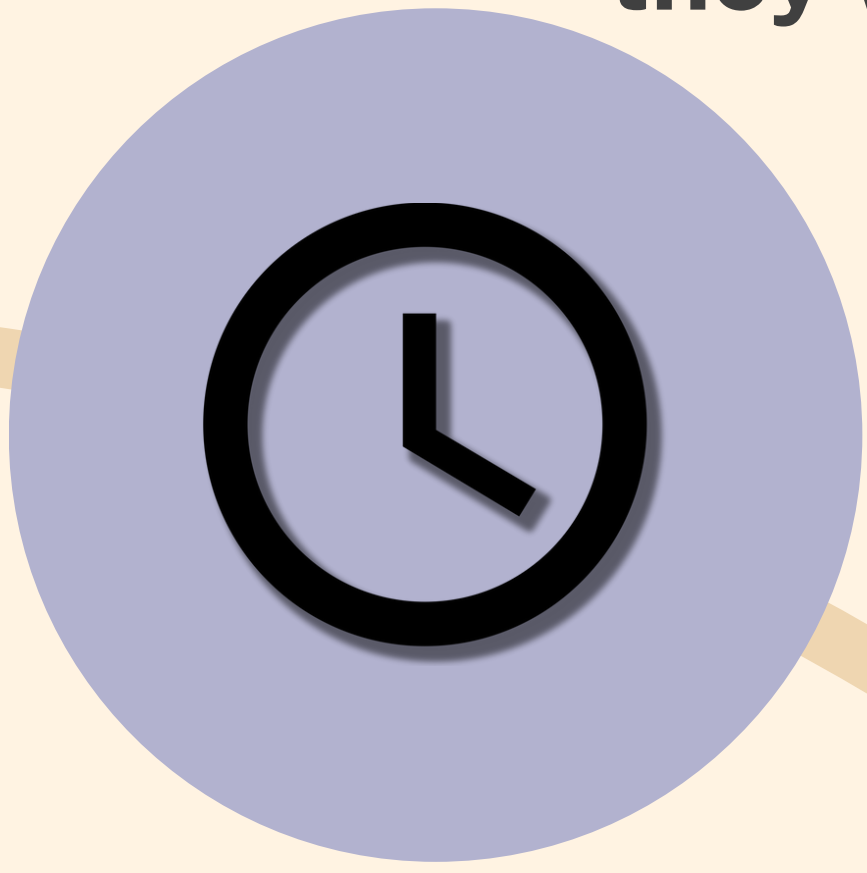


Problem: Students Wake up Late → Arrive School Late

Solution: Use AI to suggest the latest time for students to wake up so as they will reach school on time and maximize sleep at the same time.



Data → Model → Predict
Input (Mode of Transport) → Output (Time to set Alarm to wake up)

