads to cover for you while you are away.
Team break up procedure

Once you are in a team you are there to stay for the year, though there is some flexibility in week 1. Unfortunately some teams do experience insurmountable problems (these are very rare) and in some cases it is necessary for an individual to leave a team. An individual could leave the team for the following reasons:

1. Failure to complete work – the student is not contributing to a level expected by the remaining members of the team.
2. Failure of team to complete work – the student feels that other members of the team are not contributing to the level expected.
3. Extreme personality clashes – the student is unable to continue associating with one or more members of the team.

An individual can not leave a team without either the student or team undertaking a three week probationary period unless the individual has found another team that they can join and all members of that team are willing to take on a new member, and (unless it is week 1) all members of the current team are willing to let that member leave. A student can, of course, choose to withdraw from the unit at anytime.

At the management meetings peer assessments and team management will be discussed, and a team or individual could be placed on three weeks probation. At the end of probation a student could be asked to leave the team. This student can then withdraw, or join another team if they know of one willing to have them, or form/join a team with other people removed from teams or if none of the previous are possible work as an individual on another game for the rest of semester.

If an individual or team is put on probation, some or all of the following will occur:

• The student or team will be advised to talk to the University Counsellor;
• The team will undergo a mediation session;
• The individual (or all individuals in the team) will write weekly individual contribution reports and be required to show the work to the lecturer;
• A lecturer will attend the weekly formal team meeting.
**Self and Peer Assessment**

Each team member will be assessing themselves and each other throughout the year. This assessment will take many forms:

- Peer Evaluation Surveys
- Individual Contribution Report
- Work Product Pay Packet

These assessments are due in weeks 5, 9, 13, 18, 21 and 27. Failure to submit an assessment form by the deadline (without a reasonable explanation) will result in a -0.5 reduction in your final grade (max -5).

It is tempting to have a pact with your team members to always give high ratings. You are advised *not* to do this. This encourages individuals not to do their share of the work and you will end up carrying them or submitting sub-quality work. You should respond based on *your* opinion of each person’s contribution. You should find that if you are honest with each other you will all learn more and improve, as students are often in a better position to provide one another with meaningful feedback regarding both technical and interpersonal performance.

**Peer Evaluation Surveys**

These surveys ask a series of questions about a team member’s performance at team meetings and about their work habits. These surveys will be used to evaluate each individual’s teamwork mark for professionalism, worth 5%.

**Individual Contribution Report**

With each submission (eg reports, game, manuals), an individual will be required to write a report stating what was their contribution to the submission. It is important to provide as much detail as possible. This report must be read by all team members who must indicate agreement/disagreement. You must also write a comment about the performance of each team member.

**Work Product Pay Packet**

With each major submission students will distribute $100 (virtual only, not real money) based on their opinion of the contribution by their team members, consider both quantity and quality. You do not have to give out the entire $100 (any remaining amount will be distributed by the lecturer). You can only use whole dollars (no cents). You must also write a comment explaining why you have used this distribution pattern.

For example, students will have $100 to distribute between their team members (including self). If a person believes everyone contributed equally then they should give everyone the same amount, or if they believe that someone did more work than others, they should give that person more, and others less.

If you believe an individual has done above what was required (or asked for) then you can give them a bonus. You can only give one person a bonus, and you can’t give it to yourself. You **must** provide an explanation of why you are giving a bonus. If you strongly believe more than one person deserves a bonus then you must choose one, but in your comment state why the other person also deserves a bonus.

The lecturer will use these dollar amounts in conjunction with the Individual Contribution Reports and Timesheets to calculate an individual mark for that work product for each student.
Teaching Team

The unit coordinator is responsible for:

• Overall design and administration of the units;
• Development of assessment criteria;
• Monitoring the progress of the team project;
• Monitoring the contribution of each individual;
• Assisting in resolving team conflicts, which appear to be affecting the project.

Coordinator and lecturers are responsible for:

• Providing sufficient unit material;
• Providing support and guidance to the team;
• Ensuring students receive feedback;
• Assisting the team to develop project management strategies;

Unit Coordinator:
Nicole Herbert, ext 2908, Nicole.Herbert@utas.edu.au
Producers:
Ian Lewis, ext 2952, ij_lewis@utas.edu.au

Email is welcome at all times, and will be answered when possible. If you want feedback on a document do NOT email documents, put them in your project folder and send an email explaining where and what you would like feedback on. You are strongly encouraged to seek feedback on documents before submission. No feedback is given on the day of submission.

Management Meetings

Each team will have regular management meetings with the unit coordinator. Management meetings are in weeks 3, 6, 10, 15, 19, 22 and 26. The meetings are on Wednesday. Times for the meetings will be organised early in semester. Teams or individuals can meet with any lecturer at any time to discuss project/team issues (this is strongly encouraged).

The purpose of the meetings is to provide high-level management and to receive feedback on your submissions. The progress of a project will be discussed. The unit coordinator is particularly interested in any issues that may exist in the team, and will facilitate mediation if the team requires some attention. These meetings will also give you a chance to notify the unit coordinator of other resources you require for completing your project and getting specific assistance with the next submission.

At these meetings students can be put on probation or removed from the team. The students need to take the meetings seriously and see them as part of the process. The management meetings are very important and failure to attend a management meeting (without a prior reasonable explanation) will result in a loss of one (1) mark.

Producer Meetings

You should organise to have regular meetings with your producer (suggest fortnightly). Your producer will be present at the pitches in semester 1. You must also have intermediate demonstrations with your producer in weeks 17 and 22. The intermediate demonstration is an opportunity to receive feedback on your implementation (as it exists at that time) and make changes before demonstration day.
Project Reports

Each team must submit a Concept Report, Design Report, Review Report and a Final Project Report. All team members must contribute to each report. Each report consists of a number of different documents. Some examples of the different documents are available on MyLO. All documents for all reports must be electronically submitted.

Each document is assessed on the basis of accuracy, usefulness, and quality.

