School of Computer Science
COMP30830: Software Engineering
Semester II

Assignment 2
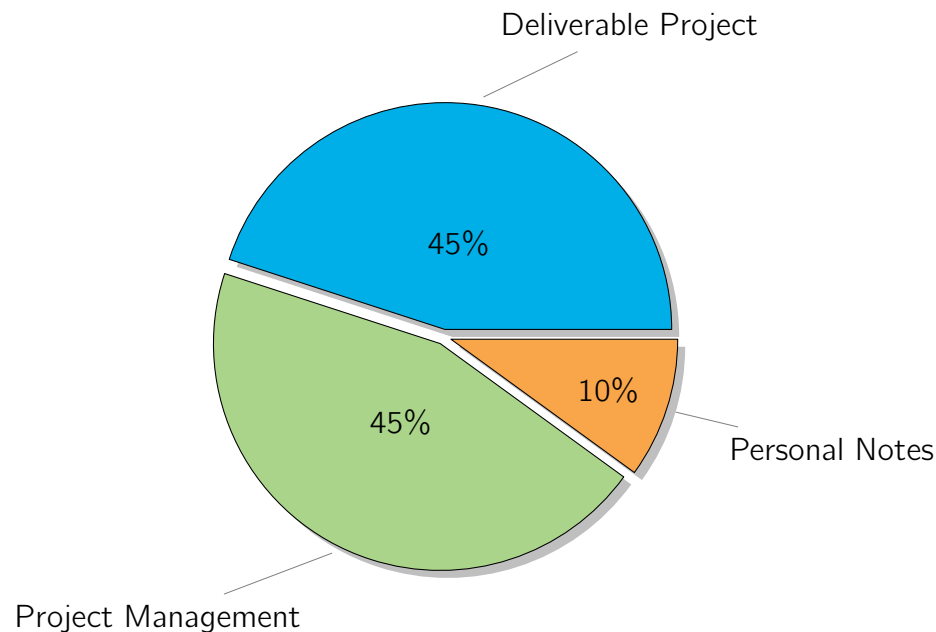On: 31/01/2021
Due: 15/04/2021 18:00

Q1: _____ (**100points**)

This assignment describes the project work for COMP30830. Refer also to the lecture notes on Brightspace.

The goal of this project is to develop a web application to display occupancy and weather information for Dublin Bikes.

You will conduct the project in a team using the Scrum methodology.

The project should be submitted before the last week of the module. This is a <u>hard</u> deadline.

(a) • Deliverable Project <u>This is not an exhaustive list, but contains the main elements of a working solution</u>   [45]

     1. data collection through JCDecaux API

     2. data management/storage in RDS DB on AWS

     3. display bike stations on map

     4. flask web application (python)

     5. occupancy information

6. weather information
7. interactivity (click, API request, handle response)
8. ML model for predicting occupancy based on weather patterns, trained on collected data
9. project served on a named host over the web on your EC2 instance
10. Github repo, including source code, logs, commit history, branches, etc

(b) • Project Management [45]
1. Design, planning notes and materials, discussion of Requirements, mock-ups, ...
2. Scrum project management (trello board, slack logs, google docs, etc)
3. Meeting notes (log of daily standup, notes from sprint reviews, retrospectives
4. feature selection/product backlog for each sprint ($\times$ 4)
5. burndown charts, (sprint and/or release) for each sprint ($\times$ 4)
6. managing deliverables, prototypes

(c) • Personal Notes (Individual Submission) [10]
1. learning journal
2. personal review
3. retrospective of the project