INTERACTIVE MODEL FOR THE RAILROAD MUSEUM

July 4th Meeting

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INTERACTIVE FEATURES

• Five Structures to focus on:
  • California Tower
    ▪ Control the sound so that it chimes once an hour (simulate the real one)
  • Oregon Pavilion
    ▪ Plays music that represents that of the building
  • Botanical Garden
    ▪ Control the lightning
  • Trolley Terminal
    ▪ Control the lightning
  • Extra:
    • Live Feed Webcam on the train or the model
MP3 SHIELD

- Progress
  1. Ultra-SD card – all set up to input MP3 files and play it
  2. Library not too complicated. Researched about other similar projects

- TO DO
  1. Must buy a header so it could stack on to the Arduino (needs to be solder on to the board)
ETHERNET

- PROGRESS
  1. Created a sample HTML page
     https://8e8c687742d89531df83dbc0a4bfaefc17c53d42.googledrive.com/host/0B6_Ayl7YnEAIVFVmQk9QanJZTzg/index.html
     1. Created the base of the code
        (can connect to google.com; not mine)

- To Do
  1. Can’t connect to the google-hosted website I created
  2. DNS address and port forwarding (how to access the router)
RASPBERRY PI

- Got it streaming
  - but, quality is low and the lag is bad
  - May have to use another camera?
- Look at other methods
  - Got it to film without lag but with a couple second delays
  - Real-time can’t be stream
- TO DO:
  - Have to Port forwarding to access the camera from any website (need to access router in order to do so)
  - Set up makes it hard to put it on the train (bulky & wires)
EXAMPLE OF STREAM
CULTURAL EXPLORATION

Eating Osaka-style Okonomiyaki

Going to Osaka Aquarium