The Concept Report consists of:

<table>
<thead>
<tr>
<th>Document</th>
<th>Extent</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Concept Document</td>
<td>Overview description of the game (not including any prototyping).</td>
<td>13</td>
</tr>
<tr>
<td>Technical Requests</td>
<td>Use template</td>
<td>2</td>
</tr>
</tbody>
</table>

The Design Report consists of:

<table>
<thead>
<tr>
<th>Document</th>
<th>Short Description</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated Concept Report</td>
<td>Update any documents where changes were identified by the lecturer or team</td>
<td>change CR mark</td>
</tr>
<tr>
<td>Release Schedule</td>
<td>Describes the 3 releases</td>
<td>5</td>
</tr>
<tr>
<td>Game Design Document</td>
<td>Detailed descriptions of proposed Game, with relevant detailed gameplay, include, storyboards, artwork prototypes, asset management details, prototypes of experience play/use. It should include an appendix of all artwork, and possibly other appendices.</td>
<td>20</td>
</tr>
</tbody>
</table>

The Review Report consists of the following:

<table>
<thead>
<tr>
<th>Document</th>
<th>Short Description</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release Schedule</td>
<td>Update the Release Schedule (use track changes)</td>
<td>2</td>
</tr>
<tr>
<td>Game Design Document</td>
<td>Update the Game Design Document (use track changes)</td>
<td>5</td>
</tr>
<tr>
<td>Testing Summary</td>
<td>Describe the results of the testing process</td>
<td>3</td>
</tr>
</tbody>
</table>

The Final Project Report consists of the following:

<table>
<thead>
<tr>
<th>Document</th>
<th>Short Description</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postmortem Analysis</td>
<td>A reflection of the lessons learnt</td>
<td>4</td>
</tr>
<tr>
<td>Testing Summary</td>
<td>Describe the results of the testing process</td>
<td>6</td>
</tr>
</tbody>
</table>

Assessment Templates for all these documents are available on MyLO. It is strongly recommended that you read these to ensure you cover the correct material.

Game Concept Document

The concept phase can be separated into three events—high concept(s) pitch, concept proposal pitch and game concept document. The goal of the concept phase is to formulate a concept for your game, present the concept’s selling points to the lecturers, and produce clear and easy to understand documentation. Verbal pitches will be made to the lecturers in weeks 2 and 4, a written game concept document must be submitted at the start of week 5.
The game concept document should overview details such as the genre, target platform, environment, gameplay, and context. The following should be described in detail: genre, target platform, intended technical aspects, influences on the game, and the application of the unit’s keywords. The following should be described (but the in-depth detail should be left for the game design document): game world, basic storyline, main characters, artistic style, primary and secondary goals, core mechanics, and control scheme.

There is a learning module (including template) available on MyLO that describes how to complete this document. The game concept document is a Word document and should be at least 10 pages and no more than 15 pages long, with the body text set at 12pt Times New Roman font. The lead designer should coordinate this document.

**Technical Requests**

A template is available on MyLO along with a learning module that describes how to complete this document. This document is meant to be a one-page document. This document is primarily the responsibility of the lead programmer, though its contents should be discussed with other team members – decisions are made as a team. It must describe your development platform, the programming language(s) you want to use, any development environments or tools you want to use. It must list any other items you will need, such as APIs or DLLs.

**Release Schedule**

There is a learning module available on MyLO that describes how to complete this document. The game concept and design documents are a description of the overall game. It may not be possible for you to implement everything. You need to decide how much you can achieve over the year. This document should be coordinated by the project manager.

A release is a distribution of software functionality. Release 1 should constitute approximately 5 minutes of gameplay (if you have levels at least one substantial level) and a few working prototypes of key artwork assets and be enough executable for the review panel to decide at your green light pitch if you should get the green light to continue with the project. Release 2 should describe what you will implement in semester 2. There may be some things that you just won’t have time to do as part of this unit, these should go into Release 3.

In first semester you indicate what you will have completed for each release. It is very rare that you complete everything you say you will by the end of Release 1; students tend to overestimate how much they can do. At the start of second semester you can re-negotiate Release 2 based on your experience in first semester.

The information about each release is presented in a release schedule. All teams need to do a release schedule. A release schedule is a Word document; it should be about 3 pages long. Each release description should be about a page long, though Release 2 can be longer and Release 3 shorter. Do not simply copy the other documents. You are now describing what will be working at the end of each semester combined with how you are going to do it. It is very important that you identify what a player will be able to do with your game at the end of each release. The release schedule must look professional. It should be written in paragraph form, sections are optional. Do not present a list of dot points.
Game Design Document

There is a learning module available on MyLO that describes how to complete this document. The design document is a Word document and the body text should be at least 20 pages long but no more than 30 pages with the font set at 12pt Times New Roman. The document also has appendices that are NOT included in the page count above. The design document is a living document that is maintained throughout the development and changed frequently; you will submit the original in week 8 and a revised version (with Track Changes on) in week 17. The lead designer should coordinate this document.

The first version of a design document incorporates all or most of the material from the concept document but includes extensive detail and prototypes. The design document should thoroughly document the following aspects: game world, story, characters, artistic style (including asset/artwork/environment/interface prototypes); game play, core mechanics, control schemes (including functional prototypes); asset management (including structure); level designs (including storyboards); and hardware and software platforms (including justification).

The following sections describe some of these elements in more detail.

Asset Management

The design document discusses how assets are created and how they get in the correct format. Think about how textures, sound and character assets are created. Also does your software generate data such as high scores or does the user have the ability to save and load current position and status.

Typically data is stored in a database or is imported/exported using XML or data is simply imported/exported from a data file. If you are using a database you should include database diagrams showing tables, attributes and relationships with detailed description justifying the decisions about tables, attributes and types. If you are going to use XML you need to describe your document type definition or schema, and show some example XML. If your software is going to read/write external text files (data files) you need to provide a detailed description of the purpose and format of these files and the file structure hierarchy.

A general summary of your decisions should be included in the body of your design document; the detailed descriptions should be included in an appendix (eg table structure, schema, file hierarchy).

Asset/Artwork/Environment/Interface Prototypes

Your game will consist of a number of assets (eg characters, locations, option screens, introduction screens, etc). Generally speaking you should do a prototype for each key asset (eg main characters, main locations) and any menu screens (eg options, setup) and any initial introduction screens.

It is important to prototype your artwork to assist with design decisions. Prototyping is also a good opportunity to learn your development language and experiment with your development environment.

When prototyping an asset it is normal to design a number of versions on paper first (sketches), then have a team meeting to decide which ones (or bits of ones) are worth implementing. The paper designs for key assets should then be implemented in the implementation language (modelling tools) for the next stage(s) of the prototype. Once completed, have another team meeting, provide feedback and make changes, and then show them to people external to the team to get feedback, and then update them based on their feedback. Feedback should primarily come from people not involved in the development of
that asset, and for at least the final stages feedback should come from people external to the team.

The week 8 pitch must include a display of your artwork. Some assets will still be at sketch stage, but it is expected that some key assets will be completed/modelled and included in functional prototypes (see below), particularly those required for Release 1.

