

COSC2196

Introduction to Information Technology

Assessment 3: Our IT Project



Assessment Type:

Word limit: N/A



Due date: Sunday of Week 12, 11:59PM (AEDT)



Weighting: 40%

Overview

In this assignment you will work in a group of 4 to 6 to produce a Project Plan on your IT project.

Your work in this project will develop a plan for your project, and as much of a prototype or other artefacts that you can produce in the time available to you.

Your work needs to constitute a self-contained document that makes sense without the reader referring to the marking specification to understand the meaning of the information that you are communicating.

Groups are self-organised in Canvas, under the People section.

This is a group assignment, a continuation to Assignment 2. Each person in the group will receive the same mark, unless there are extenuating circumstances which your group has discussed with the instructor or the contribution form / SparkPLUS / Feedback expresses a sizeable difference in contributions and efforts made towards the completion of this assessment.

Assessment Criteria

Team Profile	5%
Tools	5%
Project Plan/Description	50%
Skills and Jobs	10%
Feedback	10%
Group Reflection	10%
Presentation	10%

Learning Outcomes

This assessment supports the Graduate Outcomes of Enabling Knowledge, Critical Analysis, Problem Solving, Communication and Team Work.

- CLO 1: describe and apply basic concepts of contemporary technologies
- CLO 2: analyse human and social contexts of technological innovations
- CLO 3: apply the knowledge of various ICT components to create a prototype of a product/service
- CLO 4: identify principles of collaborative work and explain potential conflict resolution techniques
- CLO 5: participate effectively and creatively in a team environment
- CLO 6: prepare a professional and comprehensively written IT report within provided parameters

Purpose:

Having completed one project with your team (Assignment 2), it is now time to develop a plan for an IT project of your own, which will show an understanding of both your group's skills and talents, as well as an understanding of the IT industry and current IT trends. Your work in this project will develop a plan for your project, and as much of a prototype or other artefacts that you can produce in the time available to you.

What you will demonstrate:

You'll continue to demonstrate your ability to work in a team environment, complete research tasks, and to present information in a professional report format. You'll also explore your creative side, and project planning by developing further your group project idea and expanding the details with more research and feedback from the unit staff.

How you will demonstrate it:

Writing up a document covering all of the different areas listed above (and detailed below), to be then formatted and presented in a PDF Report. Update your group website from Assignment 2 that was hosted on GitHub Pages.

Specifications

Team Profile

You will have submitted a Team Profile as part of Assignment 2. You can use this as a basis for this Team Profile, noting any changes in the group as appropriate. There are some slight differences this time around, as noted below.

Team Name

You are free to choose any name for your group that you wish. However, this name will be used to identify your group for the rest of the course, so please choose wisely. You should also keep in mind that this name could be one that comes to the attention of potential employers. *This is the same as in Assignment 2, so you can reuse your work from there, unless you wish to make changes.*

Personal information

One paragraph per person, including name, student number, background, hobbies, IT interest and IT experience. This should also include your team's chosen name. *This is the same as in Assignment 2, so you can reuse your work from there, unless you wish to make changes.*

Group Processes

How well did your group work together in Assignment 2? Will you be introducing any changes in process for Assignment 3? *This is new for this assignment.*

Career Plans

Compare and contrast the career plans, including ideal jobs, for each person in the group. This may have changed due to feedback from Assignments 1 and 2. What common elements are there, if any? What differentiates each position from the others, if anything? How similar or different are your career plans across the group? *This is new for this assignment.*

Tools

As in Assignment 2, you need to have a group website and a GitHub (or similar) repository for your group. In your report you should include a brief description of what you have done, and include the following:

- The link to your group's website
- The link to your group's Git repository (GitHub, BitBucket, etc)
- Your comments on how well the audit trail on the Git repository reflects your group's work. You will presumably only be able to do this close to the time of submission.

