Department of Computing
Project Design and Management (PRJM3000)
Semester 1, 2016
Project description

In pursuit of innovation and competitive advantage, large organisations such as Curtin University are keen to capitalise on the collective knowledge and expertise of their staff and students to innovate and solve problems. Traditionally, most organisations create projects to innovate or solve problems seen as important from a 'top-down' approach. In contrast to the 'top-down' approach, the 'ground up' method gives the wider community a chance to propose innovations and ideas.

Some of Curtin's major challenges are:

- Organisational capabilities are not fully utilised as groups usually work as isolated units. Curtin departments and units are scattered across a large main campus (Bentley).
- Inefficient mechanisms to capture cost-saving ideas and innovations.
- No common medium to share innovations and/or ideas.
- It is difficult to capture the priority problems that are experienced on the frontline, by the staff and students.
- Inability to contribute to ideas and challenges outside of one's area or domain.
- Inability to prioritise staff and student innovations and/or ideas for implementation.

Getting the right problems are as important as finding the right solutions. What we want to know are:

- How can we capture the pressing issues that are experienced across the university?
- How can we encourage ideation?
- How can we rank and prioritise ideas and innovations?
- How can we categorise ideas and innovations?
- How can we capture and match problems to ideas?

Organizations are starting to appreciate the power of the collective and are looking for ways to harness that power. Your task is to provide suitable working prototype for a solution that would help Curtin staff and students post, exchange, discuss and prioritise ideas and innovations. You will also need to encourage participation and improvements on submitted ideas and innovations.

Deliverables

- A working prototype of the proposed solution.
- A report on the proposed solution.

Methodology
This project will employ agile methodologies to uncover potential solutions and develop working prototypes through iterations. There are various agile methods to choose from. SCRUM, Crystal, Feature-driven development, Extreme Programming and Kanban are a few examples of such agile methods. Teams are advised to use SCRUM for its popularity and simplicity.

Agile project management tools
There are many agile project management tools available on the market. JIRA, Target process, Version One and Pivotal Tracker are some examples of agile project management tools. Pivotal Tracker is the recommended agile project management tool for this project. Pivotal Labs, Pivotal Tracker developers, provided free licenses to PRJM3000 students.

Communication
Regular and instant communication between team members is key for successful agile projects. Face-to-face meetings and co-location is highly recommended. Online messaging tools such as slack will be required to keep the team connected. Slack integrates with many other tools including Pivotal Tracker.

Prototyping and Development
Mockups are very helpful in the analysis and design phase. Markers and A3 sheets are usually enough for mockups. There are also some online mockup tools such as MockFlow and iPlotz. Most of them have free trial periods. Pencil Project is an open source prototyping tool.
The solution must be accessible to users so it should be developed using web technologies such as HTML, CSS, JavaScript, etc. Students are encouraged to use familiar tools and languages.

About the project client
Salim Twalib is a Business Analyst at Curtin Information Technology Services (CITS). He has worked in various traditional and agile projects for business units across Curtin University.
Salim is the product owner and he will meet with the class at scheduled times and attend final presentations. Email him at s.twalib@curtin.edu.au for any questions or further clarification.