The design document should describe the art philosophy for your game and some images of your artwork in the body text. The design document should also include an appendix that includes descriptions and images of all your artwork (either sketches or screen shots of models, by week 17 nearly everything should be modelled). This appendix is a living document and should be kept up to date by the lead artist.

Level Design

The design document should include details about all the levels (or equivalent) you intend to include: what is their purpose/goal, what is the hierarchy of levels, how do they relate to the overall goal of the game, for each level what is involved, what will the player see or interact with.

There should be a storyboard for each level (all levels you intend to include in Release 1 and 2). A storyboard consists of a series of diagrams and explanations of the diagrams. The diagrams can be hand drawn.

The design document should include some storyboards in the body text. The design document should also include an appendix that includes the storyboards for all levels (by week 8 there should be the storyboards for at least Release 1 and by week 17 the storyboards for Release 2). This appendix is a living document and should be kept up to date by the lead artist and lead designer.

Hardware/Software Decisions

Typically each project requires you to make some technical decisions – eg what programming language to use, what platform to use, what library to use, etc. These issues need to be researched and decisions made using a logical process. It is this process that is written up in the design document. Normally the lead programmer takes ownership of these decisions, though the documentation is likely to be completed by another team member.

A technical decision has a definite single purpose – eg choose development language, focus on a particular platform. Generally speaking there are a numbers of options available to you and you have to make some sort of choice. To determine an outcome it is normal to have some criteria on which to make the decision. For each criteria there should be a rating system so that each possible option can be ranked against the criteria.

A decision is made in stages. Each stage is investigating a different option against the specified criteria and giving it a rating. Once each option has been investigated, a decision is made on the basis of how each option rated against each criteria.

Each technical decision should be written up in the design document as an appendix using the following sections:

1. An overall description of what decision you are trying to make.
2. A description of the criteria and rating system for each criterion
3. For each option include:
   a. A description of the option.
   b. An analysis of how this option rates for each criterion along with a discussion as to why it was given that rating.
4. A summary table of each option against each criterion and rating
5. A conclusion describing which option has been chosen and why. [This conclusion should also be summarised in the body text of the design document].

**Functional Prototypes**

Teams must develop prototypes showcasing one or more crucial features (game world/play/mechanics) that could be incorporated in the final product. Developing prototypes of gameplay features allows programmers and designers to experiment with different algorithms and usability scenarios for a game. A lot of prototyping is expected to take place during the design phase before the design document is complete. Prototypes act as a proof of concept. Most prototypes will be ported to the game.

Normally the lead programmer takes ownership of these prototypes. You will demonstrate your functional prototypes in your week 8 pitch.

A prototype has a definite single goal – eg how to create a graphical asset, how a particular game feature will work. Generally speaking there are a numbers of options available to you and you have to make some sort of choice. There should be a number of methods you could use to achieve each goal and you need to describe a number of them and then explain why you have chosen the one that you have chosen.

Each functional prototype should be written up in the design document as an appendix using the following sections:

1. An overall description of what you are working out how to do.
2. A brief description of each possible path that could be taken to achieve this goal and an analysis of why you have chosen a particular approach. [This conclusion should also be summarised in the body text of the design document, possibly including screen dumps].

**Testing Summary**

A template is available on MyLO along with a learning module that describes how to complete this document. You complete individual-testing summaries in weeks 14, 17, 23 and 26 and a team-testing summary in week 17 and week 26. The team-testing summary, and the entire testing process, should be coordinated by a Testing Coordinator.

Testing involves the discovery and documentation of defects. Quality assurance is a critical component in game development; game testing is a process of quality control. Testing starts as soon as the first code is written and increases as the game progresses towards a release. A tester receives an identifiable game release from the developers. The game is play tested and defects documented such that the developers can reproduce them. Defects include such things as art glitches, logic errors, level errors, problems with game mechanics, and gameplay balance issues. Testing requires creative gameplay to discover all defects. Testing should include both functionality and balance testing. The defects should be ranked according to an estimate of their severity. “Fun” gameplay is created through an iterative process of implementation, testing, tweaking. It is essential that you refine your gameplay based on user testing.

Testers are responsible for checking that the game works, is easy to use, has actions that make sense, and contains fun gameplay. Testers need to write accurate and specific defect summaries, and if possible, provide descriptions of how the defect can be reproduced. Developers need to document how and when the defects were repaired.
There will be individual testing sessions in semester 2 in weeks 14, 17, 23 and 26. In week 14 you will be testing Release 1, and in all the other weeks you should be testing the integrated game as it exists at that stage. It is the lead programmer’s and testing coordinator’s responsibility to ensure there is a playable/integrated game available to all team members in these weeks.

Testing sessions can be held on days and times convenient for the students but early in the week is strongly recommended. Individual testing does not have to be completed by team members at the same time, and in fact it is best done independently. It is very strongly recommended that you find a testing partner (someone not in your team) and let them use the game and see how many issues they can identify.

Students must use the supplied template to document the defects they identify in an individual-testing summary. You must submit your individual-testing summary in the week for testing (days in unit schedule at the end of this manual). Place the document in your team submission folder in the testing subfolder. Label the file yourusername_week##.doc.

Each individual-testing summary is worth 1% of your final individual report mark.

A team-testing summary is developed in weeks 17 and week 26. Each individual performs individual testing and produces their individual-testing summary. These individual summaries are used as the basis for the team-testing summary. The testing coordinator should amalgamate all the individual summaries into one document and then allocate each defect to one of the lead developers (designer, artist, programmer) to fix each defect and document how and when the defect was repaired. It is strongly recommended that the repairs are completed in a timely manner before the next testing session. So defects identified in week 14 should be repaired before the testing in week 17, defects found in week 17 should be repaired before the document is submitted in week 17. Similarly defects identified in week 23 should be repaired before demonstration day, defects found in week 26 should be repaired before the document is submitted in week 26.

Postmortem Analysis

A template is available on MyLO along with a learning module that describes how to complete this document. This document analyses what went right, what went wrong and what was learned from the project development. The project manager should coordinate this document.
Game Help Documentation

Each team is required to produce an in-built help system, user guide and a reference manual in KXG362. Each item should have a coordinator. The coordinator is responsible for task identification, layout and formatting. Every team member should participate in the text and diagram production. The coordinator does not have to write everything. Some examples are available on MyLO.

Proof read the manuals!!! Every team member should do this!

