User Manual for the Train Model

Data from the train model

This section contains all the data that the train model gets from the train controller. This includes the status of the doors, lights, the current temperature, the current power, the status of the brake and emergency brake, and the announcement request.

Data from the track controller

This section contains all the data that the train model gets from the track model. This includes the track elevation, passengers entering the train, and the authority of the train.

Train data

This section contains all the data of the physical train. This includes the train ID, number of cars, number of doors, train length, width, height, and mass. It also includes the maximum amount of passengers, the max acceleration, deceleration, and max speed of the train.

User inputs

This section contains all the inputs of the train and the most important data. This section contains buttons that simulate train engine failures, simulate signal pickup failures, and brake failures. This section also allows the user to change the total crew count and set the amount of passengers leaving the train. This section also shows the current speed of the train, the power requested from the train, and the total amount of passengers on the train. This section also contains the buttons to allow the user to test the train model.

Test section

In this section, the user can input any and all the data that the train model would get from the train controller and the track model. Included in this is the track elevation, number of passengers entering the train, the authority of the train, the temperature of the train, the power requested from the train, and an announcement request. In addition, this section allows the user to input left and right door, light, brake, and emergency brake inputs. At the bottom of this section, the user can submit the new data to the train model.