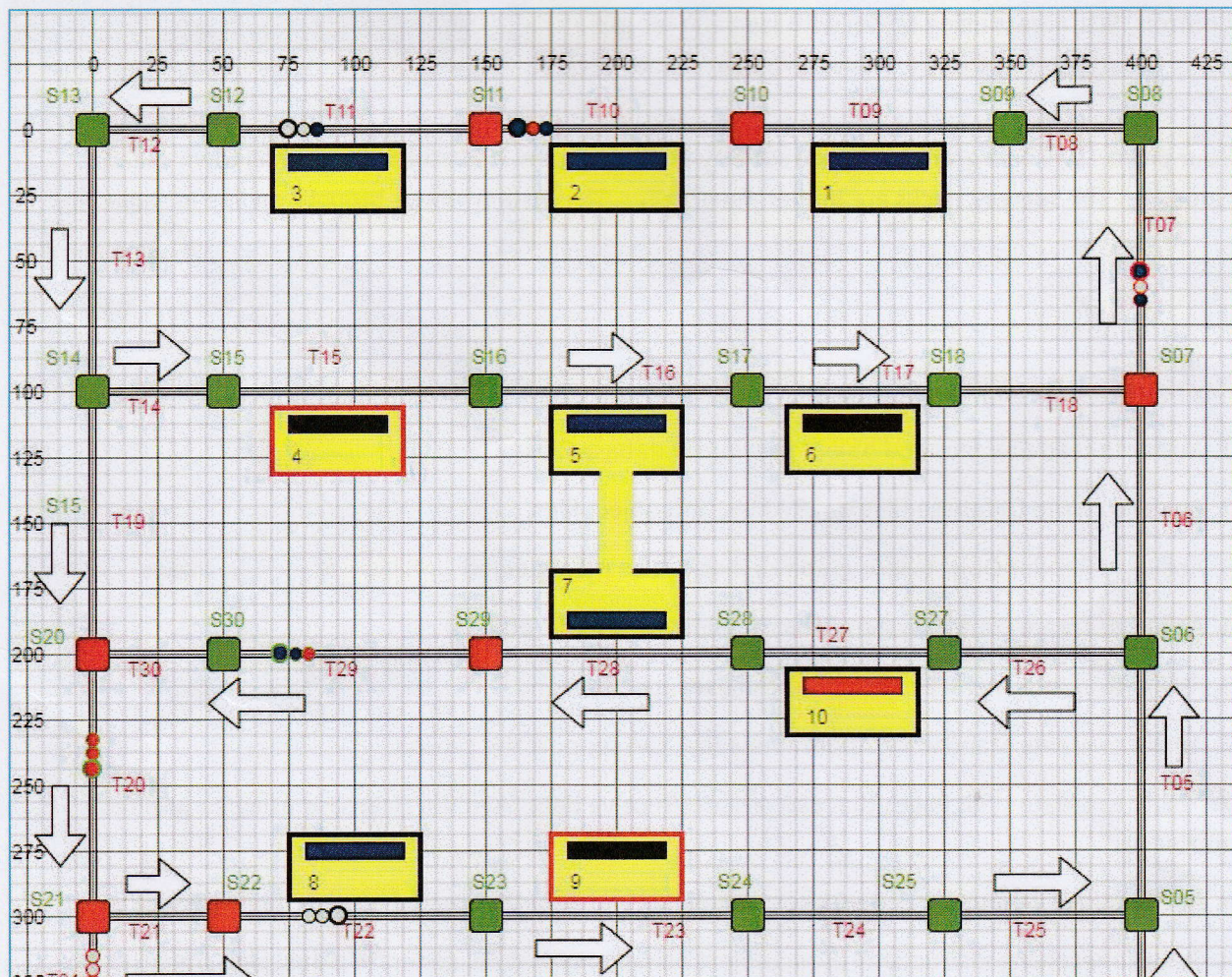Your system will include a system of tracks, trains, cars, people and subway stations.

