## 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 Lecturer1.

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.

Rubric

* HD: Formatting is precise, and follows all instructions, no errors exist
* D:
* CR:
* P:
* NP:
* NN: Not supplied

(5 marks total for formatting)

1 [abm.russel@rmit.edu.au](mailto: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 marks)

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

Rubric

* HD: Name is creative, descriptive, meaningful and clearly connected to the project
* D: Name is descriptive, meaningful and clearly connected to the product
* CR: Name is clearly connected to the project
* P: Name is basically connected to the project
* NP: Name is not connected to the product and/or is inappropriate for the project
* NN: Not supplied

**Project Description** (5 marks)

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.

Some kind of APP(s) that are to be used in the hospitality industry.

Hospitality industry is a broad category and it’s need for software is varied,

We intend to firstly create a broad base that includes all participants in order to automate as many functions as possible.

# hospitality app

## MVFs

* menu
* ordering process
* recipes
* inventory
* rostering

the purpose of this app is to, on the one hand, present the user with the option to order food from a participating restaurant through our mobile app. On the other hand, to allow restaurant owners/managers to better control and understand their inventories by linking inventories, recipes and menu items.

The menu screen of the application will display a list of menu items from where the user can order, the user will only be allowed to order items that are shown on-stock. Upon ordering an item, the app will perform two important tasks. First, it will generate a work order for the kitchen. Then, it will reduce the stock levels of the recipes that compromise the menu items ordered.

The recipe feature of the app will allow the head chef to upload and modify recipes. these recipes will include a list of ingredients needed and a procedure and will be used to build each menu item. The chef(s) will be required to update how much of each recipe is available every time it is prepared for the right functioning of the app. When a given recipe availability is increased, the recipe feature will spend the corresponding amount of ingredients from the inventory.

With each supplier delivery, The head chef will update the inventory in the inventory feature of the app, increasing the number of available ingredients and manually decrease those that have gone off. This feature will also warn the chef when the stock level is approaching par levels and suggest a reorder.

Finally, there will be a rostering feature that could be used to write, cost, publish and update the venue roster.

Rubric

* HD: Description is precise, comprehensive clear and unambiguous
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**The Team** (10 marks)

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?

**Team Member 1**

* 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?

**Team Member 2**

* Wayne Lightfoot
* s3792967@student.rmit.edu.au
* My background is in Building and Construction as an Electrician. I have experienced many different jobs but am now ready to learn new skills to elevate my career. I chose IT because I understand its importance in any workplace and wish to improve my knowledge.
* I enjoy problem solving and maintaining an efficient and hard working approach to anything to set myself to. I believe work ethic is most important and if you have that you will continue to succeed. I am hoping the vastness of IT will reignite my creative side again as I continue to learn.
* I have only created basic websites with small projects over the years never really learning the back end of building an app/site. I need improvement in all points of this project, that's why i chose to do it.
* I would like to contribute to all aspect of this project.

**Team Member 3**

* Constanza von Marees
* s3777909@student.rmit.edu.au
* My background is in hospitality, but have always been interested in IT, although I never considered it as a career before. I have arrived at a point in my life where I need a new professional direction, and decided IT would be an interesting subject to explore. After doing a few subjects last year, I decided to pursue it as a career.
* I am very creative, hard working, organised and disciplined. I can manage several things at a time, and work well under pressure. I am interested in exploring the different aspects that IT improves people’s lives, and figure out which area I would like to focus in the future.
* Even though I am familiar with building websites and online marketing, I am not very versed yet in programming suites and systems, but I’m looking forward to learning more about it.
* Ideally, I would like to contribute all aspects of the project.

**Team Member 4**

* **Shane Anthony Rogers**
* [s3292697@student.rmit.edu.au](mailto:s3292697@student.rmit.edu.au)
* 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?

**Team Member 5**

* **Lee William May**
* [s3770851@student.rmit.edu.au](mailto:s3770851@student.rmit.edu.au)
* My background is Transport and Logistics - My passion for IT is greater than transport and has been for a number of years. I just love the constant pace and ever changing technologies that IT has to offer and can never get enough of it!
* Strong points are proofreading, reports and Java knowledge (although not proficient i can work my way around a program)
* My challenges will be learning whichever tools / software we use for the development project as i haven’t worked with them before.
* I’m a quick learner (visual learner fyi) so i’m hoping to be able to complete some degree of coding. Other than that, I have a keen eye for detail and can contribute to completion of required documentation.

**Team Member 6**

* Anthony Kemp
* s3386510@student.rmit.edu.au
* I have worked in IT all my life, working up from operations/support//system administration, through development to consulting as a senior/lead business analyst for corporate clients. Additionally, I have qualifications in both retail baking (Cert II) and as a Pastry Chef (Cert III).
* I am interested in systems design and architecture.
* Challenges for this project, as per Lee, will be in utilising whatever technology the group selects to implement our product
* Hopefully I can contribute to all aspects of the project.