Help Coordinator(s) (only needed weeks 20-26 in semester 2): You should have a coordinator for the reference manual, user guide and in-built help system. They are in charge of ensuring that item is kept on track. They identify sections/ documents to be allocated at team meetings. They are not solely responsible for developing the item, just the coordinating/collating. They need to have good written skills, and know how to produce professional documentation.

In-built Help System

There needs to be help available to the player within the game. The style of this help is totally dependent on the style of the game. If a player is stuck they should be able to get some advice on how to continue (it can be very general so as not to give away the plot or tricks/techniques in the game). The player should always be able to get help on how to use the gameplay controls and what things (such as appearance, sounds, etc) that they have the ability to change.

The level and detail of help that you should provide is something that you should try to glean from the people you have testing your program and from the questions that you are asked at the pitches.

User Guide

The user guide is written for players. It is assessed on how well players will understand what you are talking about. The user guide must have a very professional look and feel. It is similar in look and feel to the typical booklet you get inside a game case.

This document can be a paged document (.doc or .pdf) or online (.html). The length of this document will vary considerably between teams, but as a guide a 10-A5 page (5-A4pages) document is typical.

You must describe the game only, not your team, not the course. You should have descriptions on how to play your game, in particular the different controls.

Include the following:

- Introduction
- Explain what your game is about
- Include a few screenshots
- Explain each main menu option
- Starting and quitting
- Saving and loading
- Getting help within the game
- Installing – this may be in the reference manual
- Trouble shooting – (explain all error messages, known critical defects)


Reference Manual

The reference manual is written for people with programmer or system administrator ICT knowledge, it is very technical. The main purpose of the reference manual is to aid people who want to change/update your game at a later stage. The lead programmer should have an active involvement in this manual and might be the best person to coordinate this manual.

The length of this document will vary considerably between teams, but less than 50 pages would be unusual. This manual should be in an interactive html format that can be accessed via an index.html file or can be a paged document (.doc or .pdf)

The introduction should explain what your game is about from a technical point of view. This should not be the same introduction that appears in your user guide but it will be similar.

You should explain the general structure of your game, e.g. client/server, stand-alone application.

You need to explain each file, why it exists, and in general what is in it. You do not have to explain every method, so long as there are comments in your code explaining every method. You can use an electronic documentation creator, such as javadoc, to extract your comments that explain each file and method; this information should be put into an appendix.

If your program reads/generates external files or uses a database you need to explain the format of every text file or database table that accompanies your program.

You need a section that covers how to re-compile your program. In particular this must include a list of the source files needed and what versions of software you used to compile your program. You also need to describe the development tools used, including version numbers.

You need to have a section giving an example of how to change the game. You need to give a detailed description of steps a programmer should go through to change your game (including things like tools needed, important files that will need to be changed).

If it doesn’t appear in your user guide then you should have a chapter than covers installing your game. This may occur when the player of the game is not usually the person who installs it (for example, something that works over the Internet). It is very important that this chapter covers every step.

You may also want to include a trouble shooting section, particularly if you have had problems understanding how to get it to install or compile.
Web Page

Each project team is required to maintain a small web page describing their project. This should be in your /public_html/web folder. Create a file called index.html, this is the base for your web page. The web pages will be made available externally via the school webpage, for this reason you can not include any executable features in your webpage, no PHP.

There should be a webpage coordinator. They are *not* solely responsible for developing the webpage, just the task allocation, the look and feel and integration. The coordinator needs to have good communication skills, both verbal and written; artistic talent is useful.

Every website should have a title and menu, a corporate look and feel and be professional looking. The menu must have the following options:

- **Home** – (index.html) has a brief description of the game
- **Team** – first page describes team with team photo, linking to individual pages
  - Each member has page with short resume
- **Tools** – describes the languages and development tools used, including links to other relevant sites.
- **Game** – a clear description of the game developed
  - Include screen dumps if possible, but not executables
  - Do *not* include copies or links to completed documentation
  - Include a trailer (movie) or equivalent

The web page will be assessed at the end of second semester, but an initial assessment is undertaken on Monday of week 22 (the game page does not have to be complete at this time). Teams are advised that all the publicity for demonstration day starts in week 22 and many industry members look at the pages in week 22/23, you are advised to make sure your web page is presentable and up-to-date at this time. You can continue to change your webpage up to week 26. At the end of the year the web pages are moved to the past projects website and are available for eternity.
Pitches

The pitches are very important as you can get some extremely useful feedback that can have a great impact on your progress. There should be a pitch coordinator. The pitch coordinator is **not** solely responsible for delivering the pitches but is likely to be the lead presenter. They identify the focus and order of the pitch and identify pitch tasks to be allocated at team meetings. They are responsible for the coordination/consistency/integration. The coordinator needs to have confident communication skills, both verbal and written.

**Intermediate Pitch Sessions**

Each team will be required to present their progress at regular intermediate pitch sessions. The lecturers will use these sessions to provide feedback and suggestions. All intermediate pitches should be 30 minutes long or less, the main point of these pitches is to get feedback so there must be sufficient time for this to happen (each team will be allocated 50 minutes).

These sessions will be held on Wednesday in weeks 2, 4, and 8. The pitches in weeks 4 and 8 are worth 2.5% towards your final grade. The week 2 intermediate pitch is not assessed but it is critical that you prepare so that you can receive useful feedback. For all the pitches a PowerPoint presentation is expected. Failure to deliver a pitch will result in penalties. If there is more than one team, all the class members are also required to attend the pitch session of all other teams and provide feedback and suggestions.

The concept phase (weeks 1-4) can be separated into three events—high concept(s) pitch, concept proposal pitch and game concept document. The goal of the concept phase is to formulate a concept for your game, present the concept to the lecturers, and produce clear and easy to understand documentation. Verbal pitches will be made to the lecturers in weeks 2 and 4, a written game concept document must be submitted at the end of week 4.

A high concept is a few sentences describing a game. In the week 2 pitch you should present a number of high concept(s), at most double the number of people in your team, and at least 3. The lecturers (and other people) will provide feedback on your ideas to help you decide which game concept you should progress.

A game concept proposal pitch (week 4) is a short presentation that focuses on the one concept your team has decided to develop. The game concept pitch should overview details such as the genre, target platform, environment, gameplay, and context. The following should be included: genre, target platform, intended technical aspects, influences on the game, and the application of the unit’s keywords. The following should also be included (but the in-depth detail should be left for the game design document): game world, basic storyline, main characters, artistic style, primary and secondary goals, core mechanics, and control scheme. This is basically the same information that you are writing in your game concept document.