Project Description

Having completed both Assignment 1 and Assignment 2, you will have thought about a personal project as well as one with your group. In this Assignment you are to come up with a plan for group project, and to develop it as much as possible in the time available. Naturally you will be very unlikely to complete your project; in fact, most worthwhile projects are "endless", in that there is always more that you can do, more features to be added, more levels to be designed, or new devices that could be used.

Naturally the choice of what to do is up to you, but you should take the following into account when making your decision.

- The passions, interests and skills of your group
- IT industry trends
- What would assist you in your career plan
- Feedback from Assignments 1 and 2

Your group will have developed some ideas in Assignment 2; it is fine to build on and refine these for this assignment, or to develop a new project based on feedback and/or what you have learned since.

Overview

Topic An overview of what you propose to do in your project. Concentrate on the big picture and outcomes, rather than intricate details. *At least two paragraphs is expected.*

Motivation What are your motivations for your project. Why is this project important or interesting? How does it fit in with current IT trends? What would it show to a future employer if you were able to work on this project? *At least one paragraph is expected.*

Landscape What similar systems or products are available? What competitors are there? What points of difference are there about your project compared to what exist now? *At least one paragraph is expected.*

Detailed Description

Aims

The topic description gives a general overview. However, it is usually helpful to have a specific aim for your project, as well as some smaller goals which will be helpful for achieving your aim. Describe these as best you can. Each project should have a single aim.

(e.g. "Re-establish the King under the Mountain", "Construct an artefact in Minecraft", "Produce a movie about green flowers", "Explore the use of Raspberry Pis for cooking"), but may have several goals which will need to be achieved in order to fulfil your aim (e.g. defeat Smaug, annoy Bard, befriend Beorn, kill as many giant spiders as necessary, fight Azog if he shows up, ...).

If things don't go as expected, this is the part of the plan that you would fall back on to answer questions such as "What are the most important parts of the project? Which parts should have priority over the others? If we have only enough time or resources for one of our goals, which one should it be?". One paragraph for the aim and one for each goal is expected. Each paragraph should include a description of the aim or goal, and a justification for it.

Plans and Progress

Here you should give as much detail as you can about what your project will do, and how you will do it. This should also include how far you have got with developing any features or outcomes from your project. Tell us about the "story" of your project – how it began, how it has progressed, and what stage of the plan you are up to. Include any dead-ends you may have followed, decisions made, and changes that have been made to the project plan. This will need to include a significant amount of detail, so that it is easily seen what precisely you have done and are planning to do. If it helps, imagine the information that would be required if you were to hand this project over at the end of the semester to a new team to complete the job. What would you want to know, if you were one of the people taking over? *There is no set length for this section, but it is hard to believe that less than two pages could be adequate. Three or four pages is far more likely.*

Roles

It is sometimes useful to define roles for particular participants, such as Lead Developer, or Technical Designer, or User Interface Designer. It is also possible that roles are changed from week to week, depending on what needs to be done next. Have you defined any specific roles for your project? If so, describe and justify these. If not, describe your process and justify why there are no specific roles.

Scope and Limits

"There's no such thing as perfection. You're never finished with a film. You run out of time." -- Peter Jackson, director of 'The Lord of the Rings' and 'The Hobbit' trilogies

One of the more difficult parts of project planning and execution is to define the scope and limits of the project. As mentioned above, you never really complete project like these; all you can ever do is your best in the time available. Part of that involves setting priorities and accepting that there will be features that will take too long to develop. This means that it is important to set a scope for your project, as a means of ensuring that you make the most of the time available. For example, if you are developing a game, you might consider only producing one level and two or three characters, in order to show a proof-of-concept, rather than develop three levels and ten characters.

The scope is probably the most crucial part of your plan, and also the most difficult to define. One way to define the scope is to think of the deliverables for your project, i.e. what outcomes would you be able to show to someone who asks you to see the results of your work. This will also include several statements about what will not be part of the project. For example, if you are using Open Street Maps to show the location of all your favourite shops, the deliverables would include the updated map, but not the Open Street Maps technology itself. It would also not include many other features of Open Street Maps, or other interesting location -- just those which show your favourite shops.

