Assignment 2B: Project Briefing
Covid-Safe Product Release 2

Group Assignment 2B: Project Plan Report

A FIT5057 Project Management Deliverable

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2020

Assignment Objectives

Learning Objectives:

This is a group assignment that uses Project Management (PM) knowledge in case-based problem solving.

Objective 1: Students form groups of 4 and are expected to apply and enhance their employability skills that they have learnt in Assignment 1.

Completion of this assignment also translate to showing the students have learnt hands-on and hence are able to demonstrate the following basic EA capabilities (unit learning outcomes) and at the Australian Quality Framework Level 9 or AQF-9.

Unit Learning Outcomes	Applicable?	Explanation
1. Analyse and evaluate the role of the modern project manager in the context of IT projects	X	Project work is group work. A project manager manages people and other resources, guided by a project plan, to ensure a software product or service is delivered on time , within budgets and meeting what the end-users expect the software to do in their busines environments. In this assignment you get the opportunity to experience firsthand what playing the role of a project manager means.
2. Interpret and critique a variety of project management methodologies offered by various professional bodies including that provided by the Project Management Body of Knowledge (PMBOK)	X	Your learn, hands on, how to apply the concepts and methods of: • Stakeholders analysis • Communications planning • HMR planning • Scope planning • Schedule planning • Budget planning • Risks management planning And in doing so, appreciate what PM integration means in action when planning a project and what aspects of PM data is exchanged to effect the dataflows of PM integration among the triple constraints.
3. Describe and apply the available strategies, techniques and decision tools used by project managers to manage modern IT projects based on PMBOK methodology.	X	The specific methods and associated techniques are those linked to the knowledge areas mentioned earlier. The strategies usually relate to your software design decisions and resulting models, which influence the work and control configuration (design) of the SDLC activities needed to deliver your software. Collectively these actions are results of your scope plan, which are integrated into your schedule and budget plans. The triple constraint paradigm guide you to manage cause-effect changes in any of your scope, schedule & budget plans. These are abstract concepts and through your hands-on experience, it is hope you can better understand these abstractions of project strategies implicated initially through scope planning.

AQF-9 means that graduates can demonstrate they (via their unit grades):

1. Have acquired mastery in PM knowledge and the earlier said employability skills
2. Are able to apply these acquired capabilities in collaborative teamwork in research or workplace settings.

Case Introduction

Prologue

The case study is the same as the one in the workbooks. Your weekly learning and completion of the workbooks' exercises will help you acquire the required PM knowledge and methods (inclusive of techniques and tools) to do this assignment incrementally each week.

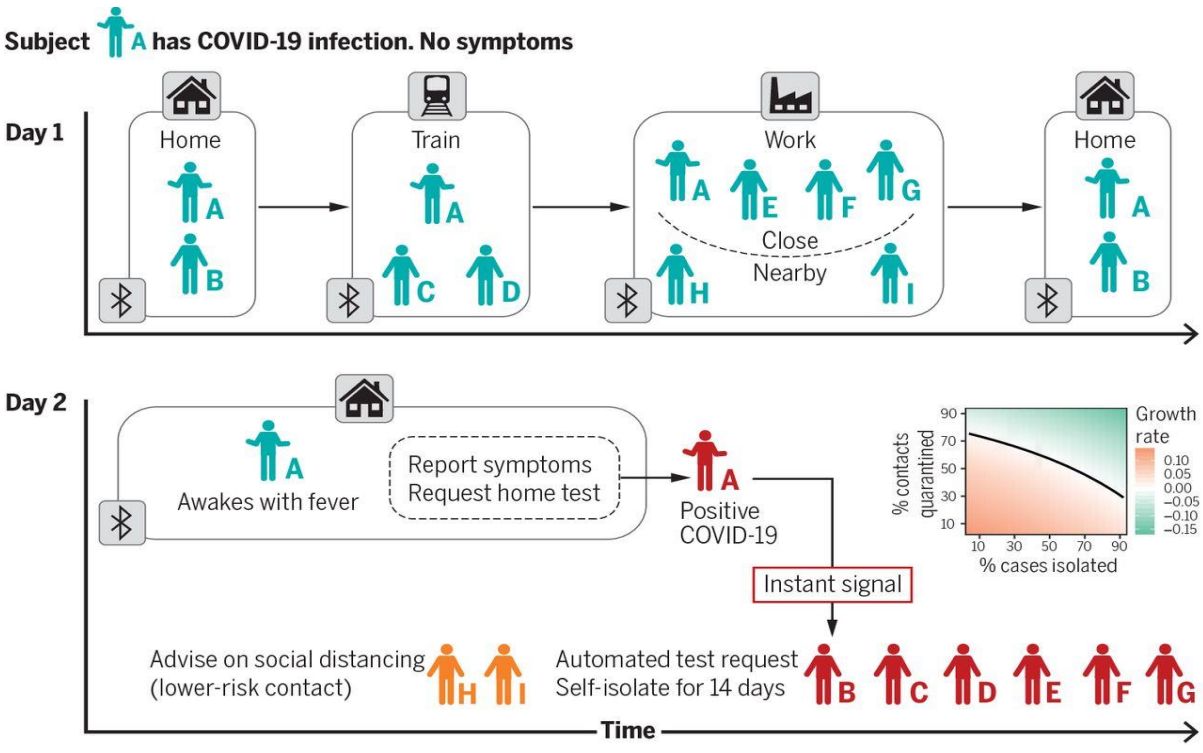
Unaddressed learning gaps in your workbook activities will impact on your capacity to do this group assignment and provide an effective PM report. Another influencing factor is your individual ability and self-directed resolve to develop and apply teamwork skills to engage in effective collaborative teamplay when developing the report.

