

#### **School of Computing Technologies**

# **COSC2635 Building IT Systems**

Assessment 1: Project Proposal

Assessment Type: Proposal

Word limit: N/A (see instructions)

Length: N/A (see instructions)

Due date: Sunday of Week 4 11:59PM (AEST)



5% of group's overall grade

# **Overview**

The project for this course is to work as a group to build a functional prototype of an IT system, this assessment is Part 1 of the Project. Please read the explanation of how the course works and examine the calendar in Week 1 to understand when each of the parts of the project are due.

Please refer to the official group registration announcement about joining your team.

This Project Proposal describes the What, How, and When of the prototype your group will be creating for the project. This assessment is worth 100 points, which contributes 5% of your team's overall grade. The Project Proposal consists of three sections, the marking breakdown is as follows:

Section 1: What = 47 points Section 2: How = 18 points Section 3: When = 30 points

Formatting = 5 points

We have provided a template for the Project Proposal which can be found on Canvas. Use that template to put together your submission.

All sections must be included in your proposal. Do not have a blank or missing section. There is no minimum or maximum word/page count. Use the appropriate number of words/pages you need in order to fulfil the requirements described in this document.

Read each section of this assignment outline below to gain a clear understanding of what is required from your group.





#### **Assessment Criteria**

This assessment will measure your ability to produce a proposal for a project to build a functional IT system. See the rubric for a specific break down of the assessment criteria.

#### **Course Learning Outcomes**

This assessment is relevant to the following Course Learning Outcomes:

CLO 1: Locate and assess tools and resources for IT systems, apply knowledge to a wide variety of experiences in programming or scripting, networks and databases to design and develop IT systems

CLO 2: Identify, decompose and solve problems related to the creation of IT system prototypes





### **Assessment details**

Your task in this assessment is to write a **Project Proposal** for a project to build a functional prototype of an IT system. Your group will endeavour to complete the prototype by the end of Week 12. This is the end of your project timeline.

Everyone enrolled in this subject potentially has a different start point in terms of their IT knowledge. Accordingly, *your* project should be beyond what you can currently accomplish. Each project will be formally approved by your mentor. In terms of time and scope, the proposal should average a **minimum** of **5 project hours per week** over the duration of **8 weeks** for each member of the group. In a team of 6, this would be **240 project hours** in total.

We have identified different areas/streams in which you may choose a project topic. Choose a project stream that your group feels passionate or interested in. Always cross check with your mentor for ideas and to identify the scope of your proposed work. Any "unusual" project (for example, one that does not seem to fit into one of the streams) must be discussed with the Lecturer<sup>1</sup>.

Each team is required to interact with their mentor for **one hour** (minimum 20-minutes live chat), once a week. Your mentor will note your group participation while supervising project progress, and this will form your score for the group participation assessment.

Your project must be formally **approved** in official Team Trello board by your assigned mentor to ensure that your proposal fulfils the requirements before the due date of your submission in order to **be eligible to submit.** 

You are encouraged to collaborate with your team at an agreed time of your group's choosing, throughout the week. At a minimum, you are **required** to synchronously collaborate with your teammates for **at least one hour** each week.

On the following pages each section of the proposal is explained in detail. The formatting guidelines are graded and explained below.

# **Formatting**

Please follow guidelines for formatting your Proposal:

- Font used must be Arial, in black, size 12.
- All figures must be clearly labeled.
- A table of contents should be used with correct page numbers for each section.
- Where possible, please use bullet points so that your group assignment is easily read by the assessor.

(5 points total for formatting)

<sup>&</sup>lt;sup>1</sup> abm.russel@rmit.edu.au





#### Section 1: What

This section describes what your project is about. It should contain the following subsections/headings.

#### **Project Name (2 points)**

This is the name of the product/item you are building. Be creative!

#### **Project Description (5 points)**

The description should:

- 1. Contain enough details so that anyone with reasonable technical capability can unambiguously visualise the proposed product.
- 2. Identify the type of project/stream this is: for example, a 2D Platformer, a Visual Novel or something else.
- **3.** Contain a detailed description of the *functionality* of the product (that is, what the product will do), and enough information to give the assessor a "good feel" of the expected product experience.

#### The Team (10 points)

List your team using the following information:

- Full Names (as per RMIT course registration (please avoid assumed/nicknames)
- Student Email Address
- Your personal background and passion in IT (a few sentences)
- Your strong points or current ability and what you're interested in
- Your challenges in the context of the project
- The specific types of tasks you see yourself contributing to the team?

#### **Demonstrable Outcomes**

List the demonstrable outcomes of your project. Think of this as comprising the functional<sup>4</sup> and nonfunctional<sup>5</sup> requirements that can be measured/demonstrated. If you were to buy your product from the store, what would the packaging describe. List these and include a measure (question you can ask) that validates the outcome. For example: We will produce a digital clock showing the current time on the app. To make this demonstrable you should add, for example, that the current time will be displayed on your application's dashboard?

Break down your demonstrable outcomes into two sections:

#### 1. Minimum Viable Features (MVFs) (10 points)

Describe the features which can be demonstrated.

List at least 5 features. ("The background will be white" is not a **feature**.) For each feature you list, explain how you will validate that the feature has been successfully implemented (Validation Testing).

#### 2. Extended Viable Features (EVFs) (3 points)

If time permits, these features will also be implemented. List at least 3. For each feature you list, explain how you will validate that the feature has been successfully implemented (Validation Testing).





