The Project Scope

The product is a tool that helps provide relevant and timely intelligence as inputs into the City of Melbourne council's decisions focused at encouraging Melbournians to adopt measures that would facilitate lower fossil gas emissions within the city. The project showcases visualization of prediction of total pedestrians' count between November 2020 and March 2021 in the CBD. It also possesses an interface where realtime total pedestrians' count prediction can be made using the identified independent variables as input. Enabling officials to determine pedestrians' count for a specific day using weather forecast features (obtained from reliable sources), whether government restriction was in place or not and date features, as independent variables. Different models using five Machine learning algorithms were built, and the algorithm with the least error was adopted for the predictions.

Deliverables

1. A regression model to predict future pedestrian traffic to help the council make appropriate decisions on promoting walking towards contributing their quota in achieving net-zero emission by 2040.

2. An Interactive visualizations providing insights on pedestrian traffic and how other factors, such as the microclimate data impact.

3. Charts indicating the trend of COM pedestrian traffic and changes that has changed over time

4. A heat map visualization of Pedestrian Movement Hourly/Daily so that users can identify pedestrian hotspots.