The MOnash Covid Analytics System (MOCAS) Case Story

Monash University, in partnership with the Australian (Federal) Government, has agreed a **system proposal** to expand the Australian CovidSafe app, a covid-19 tracing phone-app that is used to trace and provide movement analytics of individuals who are infected with covid-19 between date of testing and confirmation of a positive result.

The initial pilot will be tried on the Victorian population.

A functional overview of the current Australian CovidSafe app is summarised as follows:



(Ferretti et al, 2020)

Your proposed MOCAS system is expected to integrate with the current CovidSafe app to create a database of de-identified covid-19 test data to allow data analysis for trend analysis in movements and locations and other management reporting views for helping the Victorian Government to better manage the covid-19 contagion. A user requirement summary of the current CovidSafe app can be found in https://www.health.gov.au/resources/apps-and-tools/covidsafe-app#how-covidsafe-works .

The new requirements:

1. Extract data to download, in real time, from Victoria's main CovidApp database consisting of:
    a. De-identified Individuals data (no names, street numbers or contact details):
        i. Residential location de-identification limited to street names in suburbs,
        ii. Sex of individual
        iii. Age of individual
        iv. Ethnic background
        v. Occupation/Employment Class (e.g. student, educator, unemployed, etc)
        vi. Employment status (eg fulltime employed, part-time employee, casual employee, retired, unemployed, convid-19 retrenched)
        vii. Living Arrangement (e.g. living alone, with family, living with flat mates, shared / boarding, homeless)
    b. Number of Covid-19 tests and each Covid 19 test date
    c. Date of each Covid 19 Positive result (only positive results are required)
    d. For each positive test, movement of positive result individuals between test date and result date, expressed in locations geographically every 15 mins (Note this data is geographically accurate to +/- 3 metres).

2. Development of a National "storage" Data warehouse to retain the 4 data sets (requirements 1:a,b,c,& d above). Note data set "d" needs to be capable of holding data results based on every 15 mins for a period to cover the **test analysis period**. This has been specified as maximum time of test currently is 7 days, however the government. has specified that the maximum collection time should be set at 14 days to allow for extended testing time. **NOTE:** the "National Database is a concept. The pilot will only have a partitioned database for the Victorian data. If the pilot is successful, then additional partitions will be added.

3. Export Software to extract data from the "Storage" Data warehouse to:
    a. desktop application report generator
    b. SPSS (Statistical Package for the Social Sciences) software for data analytics.