Also, be aware of the phenomenon of 'scope creep', which is the tendency for projects to incorporate more and more features. There is nothing wrong with being ambitious, but you only have a certain amount of time. At least one paragraph is expected.

Tools and Technologies

What software or other tools are required by the project? Are there any software licenses needed? Is there any hardware needed (beyond a standard laptop or something similar)? This needs to be precise (e.g. Windows Movie Maker Version 45.3) but needn't be long. You should also include a brief description of any prior experience any group members have had with the tools and technologies you list. *There is no minimum length for this. It is important to be as precise as possible, but descriptions of the tools are not needed here.*

Testing

How will you test your project? How will you know when you have succeeded? Testing is not something that you should leave until the very end; often it is far more useful to have a quick and dirty “mock up” of a project and then do some (limited) testing, to find out whether you are building the right product. If your project involves user testing, you should describe in your plan how you will find the test users, approximately what number of people you will need, and what background (if any) is required. *At least one paragraph is expected here.*

Timeframe

Another difficult aspect of project planning is knowing how much time to allow. You will have something like 36 hours per person for this assignment. In order to develop a plan for further work beyond the end of this course, let us assume that you will have an extra 10 hours per week per person for 10 weeks in addition to this time in order to develop your project. This means that you will have six weeks (Weeks 7 to 12) of the semester to work on your assignment, with a further 10 weeks after that. This means that your plan will be for a total of 15 weeks, with the first 6 being on this assignment.

You will clearly not have the extra 10 weeks to work on the project; this is intended to give you a feeling for how much you would be able to achieve in that time. This means that the first 6 weeks of your timeline will end up being your actual progress on this project, with the remaining 10 weeks being your plan for the next stages.

This should be presented in the form of a table, with one row for each week, specifying as best you can the work for each person for each week. This means that the first six rows of the table will describe your progress so far, and the remaining 10 your best guess at how the remaining time would work.

This will no doubt change as you work on your assignment, as it will give you a more precise idea about how long it will take to get things done. This is not an unchangeable contract for exactly how things will work; that is unrealistic for just about any project. The idea is to get you thinking about how exactly your time should be allocated to the various tasks involved. It is a good idea to have a milestone (i.e. a specific outcome) for each week of the project. This may include getting familiar with tools, or reading up on a particular technique or technology. You should also include time for writing up the final report and any other documentation. Writing reports always takes longer than you think, especially as you should expect to re-write any piece of writing that you do at least three or four times.

Risks

What risks can you identify for your project? There will always be some generic risks (such as computers breaking down the night before a deadline, health and family issues, and institutional changes). Do not include generic risks such as these. The idea is to be as specific as you can to your project. For example, if your topic is to develop a game, there may be a risk that the software you choose to work with may be very difficult to learn, poorly documented, or not turn out to have the features that it claims it has. These properties are often only discovered once you have started working with the software, and so unless you have had lots of experience with the particular tool, there is always a risk that it may not work as well as you believe it should, no matter how much prior research you do. Similar comments apply to hardware.

Group processes and communications

Communication between group members is arguably the most important aspect of your project. Past experience has shown that communication breakdowns between group members is the most common cause of project failures, so it is vital that you specify at the outset the means and expected frequency of communication between group members. How will your group communicate? How often will meetings take place? Will these be face-to-face, or using technologies such as Skype? Or Facebook? Or email? Or text? Or ... ?? What will you do if you have a group member who does not respond to communications? You should expect contact between group members at least twice a week. You can always make contact more often if you wish, but you do need to know what minimum frequency is expected from all members of your group. *At least one paragraph is expected here.*

Skills and Jobs

Let us suppose that a group of venture capitalists hears about your project, and is so impressed that they wish to fund you to develop it further for say six months. You will be the manager of a team of 4 people to deliver the project outcomes. What position description would be appropriate? Write 4 position descriptions for people that you would employ to take your project to the next phase. You will need to consider what skills are appropriate, which may include specific technical expertise, team work experience, leadership and management techniques, and innovative thinking.

