
UI DESIGN

for

COE 1186 Project

Version 0.1 approved

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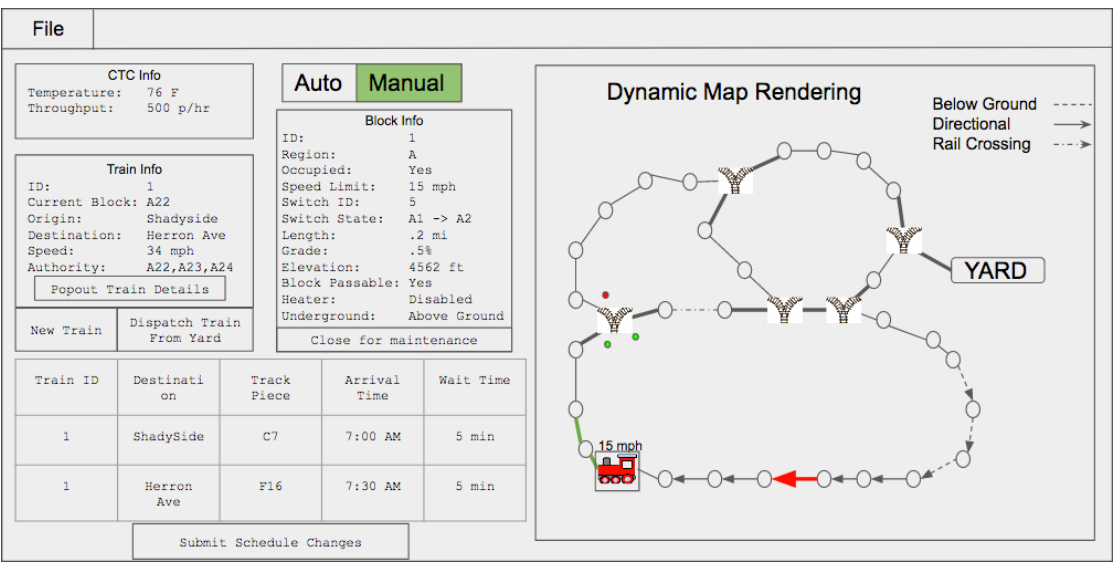
Training Montage

December 14, 2017

Contents

1	Centralized Traffic Control	3
2	Track Model	5
3	Wayside Controller	6
4	Train Model	8
5	Train Controller	9

1 Centralized Traffic Control



Train Info

ID: 1
Current Block: A22
Origin: Shadyside
Destination: Herron Ave
Speed: 34 mph
Authority: A22,A23,A24

Schedule

Destination	Track Piece	Arrival Time	Wait Time
ShadySide	C7	7:00 AM	5 min
Herron Ave	F16	7:30 AM	5 min

Submit Schedule Changes

2 Track Model

Track Model	
<div>11:46 AM 76°F</div>	
<div><div>Block Information</div><div><div>Wayside ID: 1</div><div>Speed Limit: 15 mph</div><div>Length: .2 mi</div><div>Grade: .5 %</div><div>Underground: No</div><div>Bidirectional: No</div><div>Occupied: No</div><div>Track Heater: Disabled</div><div>Next Blocks: A1, A3</div><div>Signal: Super Green</div><div>Infrastructure: SWITCH</div></div><div><div>Block ID: A1</div><div>Reload Block Info</div><div>Submit Changes</div><div>Elevation: 252ft</div><div>State: Operational</div><div>Line: Green</div><div>RR Crossing: Inactive</div><div>Authority: Super Green</div></div></div>	<div><div>Switch Information</div><div><div>Switch ID: 2</div><div>Connected Blocks: A1, A3, A4</div><div>State: A1 → A3</div></div></div> <div><div>Force Majeure</div><div><div>Power Failure</div><div>Broken Rail</div><div>Extra Train</div><div>Track Circuit Failure</div><div>No Train</div><div>No Communications</div></div></div> <div><div>Import Track</div><div>Export Track</div></div>

3 Wayside Controller

Region

G4

▼

Upload PLC

INFRASTRUCTURE

Block Occupancy

A1: 0

B4: 0

C7: 0

D13: 0

A2: 0

B5: 0

C8: 0

D14: 0

A3: 0

B6: 1

C9: 0

D15: 0

C10: 1

D16: 0

C11: 0

C12: 0

Switches

C12: 0

Lights

C12: 0

D13: 0

A1: 0

Crossings

NA

Broken Rail

NA

ROLLING STOCK

Block

C10

▼

Speed

Authority

Suggested

100

Suggested

A2

Actual


55

Actual

C7

4 Train Model

TRAIN MODEL



Current		Adjust	
Train ID	1 ↓	Speed Limit	20 mph
Authority	2 mi	Temperature	72 °F
Power	300 kW	Acceleration:	10 mph²
Current Train Speed:	8 mph	Manual Mode	ON OFF
Lights	ON OFF	Emergency Brake	ON OFF
Emergency Brake	ON OFF	Lights	ON OFF
Set Power:	200 kW	Set Temperature	65 °F
Authority	5 mi	Failures	
Doors		Brakes	ON OFF
Left	OPEN CLOSED	Engine	ON OFF
Right	OPEN CLOSED	Signal	ON OFF
Dimensions		Apply Changes	
Mass:	40,000 lb		
Height:	3.42 m		
Width:	2.65 m		
Length:	32.2 m		
Counts			
Passenger:	50		
Crew:	1		
Number of Cars	1		


5 Train Controller

Time & Station

Basic Info

Speed & Power

TRAIN CONTROL



UPCOMING/CURRENT STATION INFORMATION

Train ID: 1

Authority: 2 mi

Speed Limit: 20 mph

Manual **ON** OFF

Apply Changes

Suggested Speed: 15 mph

Current Train Speed: 8 mph

Max Safe Speed: 12 mph

Set Speed: 12 mph

Calculated Power: 300 kW

Set Power: 300 kW

Std Brake

Current Safe Braking Distance: 0.5 mi

Current Power: 200 kW

Lights **ON** OFF

Doors **LEFT** RIGHT

Manual Mode

Auxiliary Info

Lights & Doors

9