The design pitch (week 8) should discuss some of the content in the design document: game world, story, characters, artistic style (display asset/artwork/environment/interface prototypes); game play, core mechanics, control schemes (display functional prototypes); asset management; level designs (display storyboards); and hardware and software platforms (summarise justification). This pitch is an opportunity to receive feedback and make changes to your design before submission.
**Green Light Pitch**

You must give a formal presentation at the end of semester 1 (along with all the other teams from KXX331). Lecturers and class members will be invited to listen and bring guests with them. Team members can invite other people (students, family, and employers) to listen. You should treat this process seriously and dress and act in a business-like manner. You should treat this pitch as though you were tendering/competing to develop this game in the real world, you need to justify that it is going to sell. You are aiming to convince the review panel that you should be given a green light to develop the full-playable game in Games Project B.

The green light pitch will be held on Wednesday in week 13. You will be required to attend some of the final presentations by other teams (in KXX331 and/or KXG361).

The green light pitch should be no longer than 35 minutes (less than 20 minutes would be too short); include both a demonstration and a PowerPoint presentation. All team members should participate in preparing the presentation and demonstration. You can have a subset of your team do the pitch or you can all participate. All team members should be available to answer questions. Your green light pitch should contain the following:

- An introduction of your team members
- A description of the game
- A demonstration of the game developed so far
- A description of the tools used
- A description of the difficulties/challenges you have faced
- Justification of the work to be completed in semester 2
**Demonstration Day**

The demonstration will be a public demonstration of your final game. Staff, students and members of the Tasmanian ICT community will be invited to come and look at the final products.

Demonstration days are held in week 24. The Hobart version will run from 10am - 2pm on Wednesday.

Setting up demonstration day takes a considerable amount of time: typically one hour before it starts in the morning and one hour after it finishes. Students from each team will be required to help with the setup and pack up.

There should be a DemoDay coordinator. The DemoDay coordinator is not solely responsible for everything. They identify demo day tasks to be allocated at team meetings. They are responsible for the coordination/consistency/integration. The coordinator needs to have confident communication skills, both verbal and written.

**Demo Day Assessment**

The assessment will be based on how well you market your game and how well you demonstrate the game.

**Demonstration**

You need to prepare a suitable demonstration of your game and be prepared to talk to interested people. At least two people from each group should be available at all times during demo day, and everyone should participate. You should organise a roster.

Your demonstration should contain the following:

- A description before starting to use the game of what the game was all about.
- A complete demonstration of all the standard type features of the game.

The complete assessment criteria will be discussed in the lecture and are available on the MyLO site. The demonstration is worth 6% of your final mark.

**Marketing**

You should decorate your display area (booth) using such things as project posters, pamphlets, name tags. Warning: each team only has limited space, around 0.5m x 1.5m (a computer bench).

The marketing coordinator should coordinate the marketing materials, but all team members should contribute text and diagrams and provide feedback and suggestions.

Each item is assessed on the basis of appropriateness and quality. The money spent on an item has NO impact on assessment – do NOT spend too much money. Demo Day Marketing is worth 5% of the final assessment. There is an assessment of individual contribution to marketing using peer assessment tools.

**Poster**

You should prepare a poster for display on demonstration day. The poster should include the following: title, team members, description of the game, information about tools used, screen dumps that give a good impression of the interface.
Pamphlet
This is typically an A4 sheet of paper, possibly in 3-fold format that describes your game and team. You hand out these pamphlets to visitors to your stall. Printing these pamphlets is the financial responsibility of the team – we suggest no more than 20 pamphlets unless you expect to be extremely popular. Black and white pamphlets get the same marks as colour ones!

Name Badges
Each student should wear a name badge. Printing these is the financial responsibility of the team. Black and white versions get the same marks as colour ones!

Game Related Materials
Depending on the domain of your game you can use interesting artifacts to decorate your area, e.g. sporting equipment for a sporting game.

Giveaways
In the past students have given away lollies or other things such as key rings. This is proving too expensive and this practice is being discouraged in 2012.

Attire
You should treat this process seriously and dress and act in a business-like manner. A coordinated team approach is best, for example matching t-shirts or tops or similarly coloured clothes. It is NOT necessary to buy a suit for the occasion.

Attractiveness
Displaying your materials is just as important as having them. Think about how to use your display space, do not overcrowd, use items to emphasize displays such as boxes to raise height or tablecloths. You will also be assessed on how you attract people to your area and interact with the people around your booth. Do not have too many team members in your area, so that visitors can not see your game.
**Timesheets**

Timesheets need to be filled in when you work on project to keep a record of how much each person is contributing to the project. These will show who is doing what, and that you are meeting the time requirements for this unit. Include lectures, all meetings, any reading you do, any programming, anything to do with the project.

You are required to spend at least 8 hours a week on Project on average. There will be weeks when you won’t do 8 hours; this is not a problem as you should make up the hours in other weeks. The lecturer will only be concerned if you consistently work less than 8 hours. Any excessive contributions will be looked at seriously.

The timesheet system is available via the project website. There is a paper version in appendix A. The timesheets should be kept daily as this is the best way to ensure accuracy. The web server goes down frequently; if the web server goes down on Monday night there will be no extensions granted, as all the times should not be entered at the last minute.

Classify each of the tasks you do as one of the following job codes:

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Tasks</th>
</tr>
</thead>
</table>
| Meeting  | Formal Team, Producer or Management meeting  
Preparing for any of these meetings eg arranging a time for the meeting, phone calls, etc |
| Admin    | Peer Assessment, Task Schedule, reading/writing email relevant to project, writing up minutes of meeting |
| Study    | Reading project manual or online materials, reading other project management material  
Attending lectures  
Reviewing past material from previous years (eg design docs, manuals, marketing materials)  
Web browsing for similar software or software tools  
Web browsing for project content, eg pictures, text  
Experimenting with other similar software, Learning programming languages  
Doing online tutorials about the tools or languages |
| Report   | Any work on a report (concept, design, review, final project), includes both development and proof reading  
Meeting to work as a team (or partial team) on a report  
Does not including prototyping, but does include time writing about prototyping  
Does not include testing, but does include time writing about testing |
| Implementation | Creating software (programming, graphical modelling, whatever is involved in developing system)  
Meeting to work as team (or partial team) on implementation  
Developing prototypes  
Meeting to work as a team (or partial team) on a prototype |

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1 Some teams meet to do work on a specific item, eg requirements document. This should be classed as report not meeting. If the meeting was to work on software, then it should be classed as implementation, not meeting. It should only be recorded as meeting if there was no specific work product produced, just checked or allocated.
Testing software
Meeting to work as team (or partial team) on testing
Implementing the in-built help system

Manuals
User Guide, Reference Manual,
Includes both development and proof reading

Marketing
Pitches, Demo Day, marketing materials, Webpage
Includes both developing material and attending

In the comment field you must describe in detail what you did, e.g. What particular document you worked on and what you did to it; what type of meeting it was and what you discussed. A comment entry would generally be about 10-30 words. Failure to enter proper descriptions will lose marks.

