Deployment Plan Documentation: Team 2 Project 4

Project Information

Our project is a web game built in Javascript and HTML. The source is available at the dedicated GitHub page: https://github.com/amanelso4/EECS448Project4. There is no build process for our source code.

Deployment Plan A: GitHub Pages

If we were to deploy this project publically, we would likely use Github Pages to host it at no cost. This plan will be referred to as “Deployment Plan A”. Deployment would consist of merging changes into the gh-pages branch in Git and then pushing to the Github remote. The game would then be accessible at the hosting GitHub user’s GitHub Pages URL (for instance, <user>.github.io).

Deployment Plan B: Webserver and Domain Name

If we wished to deploy on a larger scale, we could purchase a domain and host a (probably Apache) webserver on a raspberry pi. This plan will be referred to as “Deployment Plan B.” Deployment would then consist of pushing changes to the remote on the rpi and restarting the webserver. This scenario would include (on average) a ten to fifteen dollar annual cost to maintain the domain name. Additionally, the raspberry pi (RPi Zero in this case) would cost around twenty dollars for the board, charger, and microSD card, and a further thirteen or so dollars for an ethernet cable and microUSB to RJ45 adapter. All told, hosting a webserver and purchasing a domain name would cost around forty-eight dollars up front and fifteen dollars per additional year.

Deployment Plan A Costs: GitHub Pages

Account and GitHub Pages Hosting for a Single Site……$0

Total…… $0

Deployment Plan B Costs: Webserver and Domain Name

Domain Name…… $15 per year

RPi Zero…… $5

5V 2.5A Micro USB AC Adapter Charger……..$10

16GB MicroSD Card……$5

Ethernet Cable…… $10

MicroUSB to RJ45 Adapter…… $3

Total…… $33 + $15 per year

Development Deployment

During development, deployment is tested on a python webserver running on a Windows machine. This is handled by the python script included in the source repo named “server.py”. The game can be deployed to the development server and played by running “python server.py” and navigating to http://localhost:8000/game.js in a browser running on the same machine. The server can be shut down with a keyboard interrupt in the terminal from which it was launched. If port 8000 is forwarded on the router, the game is accessible publicly from the public IP address of the host machine at port 8000.

Marketing and Revenue

This project is marketed towards children and adults who want something to keep busy with, absent-mindedly. The project can be used to pass the time during lectures and work meetings without requiring all attention be focused on the game. The game can also be played competitively, with players comparing runtimes in Infinite Mode. Revenue from this project can be gained through advertisements on the webpage. Use of advertising on GitHub Pages is currently receiving pushbacks from GitHub. To generate revenue in this way, we would likely have to go with Deployment Plan B and host a webserver ourselves.