4. "Desktop" BI (Business Intelligence) application for a max of 40 users, to run on Mac and MS Windows devices:
    a. Standard reports of:
        i. De-identified individual's location summery by suburb
        ii. Testing Date summary (average days test & +/=- 3 standard deviations)
        iii. Positive Result Date summary (average days test & +/=- 3 standard deviations)
        iv. Individual's movement summary between testing date and Testing Result date by geographical location when location = greater than 200 metres from Data field "Residential Location" as defined above.

b. Data to AI Machine Learning Analytics (which include SPSS capabilities eg IBM Watson)

Using fundamental software design, at the conceptual level, identify and model the underlining

1. Processes that shape the whole system functionality
2. Data classes that support the information exchange of the system processes identified.

From these conceptual software design models, identify the number of graphic interfaces (screens) and system-interfaces are needed to complete functional and interface requirements of the system (you do not have to design and model these system objects).

Identify the non-functional requirements categories of the system. Using this information, identify:

- additional system processes that you can develop to secure the global uses of the installed system;
- cybersecurity testing requirements;
- cybersecurity risk management requirements that can be delegated to eSolution to provide as part of the university ICT security infrastructure management services.

Baseline Project Plan Version 2

Imagine through your workbooks' activities, you defined and published the first baseline project plan, focusing on the triple constraints to grasp a preliminary understanding of the scope of the given case's initial requirements, timelines and budget. With that information, the Australian Government decided to engage your group to proceed with the project. However, they have changed the scope and would like you to provide a fully detailed project plan before final review and approval. This means you will need to replan within 6 months. However, within the next 8 weeks, they need to know the revised scope, schedule, cost and risk exposure and identify who are the key influencing stakeholders and how best to engage and communicate with them, and also understand recruitment and training requirements for people in the project team. You are expected to publish this partially completed project plan by the 13th October 2020, for review and discussions with senior representatives from the Australian Government.

MOCAS Scope Changes

The Australian Genomics Patient Archive Platform is a current national genomics[1] research database system that enables patient data management, collaborative diagnosis and knowledge exchange within Australia. The Australian Government wants to transfer each state's covid-19 patients' test records to this national genomics database, which needs **identifiable patient records** and all their positive and negative covid-19 test results, to assist in covid-19 tracing for states. Clearly, genomic data is innately personal. This information can be used for gene mapping and when put in the wrong hands, can be used for making selected population surveillance or making biological weapons.

It is no surprise that genomic data and information systems are key targets of malicious cyberattacks. Genomic research workflows are predominately manual, also making easier targets for social engineering by actors of cyber hacking.

Your group needs to decide whether to transfer the Victorian covid-19 test records to the Australian Genomics Patient Archive Platform directly, or via the new National Covid-19 Datawarehouse. You need to justify your interface solution recommendation and provide research evidence of

[1] Genomics is study of human 'genome' - the complete set of genetic information a person has and which determines how one's body functions and what it looks like (Melbourne Genomics Health Alliance, 2020).

cybersecurity risk prevalence in each solution, clearly identifying both machine and human brain hacking risks.

Additionally, the new National Covid-19 Datawarehouse should also be able to manage **real-time information exchanges** from all states and desktop end-users on different computing platforms, beyond Apple and MS Window, to include Linux, blockchain, AWS and other new computing environments. The number of end users should no longer be limited to 40, but realistically constrained by the platform performance capacity thresholds.

Your group will need to revise the workbooks linked product scope of the project, before deciding how you would reconfigure the DevOps activities and work control elements needed to develop and operate the software. Both these product and work scoping activities need to be completed, to avail relevant information to redo the project schedule and budget plans.

Identifying the cybersecurity risks as functional and/or non-functional requirements of your new product scope will provide cybersecurity mitigation insights for use as inputs into formulating part of your risk management plan, including risk register specifications.

Report Template

A report template has been provided for you. Please use it to prepare your report.

We strongly advise you do not change the heading structure, as this may cause us to missed marking assessment areas which the heading sections align to.

Rubrics/Assessment Criteria:

Executive Summary	2%
Report Purpose & Planning Scope	1%

Part 1 - Theories

Project Plan Sections	5%
Project Integration Overview	5%

Part 2 – Theory Applications: Writing the Project Plan

Project Term of Reference	2%
Project Team Structure	0.5%
Project Objectives & Business Constraints	0.5%
People Management Plans	6.5%
Scope Management Plan	15%
Schedule Management Plan	15%
Budget Management Plan	15%
Risk Management Plan	15%
Project Planning Conclusion	2.5%
Reference Proficiency	10%
Written Language Proficiency	5%
TOTAL	100%