Project Plan Group 33

<Project Name>

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**Victoria State Accident DataSet**

[**https://www.kaggle.com/gaurav896/victoria-state-accident-dataset**](https://www.kaggle.com/gaurav896/victoria-state-accident-dataset)

**Required Features:**

* **For a user-selected period, display the information of all accidents that happened in the period.**
* **For a user-selected period, produce a chart to show the number of accidents in each hour of the day (on average).**
* **For a user-selected period, retrieve all accidents caused by an accident type that contains a keyword (user entered), e.g. collision, pedestrian.**
* **Allow the user to analyze the impact of alcohol in accidents – ie: trends over time, accident types involving alcohol, etc.**
* **One other ‘insight’ or analysis tool of your choice**

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# Introduction

## Background

The goal of this project is to be able to develop a simple data analysis and visualisation tool pertaining to road crashes in the state of Victoria, to aid the Victoria State Government in their overall goal of improving road safety. The required output involves a graphical user interface that will allow users access data and view these in tables and charts that will aid in the analysis, details of which are listed in the succeeding sections below.

## Scope

The scope of the project will cover parts of Scope, Time, and Quality Management, which involves designing, building, and testing activities. Other areas, i.e., Cost, HR, Communication, Risk, and Procurement Management will not be included.

The end output is a software with a graphical user interface that must show the following:

1. Information of all accidents based on user-selected period.
2. A chart showing the average number of accidents in each hour of the day based on user-selected period.
3. Information of all accidents caused by an accident type that contains a keyword entered by the user (e.g., collision, pedestrian), based on a user-selected period.
4. A chart that shows the impact of alcohol in accidents with the following filters:
   1. Period Covered: Number of accidents by year, by month across a 5-year period, by day across a 5-year period, day of the week, hour of the day.
   2. Type of accident
5. A chart showing accidents that caused harm to each type of road user i.e., pedestrian, cyclists, motorists, older people, etc., based on user-selected period and area.

Project documentation is also included, as listed below:

1. Project Plan
2. Gantt Chart
3. Software Design Document
4. Git Log in .txt file
5. All .py files containing the program
6. User Manual
7. Software Testing Report
8. Executive Summary

## Document contents

This document contains a Phase-Based Work Breakdown Structure (WBS). The detailed steps of the WBS are listed on the succeeding section under Activity Definition and Estimation, and the schedule of which is plotted on the Gantt Chart, shown at the end of the document.

# Work Breakdown Structure

WBS is based on Activity Definition &Estimation

A diagram of a project

Description automatically generated

*This section should include the work breakdown structure for the whole project. The elements from the WBS should be used to generate your activity definition and those activities should then be scheduled in the Gantt Chart. Remember to consider ALL project activities – anything you do or will need to do should be included in the WBS*

*WBS’s are usually presented as some kind of hierarchical diagram/chart etc. The details what is involved each work unit should be provided in section 3:* ***Activity Definition***

*You do NOT need to do a WBS Dictionary for this project – the activity definition (whilst slightly different) will suffice. The WBS is focussed on SCOPE. The Activity definition is focussed on TIME.*

# Activity Definition & Estimation

1. Project management
   1. Project Background – 1Day
   2. Project Scope– 2Day
   3. WBS– 2Day
   4. Project Management Plan– 2Day
   5. Server Management Plan– 2Day
2. Requirement
   1. Stakeholder Requirement – 2Day
   2. Software Design Requirement– 2Day
   3. Software Architecture Requirement– 2Day
   4. Server Design– 2Day
   5. UI Design– 2Day
3. Architecture
   1. Analysis Software Architecture– 2Day
   2. Design Software Architecture– 3Day
   3. Development Software Architecture– 4Day
   4. Design Server Architecture– 4Day
   5. Development of Software Architecture– 5Day
4. Development
   1. Software Development – 7Day
   2. Server Development– 7Day
   3. UI Development – 2Day
5. Testing
   1. Software Design Testing– 2Day
   2. Software Response Testing– 2Day

*From your WBS, define the activities required for your project. You will revise this document and add more detail for part B as you discover more about the project.*

*Each activity should be clearly identified by a number and should match up to your Gantt chart. You should provide some estimations for the time you think each activity will take. This should make it easy to prepare your Gantt chart.*

# Gantt Chart

*This section should contain your Gantt chart. The items in the Gantt chart should match the activity definition from section 3. You should also submit your Gantt chart file separately.*

