Project Plan

Analysis tools of Victoria State Accident

S5288771 Chi Pang Cheng

S5323472 Kwangseok Choi

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# Introduction

## 1.1 Background

Data analysis is important for businesses for informed decision making. It helps organizations predict the future by allowing them to discover valuable insights from vast amounts of data. In addition, data analysis helps to assess and mitigate risks, allowing companies to make informed strategic choices.

The project aims to develop software for users to analyze datasets of traffic accidents that occurred from 2015 to 2020 in Victoria, Australia. A data set is vast data consisting of approximately 74,000 rows and 63 columns. The software will make this vast dataset easier for users to analyze.

## 1.2 Scope

The software capabilities, which are proposed at a high level, include the following:

ᆞ For a user selected period, display the information of all accidents that happened in the period.

ᆞFor a user selected period, produce a chart to show the number of accidents in each hour of the day.

ᆞ For a user-selected period, retrieve all accidents caused by an accident type that contains a keyword.

ᆞ Allow the user to analyze the impact of alcohol in accidents

ᆞAllow the user to analyze the accident frequencies in different locations.

## 1.3 Document contents

ᆞIntroduction

Give a brief description of the project's background and dataset. In addition, the scope introduces the core functions of the software.

ᆞWBS

WBS will be represented by a hierarchical diagram. In addition, details about WBS will be covered in the activity definition.

ᆞActivity Definition

Activity Definition is based on WBS. It will explain details of each items in the WBS and includes reasonable time estimates.

ᆞGantt

The Gantt chart is a visualization of the activity definition as a chart. It also shows summary task, critical paths. It will help us to identify the project more easily.

# 2.0 Work Breakdown Structure

The following table indicates the Work Breakdown Structure(WBS) which is the list of activities and tasks used to estimate the work to be done in a project. following table outlines all activities required for the project. The project is divided into five stages and a detailed description will be given in activity definition.

*텍스트, 도표, 평면도, 평행이(가) 표시된 사진

자동 생성된 설명*

*Table 2a – Work Breakdown Structure(WBS)*

# 3.0 Activity Definition & Estimation

The following table explain details each item in the WBS and includes reasonable time estimates. Allocated the most time to build tasks that are expected to take the most time. The total duration is 22 business days.

|  |  |  |
| --- | --- | --- |
| **Activity Definition** | | |
| Task ID | Description | Duration |
| Project Planning | | |
| 1 | Schedule WBS | 1 day |
| Analysis Tasks | | |
| 2 | Define software requirements | 1 day |
| 3 | Define required data | 1 day |
| 4 | Define use case diagram | 1 day |
| Design Tasks | | |
| 5 | Design GUI | 3 days |
| 6 | Design Data Structure | 1 day |
| 7 | Meeting with team staffs to evaluate | 1 day |
| Build Tasks | | |
| 8 | Write code for displaying all info about accidents | 2 days |
| 9 | Write code for displaying the number of accidents in each hour | 2 days |
| 10 | Write code for displaying accident type | 2 days |
| 11 | Write code for displaying the impact of alcohol in accidents | 2 days |
| 12 | Write code for displaying the accident frequency in different locations | 2 days |
| Test Tasks | | |
| 13 | Perform acceptance tests | 1 day |
| 14 | Fix bugs | 2 days |

*Table 3a – Activity Definition*

# 4.0 Gantt Chart

The following Gantt chart is based on table 3a. It takes 22 business days to complete.

텍스트, 스크린샷, 소프트웨어, 번호이(가) 표시된 사진

자동 생성된 설명

*Table 4a – Gantt Chart*