Sometimes it may be hard to know what to classify a task as. Try to be as accurate as possible. For instance, if you have a team meeting to primarily work on a document then classify it as report, but if you have a team meeting to distribute out report work, then classify it as Meeting. Sometimes you may do multiple things in the one session, e.g. you may do some study, and then implementation, and then some administration. You should break the timesheet entry up into separate entries reflecting the amount of time you spent on each job code.

A timesheet spans from Monday to Sunday. A timesheet for the previous week must be completed by the following midnight Monday. A timesheet is assessed based on your level of participation and the following rules:

- Each weekly timesheet is worth 0.5%, to a maximum of 5%.
- The quality of comments may mean you do not earn the full 0.5%.
- If there are less than 5 entries in a week by Monday midnight you will get 0 for that week.
- Any entries added after midnight Monday will be considered late, and will not be counted in the above rule.
- If you average less than 8 hours over a semester (including the late entries), you will score 0 for each week you worked less than 8 hours.
- There are 13 weeks a semester; the three weeks with the lowest score will not be counted, allowing you to have some light work weeks with no penalty.

It is in everyone’s best interest if you each keep honest records. The data on your timesheets (and the number of hours you spend on each work product) is used to evaluate your individual mark for a work product. It is incredibly important that your timesheets are accurate, and that you classify each job you do correctly. Team members should look at each others timesheets and ensure that they are accurate. If your team members are lying about the time they spend on project you should tell the lecturer, as this can impact on your mark.

If it is not on your timesheet, you did not do it!
Task Schedule

At the weekly formal team meeting you should check the progress of each team member on the previous tasks allocated, and provide feedback to that person on their contribution. During the meeting new tasks should be allocated for the following week(s).

Providing feedback to each team member is critical if you want each member to perform and improve. Constructive criticism is necessary: what is good, what is bad, what is missing, how can it be improved. Finally you need to decide who will do the changes (not necessarily the same person).

As soon as possible after the conclusion of the meeting (within 24 hours), the project manager should update the task schedule. This updated task schedule should reflect the progress made on the tasks allocated at the previous meeting and should also show the tasks allocated at this meeting.

The project schedule should be developed using Microsoft Project. There is a template available on MyLO, you should add subtasks as you identify them. There will be lots of subtasks to add.

The schedule must contain accurate records of who has completed which tasks, and a plan showing who is responsible for completing tasks in the coming week or further ahead if decided at the team meeting.

Only tasks relating to project development should be recorded in the schedule. These things relate to anything to do with the production of the project reports, implementing the software, preparing the help documentation, or tasks related to marketing materials (eg pitches, demoday, webpage). These tasks typically take longer than one hour; in fact most will take days or weeks. Do not put meeting attendance, administrative tasks, or tasks that relate to professionalism in the schedule.

After each team meeting the project manager should update the task schedule to reflect the outcomes of the meeting. Once the task schedule is updated the rest of the team should review it (within 24 hours). If changes are required the changes should be made.

The schedule is a permanent document in your submission folder. It must always be up-to-date, within 24 hours of a formal team meeting or any other meetings that change the allocation (remember we know when the team meetings are because you put them in your timesheets). It can be assessed at anytime, but typically just before a management meeting, feedback will be provided at your management meetings.

System Component Charts

Each lead or coordinator (in conjunction with the project manager) should develop a system component chart for their key development items (eg Concept document, Design document, Software, Manual, webpage, demoday, etc). This chart should break the item down into sub-tasks/components. You should use this component chart to identify the critical path and critical sub-tasks. The project manager should maintain the charts. You should use this chart to do task allocation. The sub-tasks should be colour coded to indicate in-progress, completed, not-started.
Assessment

Games Project A Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports</td>
<td>40%</td>
</tr>
<tr>
<td>Game</td>
<td>32%</td>
</tr>
<tr>
<td>Marketing</td>
<td>15%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>13%</td>
</tr>
</tbody>
</table>

Games Project A is 100% internal. Each student will get an individual grade that is made up of an individual component worth 40% and a team component worth 60%. To pass Project A you have to get 45% of both components and more than 50% overall. So to pass Project A you would have to get at least 18/40 for the individual component and at least 27/60 for the team component and at least 50/100. The individual component is made up of: 13% Reports, 12% Game, 5% Marketing, and 10% Professionalism. The team component is made up of: 27% Reports, 20% Game, 10% Marketing and 3% Professionalism. Each person in the team will get the same mark for the team component, so it is very important that you all work as a team and contribute to the best of your ability.

The lecturers will assess each report on the basis of quality, accuracy and presentation. There are two reports (Concept Report (15%) and Design Report (25%)) and the teaching team assesses both. Your contribution to the reports is worth 13% of the individual mark and is assessed by the coordinator using peer assessment tools.

The teaching team will assess the game. The assessment will be based on what you undertook to produce for Release 1. The software assessment, worth 32%, will be performed at the green light pitch. Your contribution to the software is worth 12% of the individual mark and is evaluated by the coordinator using peer assessment tools.

The marketing mark is a combination of your mark for the green light pitch and the intermediate pitch sessions, worth 15%. The teaching team will assess the pitches. All students are required to actively participate in the pitches (or their preparation), which is worth 10% of your team mark. Your contribution to the pitches (or preparation) is worth 5% of the individual mark and is assessed by the coordinator using peer assessment tools. The green light pitch session is worth 10% of your final grade and the pitch sessions in weeks 4 and 8 are worth 2.5% of your final grade.

Peers and teaching team will assess professionalism. The student’s approach to working in a team will be assessed by their team members and form part of the individual component of professionalism (5%). It includes such things as your attendance at team meetings, contributing to the ideas and discussion at the meetings, completing work by deadlines set at team meetings, your ability to work with team members and perform your management/coordinator role. Assessment will be completed using the peer assessment forms. Each student’s level of professionalism can be discussed at management meetings with the coordinator.

The coordinator will assess timesheets and schedule. The assessment for the timesheets is on-going throughout the semester and they are assessed using the rules under the section titled Timesheets, maximum 5% towards the individual mark. The assessment of the task schedule is on-going throughout the semester, and the task schedule is worth 3% of your team mark.