Rubric

* HD: All team member detail is listed, team member information is clear, detailed and comprehensively
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Demonstrable Outcomes**

List the demonstrable outcomes of your project. Think of this as comprising the functional4 and nonfunctional5 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 marks)  
   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).

**Feature 1**

explain how you will validate that the feature has been successfully implemented

**Feature 2**

explain how you will validate that the feature has been successfully implemented

**Feature 3**

explain how you will validate that the feature has been successfully implemented

**Feature 4**

explain how you will validate that the feature has been successfully implemented

**Feature 5**

explain how you will validate that the feature has been successfully implemented

Rubric

* HD: Description is precise, comprehensive clear and unambiguous
* D:
* CR:
* P:
* NP:
* NN: Not supplied

1. **Extended Viable Features (EVFs)** (3 marks)  
   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).

**Feature 1**

explain how you will validate that the feature has been successfully implemented

**Feature 2**

explain how you will validate that the feature has been successfully implemented

**Feature 3**

explain how you will validate that the feature has been successfully implemented

Rubric

* HD: Description is precise, comprehensive clear and unambiguous
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Project Motivation** (3 marks)

Describe what motivated your group to choose this particular project?

How does it relate to your individual and collective interests?

The motivation behind this project was mainly due to most team members having a hospitality background. They could all relate to the need for a tool such as our proposed application to be useful in the hospitality industry.

Lee May:

Personally speaking, and from a non-hospitality background, I can see the benefits in its use. I have not developed an app before, so currently I have my head buried deep in javascript learning so i can assist the team with the build.

Connie:

Camilo:

Anthony:

Shane:

Wayne: I do not have much experience in hospitality, only bar work at a few events and at our football club. It does interest me how this app will play out and what features we come up with to improve what is out there at the moment. I have many friends in the hospitality industry so i will confer with them to check the usability of our app.

Rubric

* HD: Description is detailed and comprehensive and is clearly related to the teams individual capabilities and interests
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Project Justification**

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

* **Justified Workload** (4 marks)   
  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.

Rubric

* HD: Rationale is detailed, believable and backed up by relevant evidence
* D:
* CR:
* P:
* NP:
* NN: Not supplied
* **Beyond Current Capabilities** (4 marks)  
  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.

**Team member 1**

explain what your current knowledge is and how completion of the project will extend it.

**Wayne Lightfoot - s3792967**

My current knowledge in IT is minimal. Only learning what I have from previous units from last year (Java, HTML, SQL). I currently use the SoloLearn app to keep refreshing my mind and try different languages to hopefully improve my confidence as i continue this path. I enjoy hearing from peers with an IT background and there are a few in this group so I am looking forward to growing my knowledge and hopefully gaining more ideas,tools and resources from everyone.

**Team member 3**

explain what your current knowledge is and how completion of the project will extend it.

**Shane Rogers**

explain what your current knowledge is and how completion of the project will extend it.

**Lee May - s3770851**

My current knowledge is hardware knowledge and Java skills obtained through Intro to Programming and Programming 1. App development is new to me and although we are not planning to use Java for development, by completion of the project I plan to have extended my knowledge of Javascript to the next level. (I’m currently on level 0). I know nothing about Javascript, i have played in the HTML and CSS space previously so obtaining a new skill set will be beneficial.

**Team member 6**

explain what your current knowledge is and how completion of the project will extend it.

Rubric

* HD: explanation is detailed, comprehensive, believable and backed up by relevant evidence
* D:
* CR:
* P:
* NP:
* NN: Not supplied
* **Project Risks** (6 marks) - Lee May  
  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.

**Project risk 1 - Project goes beyond planned schedule**

Trello board will be a starting point for the project team to visually gauge how the project is progressing. Other communication tools the team uses will also be a place where continual progress updates can be communicated. If the project looks to be falling behind schedule then the team will come together and action a plan (plans will be dependent on what part of the project is behind) to get the project back on track.

**Project risk 2 - Scope Creep**

The team will need to be mindful of scope creep and stick to the originally specified project plan. It will be easy to incorporate additional features that do not form part of the project specification and will need to be monitored by the team. Concerns of scope creep can be raised in the team Discord channel or during the weekly team meeting so we can address asap.

**Project risk 3 - Team conflict / Unclear project definitions**

Any conflicts caused through unclear project definitions will need to be voiced and addressed immediately should they become evident. This can be done through Discord or in conjunction with the team mentor. If the team can’t reach a suitable decision then we will follow the conflict resolution process we have developed below in case of an occurrence.

**Team dynamics related challenge 1**

indicate how you propose to monitor and minimize the issue arising.

**Team dynamics related challenge 2**

indicate how you propose to monitor and minimize the issue arising.

**Team dynamics related challenge 3**

indicate how you propose to monitor and minimize the issue arising.