Maximizes Sleep Time and wakes them up on time

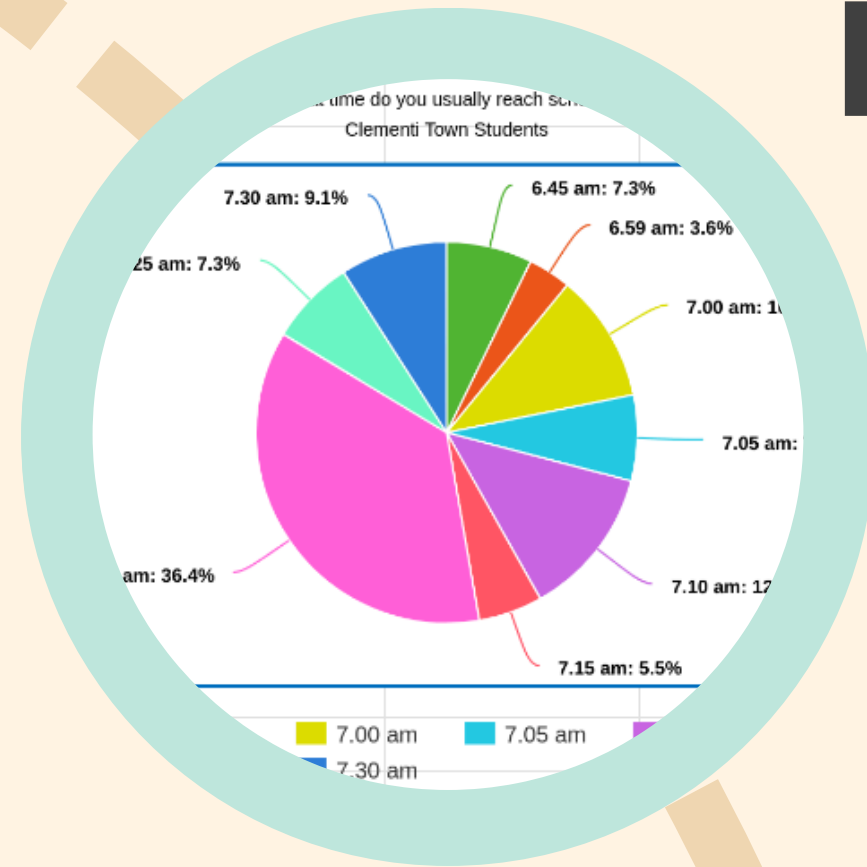
Using AI to suggest the latest time students should set their alarm to reach school on time

PROJECT BY:

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Thadar Moe Set



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锦文中学



Data: Student Survey Data

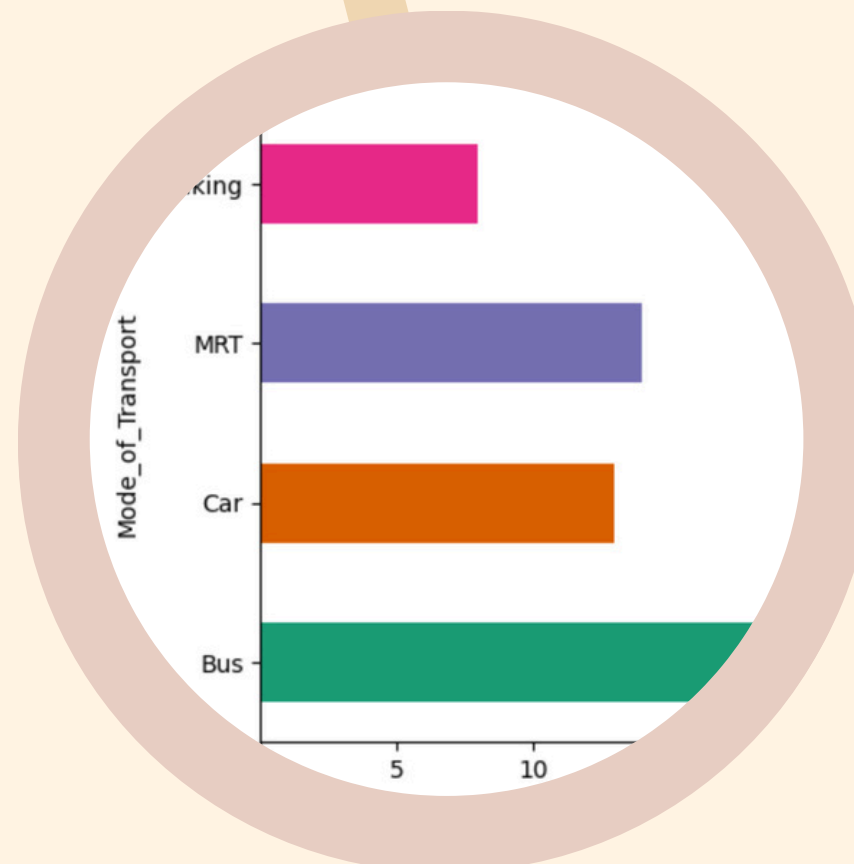
We surveyed to collect data using a Google Form and ended up collecting around 80 responses. We then imported the data from the responses to CSV Format.

