

Applied Project Specification

Marks: 35 = 30 for report + 5 for Tableau Video Test

Due date for report submission: 15 August 2025 (Week 8) by 11:59pm

Submission: Turnitin project report

Further instructions:

Project Report Size: 1500 words (excluding references, title page, ToCs, and diagrams)

Project objective: Investigate the reasons of traffic accidents in the United Kingdom (UK) through a data analysis and visualisation project called “Accident Casualties” in an attempt to make decisions on how the accident casualties can be reduced in the UK. Students can consider the following objectives to identify appropriate stakeholders and plan to reduce casualties.

- 1) Understanding Accident Severity for Effective Road Management
- 2) Exploring Geographic and Temporal Aspects of Road Incidents
- 3) A Comprehensive Dataset for Traffic Incident Research
- 4) Impacts of Weather and Road Conditions on Accident Rates
- 5) Identifying Hotspots and Risk Factors in Road Safety
- 6) Data-driven Approaches to Reduce Road Accidents
- 7) Traffic Collision Analysis for Urban Planning Strategies
- 8) Patterns of Driver Behaviour and Their Influence on Accidents

Learning Objectives:

The main learning objective of this project is to develop your skills in designing and implementing an analytics and data visualisation project in **any** context, including organisational, industry-wide or societal.

Project Tasks

Project Name:

Project Sponsor: if applicable

Project Manager: (could be your instructor)

Project Approval Date: if applicable

Last Revision Date:

(above items could be in the title page)

Project Description: (For example to introduce a new advanced telephone system to ensure all calls are answered. Description should be around one page long with appropriate in-text citations)

Project Scope: (For example, development of an IVR system to assist sales teams in taking orders and also to ensure that the orders are not missed. This system will help the sales team, other teams such as support team is beyond the scope of this project. A project scope should be clear and concise preferably written in point form).

Business Case: (For example, to increase orders per sales team member by 20%, another point in this case could be to reduce call unattendance rate to 0%, another point could be to increase customer satisfaction by 10%. A business case should comprehensively provide the reason for the project around on one page)

Research question: (one or two clear and concise research questions in aligned with the business case)

Key Stakeholders Analysis

This table provides an example stakeholder analysis for your understanding. You need to develop such a table from your business case perspective.

Stakeholder Name	Contact person (phone, email, address)	Impact (how much does the project impact them? Low, Medium, High)	Influence (How much influence do they have over project? Low, Medium, High)	What is Important to the stakeholder	How Could the stakeholder contribute to the project?	How could the stakeholder block the project?	Strategy to engage the stakeholder
Example Nurses & Midwives union	John John@hospital.com 0298543256	H/M/Low with one sentence justification	H/M/Low with one sentence justification	Maintaining working conditions for nurses	Agree for union members to implement the new reforms	Going on strike	Monthly round table discussions
Patient Advocacy group	Peter Peter@advocacy.com.au 0398763456	H/M/Low with one sentence justification	H/M/Low with one sentence justification	Maximising quality of care for patients	Communicate with other stakeholders to express their support for reforms	Making complaints About quality of service after the report	Information and feedback meetings every 6 months
Sunday times Newspaper	admin@newspaper.com.au 0798323456	H/M/Low with one sentence justification	H/M/Low with one sentence justification	Getting a good story	Print stories that support the new reforms.	Printing stories that oppose the new reforms.	Quarterly press meeting

Project Deliverables (for example, in the context of the above information)

- IVR system to assist sales team
- Training for sales team
- Support during the first operational month

Provide data Description

- Data collection and sourcing approach
- Assessment of data quality

Reporting Visuals

- Bar charts, histograms, maps, dashboards and so forth
- Uncover patterns & relationships
- Explaining visuals against research questions

Decision Making Process for Best Solution Selection

- Discuss results
- Present multiple solutions
- Explain the best solution aligned with project goals and values

Peer Evaluation in Two Steps (5 mark)**1. Contribution Log (available at vUWS)**

- A contribution log must be completed collectively by the group and attached to the report as an appendix.

2. SparkPlus

- Each student must login to SparkPlus and evaluate group performance immediately after submitting the project report.