University of
Salford
MANCHESTER

Researsh Title

Name

Student ID

Date

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Part One: Interactive Dashboard Design

1. Introduction

[250-350 words] Exploration of the defined problem with the determination of overall strategy for approaching the problem and discussion of the formation of objectives and initial requirements. You should also include an overview of the research directions you will need to undertake

2. Background Research

[650-750 words] Exploration of the current state of the art in the design of interactive dashboards with references to appropriate works. This should include current perspectives on the composition, layout and design principles of single screen dashboards and may include a review of current understanding in the methodology of design/development of a dashboard system.

3. Exploration of Data Set

[200-400 words]. Review of the dataset provided with critical Evaluation of the data and explanation of any data cleansing, normalisation or other bulk preparation processes that need to be undertaken. You may also need to present some explanation of the relational nature of the data attributes and how these could be used in your dashboard.

4. Investigation of Data Workflows & Proposal for Design of Dashboard

[1250-1700 words]. A detailed review of the mapping from data attributes to a visual form appropriate for presenting them within a dashboard environment. This may include worked examples showing the investigation of the particular digital workflow and an explanation of how appropriate methods for analysis have been defined. Discussion on the selection of the visual paradigm used for display should also be included. A justification should be provided, in the form of citable works, for key decisions taken.

The latter shags of this section should develop a conceptual model for how these individual analysis workflows can be formulated into a single, coherent visual

representation that composites the disparate strands into a defined reading narrative that supports the principles of focus+context to give meaningful output to the user.

This section may contain substantial numbers of diagrams and figures. However, these should all have sufficient explanation and a clear connection within the body of the written text.

5. Discussion

[500 words]. Critical Evaluation of the approaches taken and proposal formed. This should review the process used (methodology), individual digital workflows and final composited proposal.

6. Conclusions

[150-300 words]. A clear statement of the final proposed solution with a concise explanation of how this meets the needs set out by the briefing document.

Part Two: Statistical Analysis

1. Introduction

[250-350 words] Exploration of the defined problem with the determination of overall strategy for approaching the problem and discussion of objectives and initial requirements formation. You should also include an overview of the research directions you will need to undertake

2. Background Research

[650-750 words] Explore current research and used statistical analysis methods related to your research objective. Briefly address the theoretical background of the tasks 4-2, 4-3, and 4-4 and try to find your way through the literature's statistical analysis part.

3. Exploration of Data Set

[200-400 words]. Review of the dataset that you have chosen for your research objective. Create a tabulated data dictionary or a complete set of written metadata, including variables' names, definitions, time frames, and data sources. Also, describe any steps that you have taken for data preparation, outlier detection, and dealing with missing data.

4. Analysis

[1250-1700 words]. This section must have 5 parts, one part for each tasks, 4-1 to 4-5. Report the thorough analysis that you have done in R (if any SAS). Also, visualisations and storytelling of the findings and results are expected.

5. Discussion

[500 words]. Critical Evaluation of the selected statistical methods and final findings are expected. At this part, you should review the methodology, and any possible limitations you've encountered for the preparation and analysis phase.

6. Conclusions

[150-300 words]. Clear statements of the findings of each phase and how your research work has fulfilled the research objective is the scope of the final section.

Part Three: References and Appendices