The subway system will have the ability to control the arrival of passengers to any one of the subway station, board them on the next available train, and ensure that they are able to exit at their station.
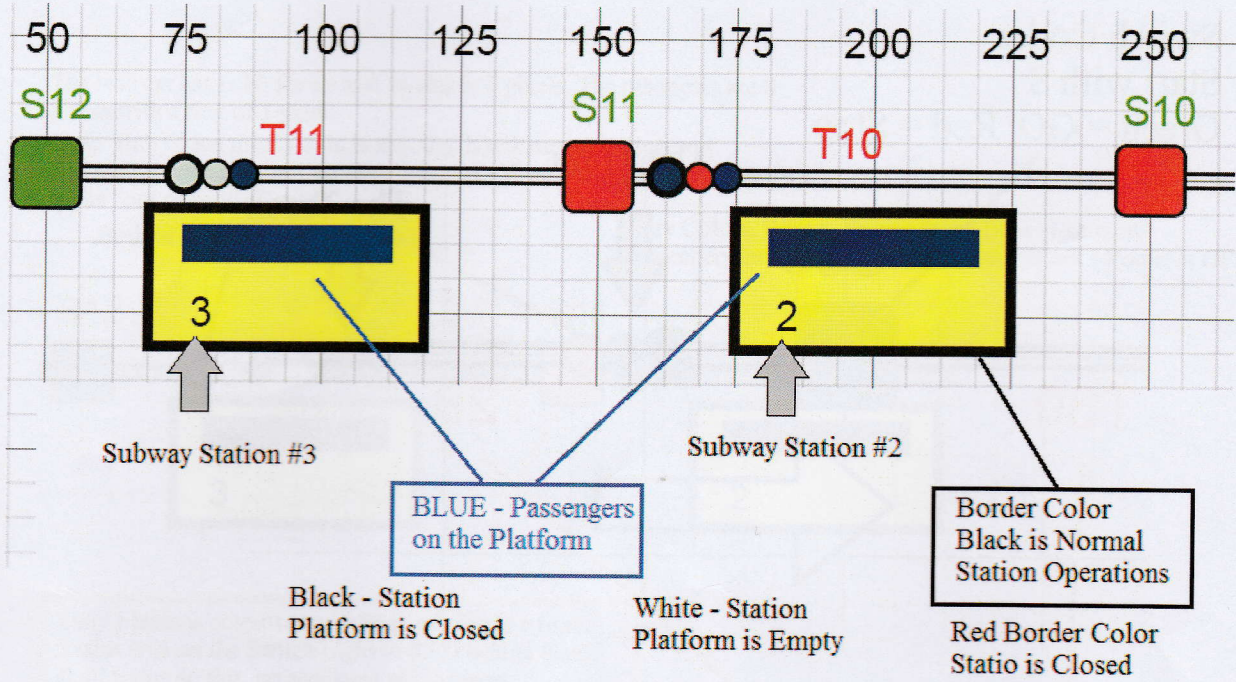
Controlling the flow of the people is only one of the goals. The subway system has to be controlled also. The rolling stock consists of many Trains that consists of train cars. Train cars vary in their sizes.

