University of Wollongong

School of Computing and Information Technology

CSIT214/CSCI814/HSC814 IT Project Management

Spring 2020

Group Project (40 marks)

IMPORTANT INFORMATION

1. Carefully read through this document;

2. Forming your group ASAP with students in the same lab as you. Try to form groups with people who have complementary skillsets (e.g. programming, design, analysis, etc.).

3. You are then required to structure your group by allocating roles and responsibilities to members. Team members are encouraged to play the role of the project manager in turn. For example, each team member can chair at least one meeting.

4. The focus of this assignment is project management, not the software artefact. The team should put more efforts on managing, controlling, and documenting the project by exercising project management skills.

5. Your group can choose to execute the project following either traditional or agile project management practices.

6. To simulate a real-world scenario, your tutor can act as the project sponsor (e.g. the CIO).

SUBMISSION

1. Verbal progress report in **Week 4 Lab**

2. **True** weekly meeting reports from Week 5 to Week 12 (submit to Moodle **every week** from Week 5, one meeting report per week)

3. Final deliverable by **5:00pm Friday 6th November 2020**

   - Final report + all project deliverables (e.g. source code)

4. Final presentation: **Week 12 Labs**

Softcopy of each deliverable must be submitted to Moodle by **ONE** *member of your group by the deadline.* *Remember to name your submission file using your group ID.*

GUIDELINES

Note: Refer to Case study 1 in Chapter 3 of the reference text "Information Technology Project Management" by Kathy Schwalbe for samples of some project management artefacts required here. The book can be accessed electronically via UOW library.

1. **Week 4 verbal progress report** – 3 minutes per group

   a. One member from each group presents the progress of their group

b. Use 1-2 slides to introduce their group members and roles, and report on progress and plans for the remaining of the project.

2. **Weekly meeting reports (from Week 5 – Week 12 inclusively)** should cover at least the following:

a. **True** group meeting records: agendas and meeting minutes which includes at least the following: meeting date, attendance, **progress reports, review and tracking** (e.g. snapshots of Gantt chart tracking or backlogs, etc.), discussion summaries, and action plans/items.

3. The **final report** should cover at least the following:

A. Project management artefacts

o Justification for your group's selected project using one of the selection methods discussed in this subject.

o Business case which includes at least the following: a brief summary of the case and situation analysis of existing business, analysis cost vs. benefit with reasonable justification, and a feasibility study.

o Project charter

   ▪ A project charter should include at least the project's title and date of authorization, the project manager's information, a summary schedule, a summary of budget, project objectives, project success criteria, a summary of the planned approach for managing the project, roles and responsibilities.

o Project scope statement

o Work breakdown structure (WBS), WBS dictionary and project schedule. For project schedule, your report must include **appropriate Microsoft Project outputs for project schedule, cost management and human resource allocation**.

o Risk management including risk identification, assessment and mitigation.

o Effort/cost estimation for the project using techniques discussed in the subject (function points and/or COCOMO).

o Detailed demonstration of how your team has executed the project including:

   ▪ At least three milestone reports

   ▪ You should use Microsoft Project to track your project progress (appropriate baseline should be used to track the project progress). If your group follow agile project management, you can use an appropriate tool (e.g. Taiga, JIRA, etc.) to track your project and provide relevant evidence (e.g. snapshots of weekly product backlog, sprint backlog, sprint goals, sprint dates, etc.).

o Evidence for the appropriate use of version control software (e.g. GitHub). This would typically take the form of excerpts from GitHub's logs of commit operations. GitHub (or equivalence) statistical reports, showing overall contributions by different members should be included in the report.

o Project closing and Lessons-learnt: This part of the report should evaluate your project success against your initial plan. It should also answer questions like "Did the project meet scope, time, and cost goals?", "What went right and what went wrong on this project?", "What will you do differently on the next project based on your experience working on this project?".

B. Product related artefacts

- o A working prototype of the product including

    - ▪ A user interface prototype of the entire product.

    - ▪ An implementation of the **key** functionalities of the product. The implementation can be done in any programming language of your choice in the form of your choice (e.g. standalone app, web app, mobile app, etc.). The use of a database is not mandatory. You can store data in files and your app reads and writes to them.

    - ▪ In the report, you need to provide a presentation that should clarify which functionalities have been successfully implemented by your team. This presentation should combine text commentary with information captured from actual execution of programs (as screen shots or as captured text inputs and outputs).

C. **Member contribution for the whole project (with each member's signature)**

- o On the cover page of your progress/mid-project/final report, you need to provide **rating** for the contribution of each team member and a **detailed explanation** **of what the team member did for the project** to justify the rating.

- o Everyone in the team should sign the cover page. The individual contribution of each team member is assessed by all the other members.

- o The rating scale can be a percentage number (e.g. 60%). Alternatively, the scale be in the form of "contributed", "very little", and "almost no contribution". For a team member who has "contributed", he/she will receive 100% of the group mark; for a team member who contributed "very little", he/she will receive 50% of the team mark; for students who made "almost no contribution", he/she will receive 0 marks for the entire group project. Your tutor/lecturer may make adjustment to this marking criterion based on practical situations.

The project description is in the next page.

Project Description

Important Notes:

- *This Project Description provides only the **high-level goals** of this project. The development team* ***MUST elicit more** <u>**detailed and specific requirements**</u> **AND get feedback from "the client"*** *(the lecturer and tutors) during the second half of weekly labs.*

- ***The requirements may change during the course of the project (this is to simulate a real-life project).***

FlyDreamAir is a major airline which covers both international and domestic routes with a large fleet of aircrafts. The airline has a large network of travel agencies and customers across the world. FlyDream is planning to digitalize its business processes and operations, and has identified three potential projects:

- Project 1: develop an IT software system to manage customers and allow them to book flights, manage flight reservations, seat selections, purchasing in-flight services such as food and drinks.

- Project 2: develop an IT software system to manage loyalty programs (e.g. frequent flyer points and rewards including a wide range of ways to earn points, use points, status upgrade, etc.).

- Project 3: develop an IT software system to manage the airline's lounges across the world (e.g. customer membership, pay-per-use, bookings, cancellations, occupancy management, search for lounges, etc.)

Assume that you are members of FlyDreamAir IT team. You are required to select and execute one of the above projects. In doing so, you would need to exercise various project management skills in different project management knowledge areas that are discussed in this subject. Note that the focus is on the project management aspect, rather than the software itself (see the Guidelines section above for more details).

The marking scheme is in the next page for your reference.

Marking scheme

Component	Out of	Marks	Comments
Final Project Presentation/Demo (Week 12)	3		
Final Deliverables (Week 12)			
Justification for project selection	3		
Business case	3		
Project charter	3		
Project scope statement	3		
WBS, WBS dictionary and project schedule	3		
Risk management	3		
Effort/cost estimation	3		
Demonstration of project execution (e.g. milestone reports, project tracking, etc.)	3		
Evidence of effective use of version control system	2		
Project closing and lesson learnt	2		
Meeting records	2		
User interface prototypes	3		
Functionality implementation	4		
Total	**40**		