Rubric

* HD: Risk description is specific, contexturalised and comprehensive includes detailed mitigation efforts
* D:
* CR:
* P:
* NP:
* NN: Not supplied

(47 marks total for this section)

## Section 2: How

Has 4 sections, each is described below.

**Resources and Tools** (3 marks)

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.

**Project Phase 1 - Lee May**

**Back End - Firebase**

Firebase (owned by Google) for back end development

We chose Firebase for its versatility and suite of in-built functions that are readily available. Firebase has authorisation for users, storage capability, database and messaging to name but a few. It also has Crashlytics which provides detailed reporting on errors leading up to a crash which will be helpful when in the development phase and beyond.

Specific version (*is unknown*) and the cost is free on the Spark plan.

Back endalternatives that we did not use were:

* Strapi -<https://strapi.io/>
* Nodejs - .<https://nodejs.org/en/>
* Azure - <https://azure.microsoft.com/en-au/>

**Front End - React Native**

A javascript library that can produce apps for both IOS and Android.

We chose React Native simply because it is cross platform and captures a wider audience for its use, this combined with ease of learning made it a good fit for our project.

Specific version will be 0.61 (at time of writing) and being open source, the cost will be $0

Front end alternatives that we did not use were:

* Flutter - <https://flutter.dev/>
* Android Studio - <https://developer.android.com/studio>
* XCode - <https://developer.apple.com/xcode/>

**Project Phase 2**

**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.

**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.

**Project Phase 3**

**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.

**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.

Rubric

* HD: Lists at least 2 project specific appropriate tools/technologies providing all required information
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Collaborative Workspaces** (5 marks)

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.)
* Trello - <https://trello.com/b/4LFgFeeJ/bits-hospitality-app>

By clicking the link above you will have access to the group Trello board. This will enable you to update, add or archive Trello cards relevant to the group project.

* GitHub - TBC
* Canvas>Groups>Files

Navigate to Canavs then Groups then Files. Here you will find any files we have kept for group assignments.

Rubric

* HD: Lists at least 2 project specific appropriate workspaces providing all required information.
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Communication Expectations** (5 marks)

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 Lecturer8 for further action.

- Lee May

Tools used for communication:

* [Discord](https://discordapp.com/)
* Student email
* Canvas > Groups > SL-Bits Hospitality App > Announcements

Expected frequency of responses:

It is expected that a team member will respond to a query within 24 hours. Discord is our preferred method of communication and is available on both desktop and mobile applications. With a group agreement to check messages at least once daily, we can stay on top of any responses required by the team.

Tool usage:

By using Canvas and Discord (Discord in particular) the team hashes out and discusses ideas and opinions for the project. Sometimes conversations might happen between only some team members, however with all conversations recorded it is easy for others to read through the posts and get a picture of what is currently happening. From there we either update our Trello board or update our project documentation.

Non communicative team members:

If a team member does not respond to communication within 24 hours, an email is sent to their student address. In the event that a further 24 hours goes by, communication will be made to firstly our mentor to alert that a team member is MIA. If our mentor has no success then we will elevate the issue to our lecturer for further advice.

Rubric

* HD: Defines communication expectations and responsibilites plan is a detailed, comprehensive way that clearly aligns understandings and expectations for a project
* D:
* CR:
* P:
* NP:
* NN: Not supplied

**Decision Making** (5 marks) - Lee May

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)

Conflict Resolution Process

1. Identify and clearly define the conflict.
2. Dig deep into the conflict and address whether it is an actual project related issue or whether it is a disagreement between team members on a particular function. If the function is not the issue but more so how it will be delivered and what it should look like then apply step 3.
3. Identify if there are team members not in dispute and are happy to act as an adjudicator.
4. Nominate a neutral team member to listen to both sides and adjudicate with bias based on the original project plan when possible.
5. The adjudicators decision will be final and the team will move on.

Team Decision Making Process

1. Ideation will be pursued through Discord discussion and team meetings.
2. The best ideas that are relatable and applicable to the project will be narrowed down by all team members with majority rules deciding on the final idea to proceed with.
3. Decisions will only be implemented once all team members have had their say.
4. Any outstanding decisions awaiting team member input will be posted in the #outstanding decisions channel located in the team Discord channel.
5. In the case of a team member not responding to a decision process notification, then after 24 hours it will be deemed that the team member is in agreeance with the majority and the decision is final.

Rubric

* HD: Clear and detailed decision-making process which can handle any impasse
* D:
* CR:
* P:
* NP:
* NN: Not supplied

(18 marks 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 demonstrate 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.

**Week 3**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 4**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 5**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 6**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 7**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 8**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 9**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 10**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 11**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Week 12**

|  |  |  |  |
| --- | --- | --- | --- |
| Title | Planned Start Date | Planned End Date | Lead By |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Rubric

* HD: Schedule is clear, achievable, comprehensive, and correctly set up in Trello.
* D:
* CR:
* P:
* NP:
* NN: Not supplied

(30 marks total for this section)