#### **Project Motivation (3 points)**

- Describe what motivated your group to choose this particular project?
- How does it relate to your individual and collective interests?

#### **Project Justification**

Here you will explain how your project scope fulfills the criteria below:

#### 1. Justified Workload (4 points)

As described above, the project involves 5 hours of work per week, for 8 weeks, for each member. This is a total of 240 hours for a group of 6 persons. Use your project schedule to back up your claims. Your project schedule should therefore include approximate hours for various tasks.

#### 2. Beyond Current Capabilities (4 points)

The idea of the project is to extend your current IT knowledge. In this section you will explain what your current knowledge is and how completion of the project will extend it.

#### 3. Project Risks (6 points)

Any project presents specific risks and challenges. By identifying these risks and challenges, you show that you are aware of their potential. This will also help you to deal with these risks should they be manifest.

List three project risks that would majorly interfere with your project outcomes **as well as** three team dynamics related challenges that would significantly delay your project's progress. For each identified risk and challenge, indicate how you propose to monitor and minimize the issue arising.

(47 points total for this section)





#### **Section 2: How**

Has 4 sections, each is described below.

#### Resources and Tools (3 points)

List the technology, tools and resources you will use for each phase of the project. Include hyperlinks to their source and any relevant documentation. Each tool/resource should contain:

- Tool/Resource name
- Short description
- Rationale (why you are using this)
- Specific version (if applicable) and Cost (hopefully zero!)
- Describe any alternatives (simply name and link to them) that you did not use.

#### **Collaborative Workspaces (5 points)**

Describe the workspaces you will use to collaborate? Does everyone in your team know where to find collaborative workspaces within your files/boards etc? List all the workspaces you will be using including:

- URL
- Information on how to access it (examples might be drawn from: Trello, Drive, GitHub, Heroku, Cloud9 etc.)

#### **Communication Expectations (5 points)**

It constitutes an **agreement between all team members** for the communication expectations and responsibilities. This will reduce team member's mismatched understandings and expectations.

#### In particular:

- List the tools you will use to communicate
- Describe the expected frequency of responses
- Describe how you use the tools in the context of your weekly workflow.
- Include a description of an action-plan for **all** team members if a team does not respond to communication sent out by the team or doesn't attend meetings. If you are stuck, immediately consult with your Lecturer<sup>8</sup> for further action.

#### **Decision Making (5 points)**

Describe the following:

- Your team's decision making process (how you have agreed to come to a decision)
- Your team's dispute resolution process (how you deal with specific problems)

(18 points total for this section)





#### Section 3: When

"Failing to plan is planning to fail"

List tasks with enough detail so that the assessor can see what **each** member is meant to be able to demonstrable each week. List the tasks that need to be completed between Week 3 and 12 in order to deliver your project and its final report. Each task should contain the following:

- Descriptive Title, which is hyperlinked to its corresponding Trello card.
- Planned Start and End by (Date)
- Lead by (member's name)

The linked Trello card should include:

- A descriptive title
- A planned start and due date
- The estimated time required to complete the task
- A precise description of the task that is to be completed with any necessary contextual information.
- A description of the artefact the task will produce.
- Who is responsible for managing the task to completion.

Note that the sample cards we have provided as an exemplar can only be viewed once you've formally joined the RMIT BITS CPT111 Trello Team. Your Lecturer will register you in the Trello Team once you have formed a group in week 2.

(30 points total for this section)





## Referencing guidelines

Use RMIT Harvard/APA 6th or 7th ed./ AGLC3/

You must acknowledge all the courses of information you have used in your assessments.

Refer to the RMIT <u>Easy Cite referencing tool</u> to see examples and tips on how to reference in the appropriated style. You can also refer to the <u>library referencing page</u> for more tools such as EndNote, referencing tutorials and referencing guides for printing.

# Academic integrity and plagairism

Academic integrity is about honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge and ideas.

You should take extreme care that you have:

Acknowledged words, data, diagrams, models, frameworks and/or ideas of others you have quoted (i.e. directly copied), summarised, paraphrased, discussed or mentioned in your assessment through the appropriate referencing methods,

Provided a reference list of the publication details so your reader can locate the source if necessary. This includes material taken from Internet sites.

If you do not acknowledge the sources of your material, you may be accused of plagiarism because you have passed off the work and ideas of another person without appropriate referencing, as if they were your own.

RMIT University treats plagiarism as a very serious offence constituting misconduct.

Plagiarism covers a variety of inappropriate behaviours, including:

- Failure to properly document a source
- Copyright material from the internet or databases
- Collusion between students

For further information on our policies and procedures, please refer to the University website.

#### Assessment declaration

When you submit work electronically, you agree to the assessment declaration.

## Working as a group

Many courses require you to work in a group to complete various assessments. It is the collective responsibility of all group members to actively contribute and complete any project. If any individual is unavailable during this time, the group will need to adjust responsibilities to allow for the work to be completed. It is recommended that students elect a group leader to take responsibility for this.

Working in a group requires consistent interaction and communication. This should be done within Canvas, Google Hangouts, email etc.





Should any individual be unavailable for an extended period of time, it is the responsibility of the group members, or group leader, to advise their tutor to discuss the situation. This should be raised as early as possible if students wish to apply for an extension or special consideration.

Only one copy of a group assessment needs to be submitted, however all group names must be added to the report submission.

For further information about understanding group work, visit <a href="RMIT Learning Lab.">RMIT Learning Lab.</a>