Various penalties will be applied throughout semester. Failure to submit a peer assessment form by the deadline (without a reasonable explanation) will result in -0.5 penalty to your individual mark. Failure to attend a management meeting or pitch session (or rude or abusive
behaviour) will mean a -1 penalty to your individual mark, lateness to a management meeting or pitch session is a -0.5 penalty. Failure by a team to do a pitch is a 1% team penalty, plus the loss of all marks associated with that pitch. Failure to have a team representative at a lecture (without a reasonable explanation) will mean a -0.5 penalty in the team mark. Maximum penalties (-5).

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Team</th>
<th>Ind</th>
<th>Components</th>
<th>Worth</th>
</tr>
</thead>
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<td>27</td>
<td>13</td>
<td>Concept</td>
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<td></td>
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<td>Design</td>
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<tr>
<td>Game</td>
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<td>12</td>
<td>Game</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>max 16</td>
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<td>5</td>
<td>Green Light Pitch</td>
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<tr>
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<td>3</td>
<td>10</td>
<td>Teamwork Penalties</td>
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<td></td>
<td></td>
<td></td>
<td>Penalties</td>
<td>3 max -5</td>
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</table>

Note: When peer assessment is used it is possible for a team member to get more than the amount allocated for the individual mark. In this case the excess can still be counted (up to maximum indicated) towards the student’s individual mark, so long as the combined individual marks do not exceed 40 and the total mark for that item does not exceed the number in the total column.
Games Project B Assessment

24% Reports
38% Game
10% Manuals
15% Marketing
13% Professionalism

Games Project B is 100% internal. Each student will get an individual grade that is made up of an individual component worth 40% and a team component worth 60%. To pass Project B you have to get 45% of both components and more than 50% overall. So to pass Project B you would have to get at least 18/40 for the individual component and at least 27/60 for the team component and at least 50/100. The individual component is made up of: 10% Reports, 12% Software, 10% Professionalism, 5% Marketing and 3% Manuals. The team component is made up of: 14% Reports, 26% Software, 3% Professionalism, 7% Manuals, and 10% Marketing. Each person in the team will get the same mark for the team component, so it is important that you all work as a team and contribute to the best of your ability.

The lecturers will assess each report on the basis of quality, accuracy and presentation. There are two submissions: Review Report is worth 10% and the Final Project Report is worth 10%, the individual testing summaries are worth 4% of your individual mark. Your contribution to reports is worth 6% of the individual mark and is assessed by the coordinator using peer assessment tools.

The teaching team will assess the game, worth 38%. The assessment will be based on what you have produced. The game assessment will be performed at demonstration day (by a panel in week 24) and at the management meeting in your presence in week 26 (by the coordinator) and by the producer who will play your game in swot vac. Your contribution to the software is worth 12% of the individual mark and is evaluated by the coordinator using peer assessment tools. The coordinator will assess the in-built help system in the management meeting.

The marketing mark is a combination of your mark for the demonstration, marketing materials, and team website, worth 15%. A panel (lecturer and PhD students) will assess the demonstration (worth 6%) on demonstration day. The demonstration will be assessed based on how you demonstrate your software. The coordinator will assess how you have marketed your project and how you attract people to your area (worth 5%). The web page will be assessed by the coordinator and is worth 4% of your mark. Layout, grammar, and having the required contents will be assessed. The marketing assessment will include a 5% individual component that is assessed by the coordinator using peer assessment tools.

Teams must produce a user guide (3%) and reference manual (7%), which are assessed by the coordinator. All items will be assessed at the end of the semester. Layout, grammar, and having the required contents will be assessed. Your contribution to the manuals is worth 3% of the individual mark and is assessed by the coordinator using peer assessment tools.

Peers and teaching team will assess professionalism. The student’s approach to working in a team will be assessed by their team members and form part of the individual component of professionalism (5%). Such things as your attendance at team meetings, contributing to the ideas and discussion at the meetings, completing work by deadlines set at team meetings, your ability to work with team members and perform your management/coordinator role. Assessment will be completed using the peer assessment forms. Each student’s level of professionalism can be discussed at management meetings with the coordinator.
The coordinator will assess timesheets and schedule. The assessment for the timesheets is on-going throughout the semester and they are assessed using the rules under the section titled Timesheets, maximum 5% towards the individual mark. The assessment of the task schedule is on-going throughout the semester, and the task schedule is worth 3% of your team mark.

Various penalties will be applied throughout semester. Failure to submit a peer assessment form by the deadline (without a reasonable explanation) will result in -0.5 penalty to your individual mark. Failure to attend a management meeting (or rude or abusive behaviour) will mean a -1 penalty to your individual mark; lateness to a management meeting or pitch session is a -0.5 penalty. Failure to have a team representative at a lecture (without a reasonable explanation) will mean a -0.5 penalty to the team mark. Maximum penalties (-5).

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Team</th>
<th>Ind</th>
<th>Components</th>
<th>Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports</td>
<td>24</td>
<td>14</td>
<td>10</td>
<td>max 12 Review Final Project Individ Testing</td>
<td>10 10</td>
</tr>
<tr>
<td>Game</td>
<td>38</td>
<td>26</td>
<td>12</td>
<td>max 16 Game In-built help</td>
<td>33 5</td>
</tr>
<tr>
<td>Manuals</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>max 5 User Reference</td>
<td>3 7</td>
</tr>
<tr>
<td>Marketing</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>max 7 DemoMarket Demonstration Webpage</td>
<td>5 6 4</td>
</tr>
<tr>
<td>Professionalism</td>
<td>13</td>
<td>3</td>
<td>10</td>
<td>Teamwork Timesheets Schedule Penalties</td>
<td>5 5 3 max -5</td>
</tr>
</tbody>
</table>

Note: When peer assessment is used it is possible for a team member to get more than the amount allocated for the individual mark. In this case the excess can still be counted (up to maximum indicated) towards the student’s mark, so long as the combined individual marks do not exceed 40 and the total mark for that item does not exceed the number in the total column.
## Unit Schedule

The amount of work can seem a little overwhelming, but you do not have to do everything at once, but you do have to work consistently.

