

### How it works?

We used historical data to find bus delay/earliness. Then, machine learning techniques (Decision Tree and k Nearest Neighbor) were used to predict buses delay/earliness and find the correlations between different factors with that.

#### **Team Members:**

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### Outcomes

By predicting accurate bus arrival time, the model can give STM a tool to update its bus routes in advance and dedicate more buses to the routes prone to delay.

# **Predicting Bus Travel Time Delays and Earliness**— Public Transportation Sector

## What is it?

*"I'm freezing, shouldn't the bus arrived earlier?".* You might have experienced such situation many times. This project aims to predict buses' delay and earliness for public bus users to keep it reliable and attractive to entice its users.

# What is new and distinctive about your project?

This project's distinctive feature is bridging the gap of considering the combination of attributes such as accidents, traffic, pavement, and weather conditions to predict both bus delays and earliness.

