



Deakin University

Analytics Pro

Project Scope

Project Sponsor

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Project Team

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Date	Version	Editor	Reason	Supervisor Signature	Client Signature
03-08-2018	1.0	Usman Tariq Syed	Initial Project Scope Draft	Supervisor signature to indicate approval	Client signature to indicate approval

Motivation / Problem Description

As a team of postgraduate students, consisting of a majority undertaking Data Analytics specialization, we selected the Project: Australian Data Science Education Institute (short for ADSEI) as the project was relevant to our field of interest. ADSEI is seeking a product capable of expanding the teachings of Data Science, alongside its real world applications to a diverse range of audience such as High School students, teachers and non-technical individuals. The product will ultimately allow its users to understand the advantages of adopting a Data driven approach when it comes to deriving hidden insights from very large data repositories. The product will also target the importance of visualizing datasets to fully understand their capabilities.

Context

The Australian Data Science Education Institute (ADSEI) is a Not For Profit Company which aims to provide Australian Students, Teachers and Professionals alike, with genuine learning resources and opportunities to explore the amazing world of Data Science and how it can be incorporated in our lives. ADSEI is seeking to create a product which provides Students and Teachers to discover hidden insights from large datasets using graphical Visualization methods. The product itself would be a Web application which will be incorporated with quality datasets and an interactive tool through which Users can view various graphical representations of the data in multiple visual formats.

Value Proposition

The product intends to provide its users with the following values:

- Providing Students, Teachers and others with genuine learning resources.
- Provide users with insights on datasets.
- Perceiving data insights in the form of graphical visualizations.
- Making the User understand the importance of Data Science and its various applications.

Core Idea/User Stories/Requirements

The main idea behind the product is to utilize any type of open source datasets which are freely available to us on the internet and apply Visualization techniques which support any facts corresponding to the given dataset. We're also required to create a dynamic interactive tool for users to utilize which allows them to understand the data through dynamic graphical representations.

Target Deliverables

The following goals have been identified as dependencies that need to be addressed early in the life cycle of the project.

1. Selecting a suitable Dataset: must be a good quality dataset and relevant to the project.
2. Creating a Simple Dynamic Web application for the Visualization tool.
3. Integration of the Visualization tool with the selected dataset.
4. A Dynamic layout design for the Web application of the product.

Roadmap

Execution Strategy

- Research and selection of a suitable dataset for the product.
- Selection of the technology stack required to build the actual product.
- Implementation of visualization tool with the selected dataset
- Creation of mock-up designs for the web application
- Implementation of the Mock up design into an actual web application.

Sprint 1

Goals

The goal of Sprint 1 is to deliver scope document, select a relevant open sourced dataset, select a suitable web-based technology stack and create an initial mock up design for the web application.

Target deliverables

- Scope Document.
- Open Sourced Dataset.
- Web-based Technology Stack selection.
- Mock Up Designs.

Sprint 2

Goals

The goal of Sprint 2 is to deliver a designed website layout which matches the initial mock up design of the web application along with a sample of the visualization tool.

Target deliverables

- Web Application Basic Layout.
- Samples of Visualization Tool.

Sprint 3

Goals

The goal of Sprint 3 is to develop the basic foundations of the back end of the web application alongside the creation of database.

Target deliverables

- A partially working Web Application with some basic visual functions.
- Database schematics.

Sprint 4

Goals

The goal of Sprint 4 is to continue development of the backend and front end of the web application and integrating the dataset onto the database. It will also cover the dataset's graphical Visualization via the Visualization tool.

Target deliverables

- A web application which has most functions performing their designated tasks.
- Implementing the Dataset onto the database and integrating it with the Web application.
- A fully functioning Visualization Tool that provides insights on a given dataset.

Sprint 5

Goals

The goal of Sprint 5 is to start performing testing of the application and performing quality checks and processing the project for deployment and closure.

Target deliverables

- Performing Test cases of the Web application and checking for any present bugs or glitches.
- Checking if all deliverables meet Requirements specifications.
- Process the application for deployment on client's servers.
- Draft up relevant project closure documents.

Limitations, Constraints and Considerations

The limitations, constraints and considerations of the project are as follows:

- We are to utilize the D3 Visualization tool as advised by Linda. Team members are not familiar with this tool and learning its functionalities might take long.
- We must ensure that a dynamic, interactive environment is maintained throughout the web application to maximize the learning experience of users.
- We will need to consider the technology stack that we'll choose, based on the client's server compatibilities.