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Major Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecture 9-3pm <em>(with KXX331)</em></td>
<td>Concept Report</td>
</tr>
<tr>
<td>2</td>
<td>Pitch Session 9am Lecture (after pitch)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Management Meeting</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pitch Session 9am Lecture 11-1pm <em>(with KXX331)</em></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><em>Lecture 9-11am Monday (catch up lecture if required)</em></td>
<td>Design Report Prototype Software</td>
</tr>
<tr>
<td>6</td>
<td>Management Meeting <em>Split Week for Easter</em></td>
<td></td>
</tr>
<tr>
<td>7</td>
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</tr>
<tr>
<td>8</td>
<td>Pitch Session (Tuesday 9am)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Lecture 9-11am <em>(with KXX331)</em></td>
<td>Implement Release 1</td>
</tr>
<tr>
<td>10</td>
<td>Management Meeting</td>
<td>Prepare Green Light Pitch</td>
</tr>
<tr>
<td>11</td>
<td></td>
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<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Green Light Pitch</td>
<td>Green Light Pitch</td>
</tr>
<tr>
<td>14</td>
<td>Lecture 2-4pm <em>(with KXX332)</em> Testing session</td>
<td>Review Report Testing Release 1 Implement Release 2</td>
</tr>
<tr>
<td>15</td>
<td>Management Meeting</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
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</tr>
<tr>
<td>17</td>
<td>Testing session Producer Demo 2pm</td>
<td>Integrate and Test Software</td>
</tr>
<tr>
<td>18</td>
<td></td>
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<tr>
<td>19</td>
<td>Management Meeting</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Lecture 2-4pm <em>(with KXX332)</em> <em>Double week</em></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
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<tr>
<td>22</td>
<td>Producer Demo 2pm Management Meeting</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Testing Session</td>
<td>Integrate and Test Software</td>
</tr>
<tr>
<td>24</td>
<td>Demonstration Day 10-2pm</td>
<td>Test and Update Software Manuals</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Testing session Management Meeting</td>
<td>Update Webpage Final Project Report</td>
</tr>
</tbody>
</table>

You must have one team meeting each week to do task allocation and other team meetings each week to complete work products. You should have regular meetings with your producer.

All the lectures, management meetings and pitch sessions and Demo Day are on Wednesday, except the week 8 pitch that is Tuesday (as Wednesday is a public holiday).
The proposed schedule for the lecture in week 1 is:

- 9am – Lecture – Introduction & Administration
- 10:30am – Workshop – Team Formation Exercises
- 11:30am – Lecture – Game Development
- 1pm – Lunch
- 2pm – Workshop – Team Meeting
- 3pm – Finish

**Submission Schedule**

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timesheets</td>
<td>Weekly</td>
<td>Monday midnight</td>
</tr>
<tr>
<td>Schedule</td>
<td>Weekly</td>
<td>Monday midnight</td>
</tr>
<tr>
<td>High Concept(s) Pitch</td>
<td>Week 2</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Concept Proposal Pitch</td>
<td>Week 4</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Concept Report</td>
<td>Week 5</td>
<td>Monday 3pm</td>
</tr>
<tr>
<td>Design Pitch</td>
<td>Week 8</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Design Report</td>
<td>Week 9</td>
<td>Monday 3pm</td>
</tr>
<tr>
<td>Green Light Pitch</td>
<td>Week 13</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Release 1</td>
<td>Week 13</td>
<td>At your pitch</td>
</tr>
<tr>
<td>Individual Testing Summary</td>
<td>Week 14</td>
<td>Friday 3pm</td>
</tr>
<tr>
<td>Individual Testing Summary</td>
<td>Week 17</td>
<td>Wednesday 3pm</td>
</tr>
<tr>
<td>Producer Demo</td>
<td>Week 17</td>
<td>Wednesday 2pm</td>
</tr>
<tr>
<td>Review Report</td>
<td>Week 18</td>
<td>Monday 3pm</td>
</tr>
<tr>
<td>Webpage v1</td>
<td>Week 22</td>
<td>Monday 3pm</td>
</tr>
<tr>
<td>Producer Demo</td>
<td>Week 22</td>
<td>Wednesday 2pm</td>
</tr>
<tr>
<td>Individual Testing Summary</td>
<td>Week 23</td>
<td>Wednesday 3pm</td>
</tr>
<tr>
<td>Demonstration</td>
<td>Week 24</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Release 2 (including in-built help system)</td>
<td>Week 26</td>
<td>Wednesday (in MM)</td>
</tr>
<tr>
<td>Individual Testing Summary</td>
<td>Week 26</td>
<td>Wednesday 3pm</td>
</tr>
<tr>
<td>User Guide</td>
<td>Week 26</td>
<td>Friday 3pm</td>
</tr>
<tr>
<td>Reference Manual</td>
<td>Week 26</td>
<td>Friday 3pm</td>
</tr>
<tr>
<td>Final Project Report</td>
<td>Week 26</td>
<td>Friday 3pm</td>
</tr>
<tr>
<td>Webpage v2</td>
<td>Week 26</td>
<td>Friday 3pm</td>
</tr>
</tbody>
</table>

Peer assessment forms are due Thursday 3pm in weeks 5, 9, 13, 18, 21 and 27. You have an additional 72 hours to do the agree/disagree part of the ICR.
Resources

Storage space
There is storage space in \alacritas\project_name (Hobart). The space should be available on Friday in week 1. A team can ask the lecturer for an increase to their quota, if and when needed. The technical manager should organise the folders inside your project folder as follows:

- Reports
  - Concept Report
  - Design Report
  - Review Report
  - Final Project Report
- Manuals
  - User Guide
  - Reference Manual
- Marketing
- Downloads
- public_html
  - project (if necessary)
  - web
- Source
  - Release 1
  - Final Release
- Temp
- Submissions
  - Schedule
  - Testing
  - Week 5
  - Week 9
  - Week 13
    - Pitch
      - Release 1
        - Source
        - Executable
    - Week 18
    - Week 24
      - Marketing Materials
    - Week 26
      - Release 2
        - Source
        - Executable
      - Manuals
      - Final Project Report

If your project is a website then you will need the project folder in public_html. Source, Submissions, public_html, Reports, Manuals, Marketing, Downloads and Temp should be at the top level.

You can only place work relevant to the project inside your project folder.

E-mail
E-mail is a very powerful communication tool that will be used a great deal by the lecturers. It is recommended that you check your e-mail every day.

LPS
Each team can have an LPS account that you can all contribute to. You must share the cost of printing.

MyLO
There are extensive resources for project on the MyLO website, including examples of reports and other submissions.
Appendix A – Timesheet

Name:  
Team:  
Week number:  

<table>
<thead>
<tr>
<th>Date</th>
<th>Start</th>
<th>Stop</th>
<th>Interruption Time</th>
<th>Delta Time</th>
<th>Job Code</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
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TOTAL TIME