Usage of: Google Colab, Stack Overflow, Python Libraries (Pandas, Numpy, sklearn.)

Dataset Clean Up & Analysis

Messy data Involved :
long columns → difficult to read
Data type → date-time, numbers
Messy response → clean to number
Plotting Graph → Visualise Data

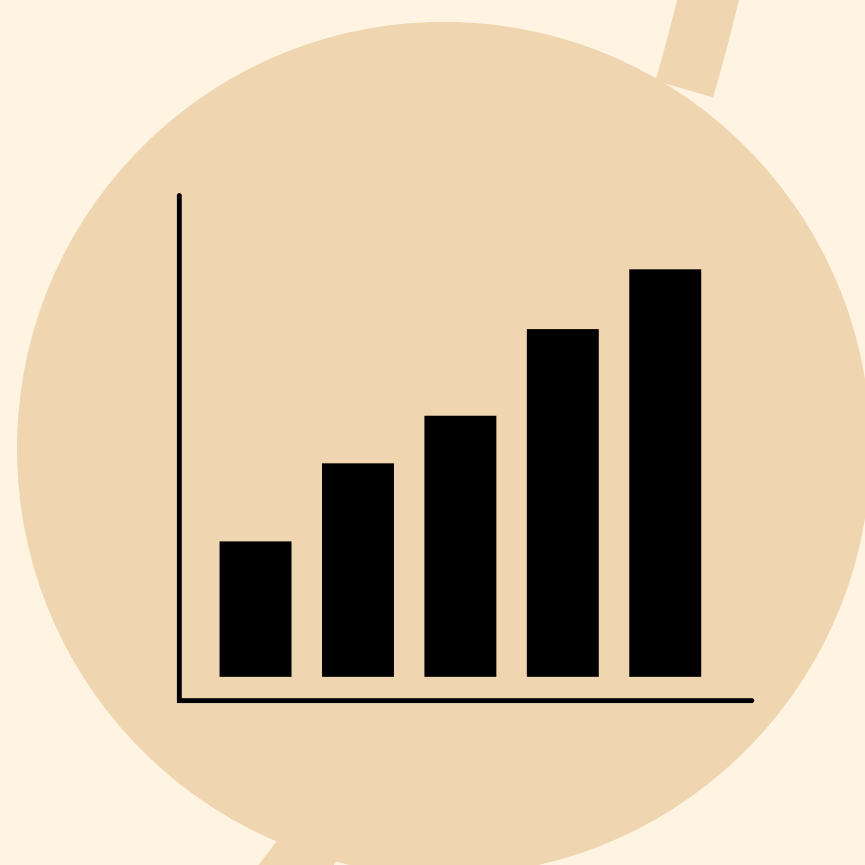
Hot-coding → to use in aiding of Model



Building a ML(Machine Learning) Model

Usage of Linear Regression

Trains the model to predict the latest time at which students can wake up and arrive on time to school just based on their mode of transport.



Testing of Accuracy for our Model (Evaluation)

MAE (Mean Absolute Error) - 25.10
MSE (Mean Squared Error) - 1153.86
R2 (Root Mean Squared Error) - 0.10

(The amount of data received was insufficient for high levels of accuracy. Therefore, for any future preferences, and as a reflection point, we couldve made sure to gather more data as to ensure the accuracy would have been higher.)

When user input mode of Transport, output is time to set alarm. Try the program for yourself here!
(Download the Csv file below and input it in the file browser before you run the code.)

<https://drive.google.com/file/d/1Z3TpRvDnwiQUrq7ISzLGQvIMR5HZ5G57/view?usp=sharing>
https://colab.research.google.com/drive/1zN_WBR96g00iHJxjprJvEyFmA-tAwY8T#scrollTo=lrOE329sDw_g

