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Name: Sethmika Dias

UOW no: 19857518

IIT no: 20221906

5DATA004C.2

Data Science Project Lifecycle

# Details

Name: Sethmika Dias Bellana

Student ID (UOW): 19857518

Student ID (UOW): 20221906

Group Number: 3

Link to Streamlit app

Link to video

[Link to GitHub repository](https://github.com/Sethmika2005/Sethmika_19857518_Streamlit)

# Aims and Objectives

The aim of this project is to build upon the data analysis conducted in the group work to build an interactive dashboard which allows users to explore key insights derived from the Superstore dataset.

The objectives of the project are as follows:

* Build upon the data analysis conducted in the group work.
* Identify and choose the most important key insights from your data analysis.
* Design an interactive dashboard that allows users to explore these key insights.
* Utilize suitable data visualization techniques to present the key findings.
* Ensure that dashboard users can interactively explore the data.
* Utilize Streamlit to implement the dashboard application.
* Create a comprehensive test plan to ensure the functionality, interactivity, and usability of the dashboard app.
* Utilizing GitHub for version control, following best practices, and documenting the development process.

# Requirements

Function Requirements

* The dashboard should allow users to interactively explore key insights derived from the data analysis.
* Users should be able to navigate through different visualizations seamlessly, selecting specific filters such as date range, region, country, state, and sub-category.
* Interactive elements like dropdowns, sliders, and buttons should be incorporated to enhance user control over the dashboard.
* The dashboard should be responsive to user interactions, updating visualizations dynamically based on selected filters.
* The layout should be clear and intuitive, with consistent design elements to ensure ease of understanding and navigation.
* The dashboard should provide sufficient functionality to explore the identified key insights without errors.

Non-functional Requirements:

* The dashboard should load quickly to provide a smooth user experience, even with large datasets.
* It should be accessible across different devices and screen sizes, ensuring usability for a diverse user base.
* The design should be visually appealing, with clear and attractive visualizations to engage users effectively.

# References

Fun, P. i., 2023. *Python Interactive Dashboard Development using Streamlit and Plotly.* [Online]   
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