The track system consists of many parts. Traffic control to ensure safe rail operation is essential. This consists of tracks, and control light system. Your software has to enable the rail traffic to move in a safe and efficient manner.
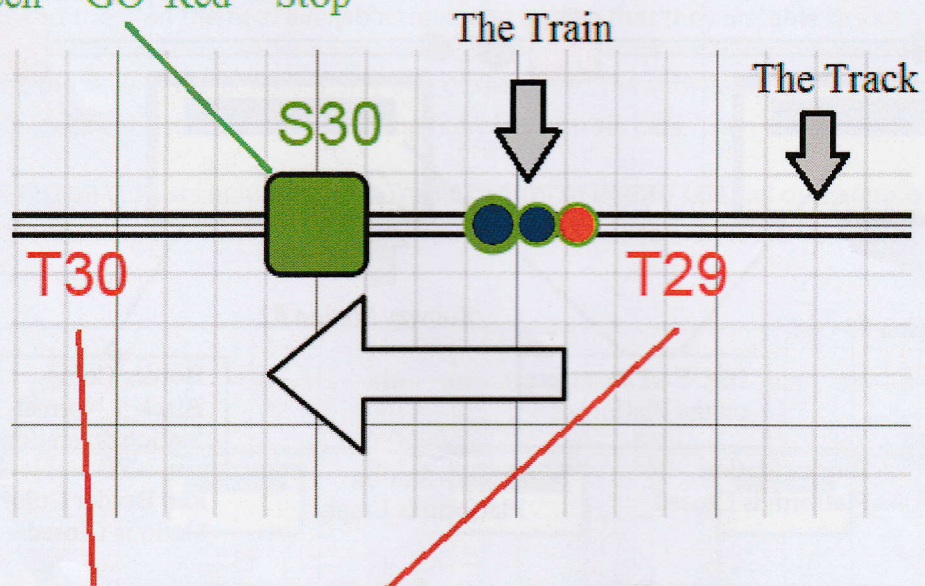
Map 01

50   75   100   125   150   175   200   225   250

S12   T11   S11   T10   S10

3   2

Subway Station #3   Subway Station #2

BLUE - Passengers
on the Platform

Border Color
Black is Normal
Station Operations

Black - Station
Platform is Closed

White - Station
Platform is Empty

Red Border Color
Statio is Closed

MAP 02

Switch Codes
Start with S
Green = GO Red = Stop

The Train

The Track

S30

T30   T29

Track Codes
Start with T

The lead car has is 10 Pixels and its ring is 2 pixels. The other cars are 8
pixels with a ring of 1 pixel.
Outer ring Green means train is moving. Black means stopped
Red means train is out of service. It can only drop passengers off when
in the "out of service" mode.

Both of these trains are stopped.

Core Colors. White - Empty Train, Blue -1 or more
passengers on board, Red - Car is Full. Black - Power is OFF

S12   T11   S11   T10

3   2
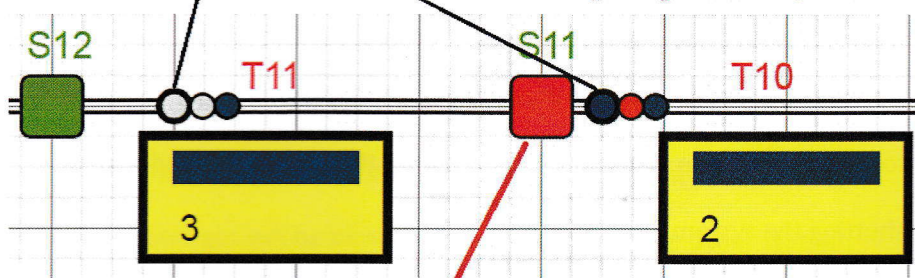
Only 1 train is permitted on a track section at a time.
Trains will set the Switch Light to RED behind them.
If all trains do this, no accidents will happen.

There will be supporting control panels and graphics to help with the administration of the Subway System.

The project goal is to create an autonomous Subway system that will allow large numbers of passengers to continuously enter at the various subway stations, enter the station queue to wait for the next available train, board the train, exit at the appropriate stop, exit the subway station.

Your controls will be

(1) Enabling the Customers to enter the various subway stations in a continuous fashion.

(2) Configuring the system to support multiple trains per route to meet the passenger load demand.

(3) Starting the system up, shutting the system down.

(4) Provide Database support for long term information system requirements.

(5) Provide Web Site support for station information boards located at all subway stops and for internet customers.

(6) Provide system information on demand for customer queue status, train status, customer search information for security purposes.