Feedback

By the time you get to the end of the semester, you should have been working as a group for nearly ten weeks, and so you will have been able to judge how well your group is performing. As in Assignment 2, each of you should login to the SparkPLUS tool to provide an assessment of each person in the group, including themselves. This will then provide feedback to each of you, and in particular on how the rest of the team view's you performance.

You do not need to include any information about the feedback you receive, as this is intended to give you experience with use of tools such as these, and how the information is gathered and processed in such tools. The markers will, however, check that each person in the group has contributed via SparkPLUS, and the marks for this section will only be awarded if all group members have contributed in an appropriate manner by the assignment deadline.

If you have any concerns with this process, please raise these with your instructor. If you wish to have a group discussion about this feedback, please contact the instructor who will facilitate a group discussion on this topic.

Group Reflection

Towards the end of the assignment period, you should reflect as a group on how well you think you have performed in this assignment. You should include whatever evidence you may have about the groups processes (such as commit trails from GitHub, or project meeting minutes). Each member of the group should contribute up to 200 words about their own perception of the group, and the group as a whole should contribute around 400 words. This should include the following attributes.

- What went well
- What could be improved
- At least one thing that was surprising
- At least one thing that you have learned about groups
- Remember to include in your section on Tools how well you think your GitHub log of activity reflects your group's work on this assignment.

Referencing guidelines

Use Harvard Referencing Style for this assessment if appropriate.

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

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

Submission format

A member of the group to upload as one (1) single PDF file to Canvas via the link on the Assignment page. Make sure the file type is an accepted format.

Extension Application:

If you are prevented from submitting an assessment on time by circumstances outside of your control, you can apply for an extension (one business day before the assessment due date). To apply, complete the [extension form](#), along with supporting documentation and send directly to your Tutor. You will be notified of the outcome within 2 business days.

When submitting your application request it must be accompanied by supporting documentation and your progress towards the assessment to date.

Please note: Applications must be submitted at least one business day prior to the due date. (e.g. If an assessment is due on Sunday, you will need to submit a form by Friday).

Special Consideration:

Where an extension of greater than seven days is needed, you must apply for [Special Consideration](#).

Academic integrity and plagiarism

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:

1. 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,
2. 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:

1. Failure to properly document a source
2. Copyright material from the internet or databases
3. 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](#).

Criteria	Exemplary High Quality >80%	Accomplished Mid-tier 80-60%	Developing Passing 60-50%	Beginning Subpar <50%
Team Profile 5 Marks	5-4 Marks You have elucidated all the relevant information about your team in a manner that is simple for the reader to interpret. Including your test results with a clear discussion of the differences between your ideal jobs. Involved discussions on Group Processes and Career Plans.	4-3 Marks You have coherently included all of the relevant information about your team, test results, and discussed all relevant aspects of the differences between your ideal jobs. Group Processes and Career Plans addressed to a good standard.	3-2.5 Marks You have included all the relevant information about your team, all of your test results, and discussed some relevant aspects of the differences between your ideal jobs. Group Processes and Career Plans addressed to the specification.	2.5-0 Marks You have not included very much information about your team. You need to include more test results. You needed to discuss more aspects of the differences between your ideal jobs. Group Processes and Career Plans not addressed to specification.
Tools 5 Marks	5-4 Marks You have included a link to your group's website. You have set up your group's Git repository and included a link to it. You have made clear and appropriate comments about your group's log of activity. Any other tool, platform, service used is also discussed.	4-3 Marks You have included a link to your group's website. You have set up your group's Git repository and included a link to it. You have made some comments about your group's log of activity.	3-2.5 Marks Some of the appropriate links are missing. You have not included a link to your group's Git repository. You need to include more comments about your group's log of activity.	2.5-0 Marks You haven't included a link to your group's website. You have not set up your group's Git repository or included a link to it. You have not made any reasonable comments about your group's log of activity.
Project Plan 50 Marks This will assess your interpretation of data on the IT industry. We expect you to deliver demonstrator artefact(s) for this section.	50-40 Marks You have given a clear and detailed description of your project plan. You have provided an explanation of the elements in elaborate technical detail. Not only covering the base elements from A2 and expanding heavily. A detailed run through of your implementation is documented. Your delivered artefacts were realistically aligned with you planned to deliver.	40-30 Marks You have given a coherent description of your project plan, providing an explanation of the elements to a notable technological extent. There is good understanding and context highlighted for the project outcomes delivered from developing on the A2 base. Solid run through of your implementation is documented. Artefact(s) have been included.	30-25 Marks Your description of your project plan hits all details that have been described in the specification. The extent to which you could discuss this could be described in further depth. More research is recommended to elucidate how you have delivered planned outcomes. Artefact(s) have been included.	25-0 Marks Your project plan needs some significant further work. There is not nearly enough detail here to get a clear picture of what you have provided. There needs to be more thought and depth regarding the feasibility too towards the completion of such a project if no artefacts are provided (beyond the A5 video presentation).

