Web and Distributed Programming

Instructor: Eric Pogue

Session: 22

Agenda:

1. Friendly Conversation & Good Natured Banter… how's everyone feeling about Project 3?

2. Quick Review of Assignments From Last Class

3. Midterm Exam 1 Discussion

4. Google Maps Live Coding Session… together!

Discussion & Questions welcome at any time… please be present with no phones or email during our discussion time

Assignment From Last Class

Assignment:

- Work on Project 3 due at the end of next week
- Complete Ch.7.1 through 7.4

Live Coding Session*
Google Maps API

Coding Session Objectives

1. Become comfortable with your development environment/tools
   - Chrome Developer Tools
   - HTML and JavaScript Validator

2. Save and deploy working versions of your project regularly… this allows you to experiment without risking what you have already accomplished
   - Start with a working, tested, and validated Hello World
   - Make incremental enhancements in new files… or using source code control
   - Be prepared to submit what you have at any point

3. Look for similar examples… but write your own code that you understand

4. Only you can choose to invest the time… time spent earlier in the project is worth more than time spent at the end

Start With Working, Tested, and Validated Hello World

Yahtzee Dice Roller to Hello World… Let's do this TOGETHER:

1. Copy 'yahtzee-dice-roller-extern-js.html' and 'yahtzee-dice-roller-extern-js.js' to working folder

2. Rename them to 'hello-world.html' and 'hello-world.js'

3. Update the JavaScript link in 'hello-world.html'

4. Test hello-world application… does it work?

5. Cut CSS code out of 'hello-world.html'… see the change in behavior?

6. Create a new file 'hello-world.css', move CSS code to external file, past CSS code into external file, and add link to 'hello-world.html'… does it work?

7. Add 'console.log()' message to 'function random()'… test it with Developer Tools! Does it work?

8. Success!

Create A Safe Environment to Make Changes

Step 1 – Create initial Google Maps files:

1. Copy all three 'hello-world' files and name them 'google-maps-step-01' html, css, and js files

2. Update links in 'google-maps-step-01.html' to reflect new names

3. Update title to 'Google Maps'

4. Update 'console.log()' message to reflect 'Step 1' and test new files

5. Test utilizing Google Developer Tools… does it work?

6. Success!

Add Tutorial Code for a Map and Markers

Step 2 – Add a Google Map and two Markers:

1. Copy all three 'step-01' files to 'step-02' html, css, and js files

2. Update links in 'google-maps-step-02.html' to reflect new names

3. Update 'console.log()' message to reflect 'Step 2' and test new files… does it work?

4. Now add code from Google Maps tutorial to Step 2 files

5. Test it!... does it work?

6. Add a marker like they did in the second tutorial… does it work?

7. Add a second marker with a custom icon and Listener… does it work?

8. Success!

9. Time check…

Add Idle Listener that Checks Zoomlevel and Bounds

Step 3 – Add Listener for Idle, get zoom level, check bounds, and remove Yahtzee code:

1. Copy all three 'step-02' files to 'step-03' html, css, and js files

2. Update links in 'google-maps-step-03.html' to reflect new names

3. Update 'console.log()' message to reflect 'Step 3' and test new files... does it work?

4. Add a listener for Idle that logs a console message with the current zoom level... does it work?

5. Success!

Remove or Repurpose Yahtzee Code

Step 4 – Create step 4 files and know what you will need to do to submit project:

1. Copy all three 'step-03' files to 'step-04' html, css, and js files

2. Remove/repurpose Yahtzee code to create Instructions and Hints… does it work?

3. If you want, you can utilize 'step-04' to continue enhancing your solution

4. Do you know what it would take to finalize and submit 'step-04'?

End of Session

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