Data Engineering Student Projects

January 2021

Data Engineering Student Project Proposal

Summary

Please note that the following is suggested plan for the semester. You and your mentor are free to adjust to your requirements

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High Level Activities

Summary

Intro to Mantel and Eliiza

- Mantel "speed dating" with brands
- Overview of Mantel Group Principles
- Into to data engineering team

GCP Certification

- Student completes 4 week GCP training for Data Engineering Professional

Sprint 0 – Project Ideation

- Student to use emulated New York Taxi streaming data on GCP
- Student to create pipeline using:
  - Pub/Sub
  - Dataflow
  - BigQuery or Cloud Spanner
- Student Decides on how to aggregate the data

High Level Activities

Summary

Sprint Planning

- Student to carry out own sprint planning
- Creates user stories and tasks
- Assigns story points to each of the tasks
- Creates backlog and splits tasks into 3 sets of 2 week sprints

Sprint 1

- Activities Defined by Student

Sprint 2

- Activities Defined by Student

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High Level Activities

Summary

Sprint 3

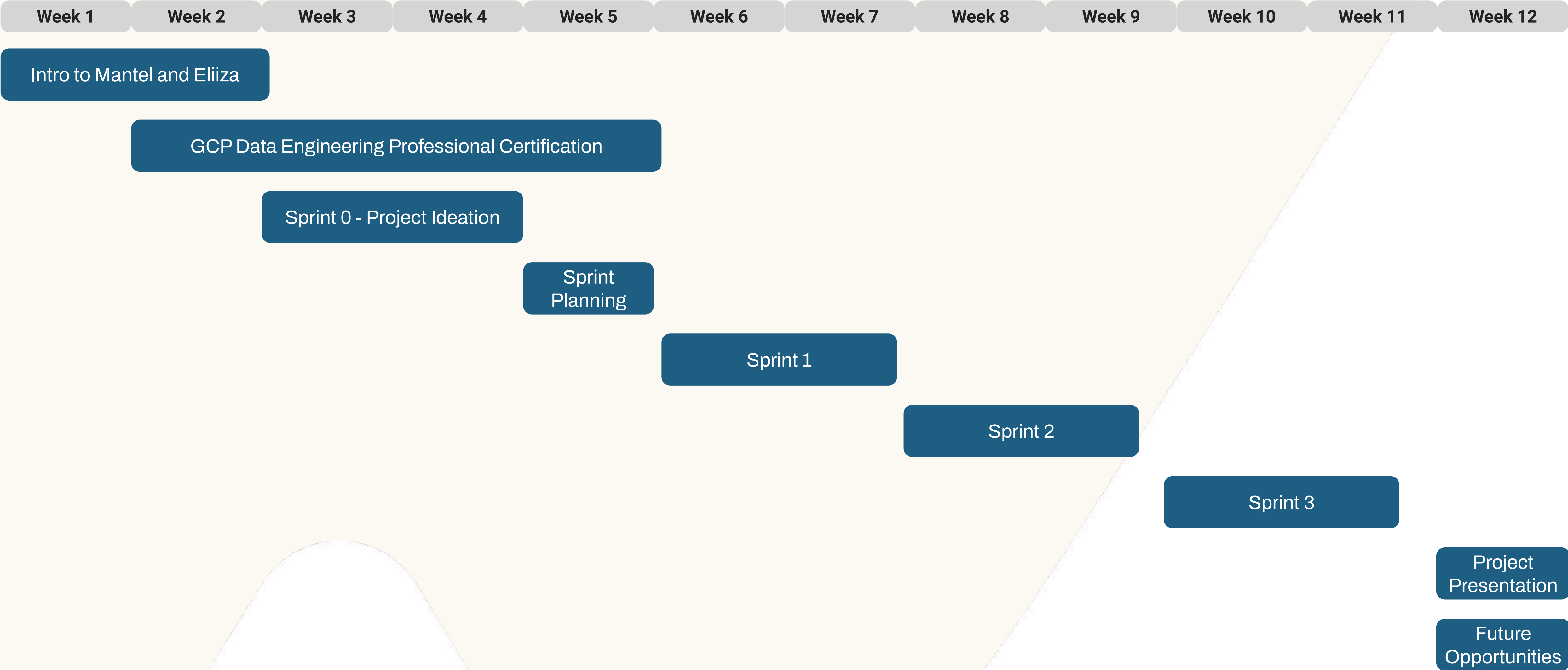- Activities Defined by Student

Project Presentation

- Student presents project to Data Engineering Team (and potentially wider Eliiza team)

Future Opportunities

- People and Culture to discuss future opportunities with the student

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High level activities

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

Intro to Mantel and Eliiza

GCP Data Engineering Professional Certification

Sprint 0 - Project Ideation

Sprint Planning

Sprint 1

Sprint 2

Sprint 3

Project Presentation

Future Opportunities

Student Support

Summary

Project Support

Typically, the sponsoring company is required to provide support to student for matters directly related to the project. This is mainly due to the fact that domain specific knowledge might only be known by the sponsoring organisation.

It is up to the student and their mentor to agree on a regular meeting frequency however 2 meetings per week is usually recommended. For example the following might be used:

- 60 minutes at the beginning of the week to review what work will be done in the week ahead and what support/help the student might require

- 30 minute meeting at the end of the week to review the work done and address any issues the student may have had

Academic/Technical Support

The university's teaching staff is available for any Data Science/Machine Learning/Data Engineering upon request

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END ADDITIONAL TEMPLATE SLIDES