Ranjitha Aswath
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Krishna Chatrathi
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Tasks and deliverables	Assigned to	Due date
Data Collection and preparation		
Identify and collect the required data primarily from CTA website.	Sanket	07-05-2023
ensure accuracy and integrity by handling missing values and other inconsistencies	Sanket	07-06-2023
Store the collected data in the form suitable for further analysis	Sanket	07-06-2023
Exploratory Data Analysis		
Load the data into R to explore structure and variables	Ranjitha	07-07-2023
Plot histograms/boxplots to understand patterns and relationships of variables	Ranjitha	07-08-2023
Identify any outliers	Ranjitha	07-09-2023
Data Visualization		
Generate bar graphs, box plots etc to visualize ridership, delays, performance metrics etc	Krishna	07-10-2023
Statistical Analysis and modelling		
Perform analysis using regression model to explore relationships between variables	Sanket	07-11-2023
Use linear regression to analyse change in ridership for a bus route	Ranjitha	07-12-2023
Apply clustering algorithms to identify groups/patterns within the data	Krishna	07-15-2023
Conduct hypothesis testing to evaluate service delays, performance difference between routes and stations	Sanket	07-16-2023
Spatial regression model or geostatistical techniques for analysing geospatial data and performance variations	Ranjitha	07-18-2023

Geospatial Analysis		
Using packages such as leaflet or sp for analysis	Krishna	07-19-2023
Acquire geospatial data for relevant areas, routes or stations	Sanket	07-20-2023
Overlay ridership data, delays or performance metrics onto maps to analyse patterns	Ranjitha	07-22-2023
Perform spatial clustering to explore spatial relationships and connectivity within transit system	Krishna	07-23-2023
Data Reporting And Presentation		
Summarize the findings, insights and key results obtained from analysis	All	7-28-2023
Project report and presentation	All	7-28-2023