Skills & Jobs 10 Marks This will assess your research and description of the work of an IT professional.	10-8 Marks You have comprehensively, clearly, and concisely identified the skills appropriate to your project and have written 4 position descriptions that clearly and accurately specify all of the skills, qualifications and experience needed to a standard that would be appropriate to be published on a careers website.	8-6 Marks You have comprehensively identified the skills appropriate to your project and have written 4 position descriptions that specify all the skills, qualifications and experience needed.	6-5 Marks You have identified the skills appropriate to your project and have written position descriptions that specify all noteworthy skills, qualifications and experience needed.	5-0 Marks You have not adequately identified the skills appropriate to your project. You have not written appropriate position descriptions that specify the skills, qualifications, and experience needed.
Feedback 10 Marks (Note: This section will be proportionally impacted by active team members who do not contribute SparkPLUS feedback)	10-8 Marks ACTIVE group members have contributed quality personal feedback on themselves and their group members on SparkPLUS.	8-6 Marks ACTIVE group members have contributed appropriate feedback on themselves and their group members on SparkPLUS.	6-5 Marks ACTIVE group members have contributed some feedback on themselves and their group members on SparkPLUS, but there is some significant information missing.	5-0 Marks ACTIVE group has not contributed appropriately to SparkPLUS. A significant amount of information is missing.
Group Reflection 10 Marks	10-8 Marks You have reflected and discussed what worked well in your group. You have elaborated on what could be improved and how. You have included at least one surprising thing for each team member. You have deeply discussed one thing you have learned about group work. Contributions have been noted clearly with commentary.	8-6 Marks You have clearly described what worked well in your group. You have discussed what could be improved. You have included at least one surprising thing for each team member. You have discussed one thing you have learned about group work. Contributions have been noted clearly and discussion.	6-5 Marks You have described what worked well in your group to some extent. You have discussed what could be improved, but some more explanation is needed. Your discussion of a surprising thing and what you have learned both need more work. Contributions have been noted clearly with comments.	5-0 Marks You have not clearly described what worked well in your group. You have not discussed what could be improved. You have not discussed a surprising thing, or what you have learned about groups. Contributions needed to have been noted clearly.
Presentation 10 Marks	10-8 Marks Your report looks clean and professional, using the appropriate font, colours and backgrounds. Resembling a document with graphic designer elements. Exceptional formatting. You have included an appropriate number of images/visual elements.	8-6 Marks Your report looks good, and uses the appropriate font, colours and backgrounds. You have included an appropriate number of images and visuals. Your report has been well formatted.	6-5 Marks Your report looks reasonable, but needs some attention to detail in key areas. Reasonable formatting. You should improve your use of images and visual elements.	5-0 Marks Your report needs improvement. You need to use appropriate fonts, colours and backgrounds. You have little or no use of appropriate images or visual elements. Document templates implementation would be recommended.