launch_code

Codergirl – WebDev Unit
Class 1
August 17th, 2020

Agenda

- Intros
- Course Overview
- Review
- Livecoding
- Groups
  - Studio
- Studio review

Instructor Intros

Chetna Aggarwal
MS Computer Engineering
Missouri University of S&T - Rolla

Bayer
- Developer
- Technical Lead
- Agile Coach

Fun facts:
- Lives in St. Charles
- Husband's name is Jimmy
- Two children- Arianna and Miraya
- Strengths
  - Developing others
  - Valuing individuals
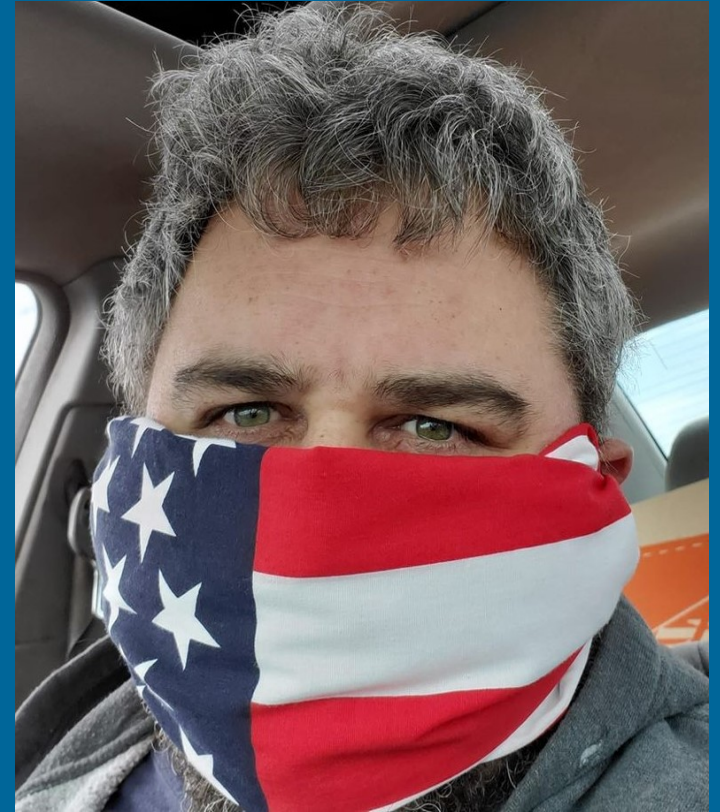 - Treating people consistently

Instructor Intros

Mike Tully
2016 LaunchCode Graduate

National Geospatial-Intelligence Agency
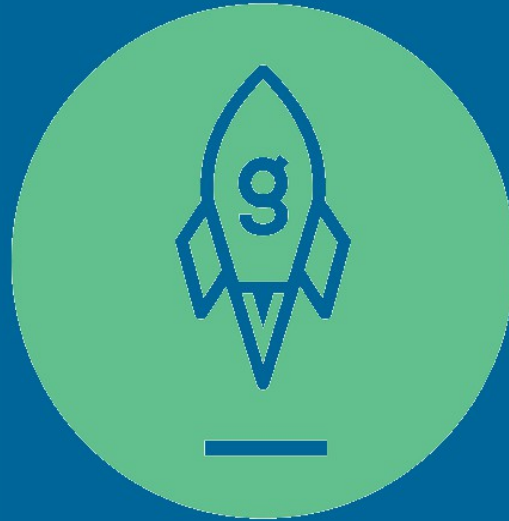- Team Lead
- Java, Python, React

Before LaunchCode:
- Title Insurance Examiner
- Best Buy
- Stagehand
- Youth Worker
- Political Canvasser
- Handicap Accessibility Inspector
- Utility Allowance Specialist
- Line Cook

Mentor Intros

- Austin
- Abbey
- Scott
- Pillai
- Gabriela C.
- Tabitha
- Carrie
- Mariah
- Monica

- Korina
- Warren
- Pallavi
- Veleria
- Clark
- Sunita
- Gab
- Kyle
- Haley

Dream Team

Course Overview

- Every Monday and Wednesday
  - 5:30-8:30pm
  - Last class day: November 9th
  - 1 holiday, 4 catch up days
  - Virtual until further notice

- Pass/Don't pass
  - Must complete all graded assignments
  - Passing allows moving to Unit 2

Course Objectives

- Learn how to create basic Javascript applications

- Build the skills to independently learn future technologies

- Develop a positive, encouraging environment to learn new skills

- Begin building a network of talented and driven people in technology

Course Tools

- Canvas
  - Prep work, Assignments and grades
  - Prep work posted roughly 2 weeks out

- Slack
  - Best communication method
  - Announcements
  - Don't be fooled by a green dot

- repl.it
  - Online Integrated Development Environment (IDE)
  - Write your code here!

Course Expectations

- You
  - Do the prep work *before* class
  - Come to class (virtually)
  - Ask questions and participate
  - Do the studios and assignments
  - Don't cheat

- Mentor Team
  - Be available (within reason)
  - Be patient and understanding
  - Be prepared

Survival Tips

- Find or form a study group
  - #webdev_studygroups

- Create a study schedule and stick to it
  - Plan on 15-20 hours per week

- Reach out when you're struggling
  - Classmates, mentors, LC staff
  - If something is unclear, ask

- Stay focused on your goals
  - Why are you here? Let that fuel you

Academic Honesty

Sources for Help

- Classmates
  - If you can help, don't be afraid to answer

- Group Mentor
  - They exist here to help YOU
  - Be mindful of their schedules

- Instructors
  - More "I don't understand this"
  - Less "my code doesn't work"

- Google!

Class Overview

Questions?

Review – Values and Data Types

- Programs are made of two things:
  1) Data
  2) Operations that manipulate data

Review – Values and Data Types

- **Value:** Specific piece of data
  - "Hello world" **String**
  - 23 **Number**
  - animal_cross.jpeg **Object**
  - true **Boolean**

- **Data Type**: Category of data

Review – Values and Data Types

- **Variable:** Way to store values for use in a program.
  - **Declaration**: Creating a new variable

```
let programmingLanguage;
```

  - **Initialization:** Giving the variable a value to store

```
let programmingLanguage;
programmingLanguage = "JavaScript";
```

```
let programmingLanguage = "JavaScript";
```

Review – Values and Data Types

- Variable keywords
  - **let** – used if the value will change
  - **const** – used if the value is constant
    - Trying to change a **const** variable will lead to errors
  - Only use keywords when **declaring** a variable, never for reassignment
  - Do not use **var**

Review – Values and Data Types

```
let day = "Thursday";
console.log(day);

day = "Friday";
console.log(day);

day = 21;
console.log(day);
```

Declaration and Initialization

Reassignment

Reassignment

Review – Values and Data Types

- Variable Naming
  - Use camelCase
    - thisIsVeryCoolCamelCase
    - this_is_not_camel_case
- No special characters or whitespace
- Cannot start with a number
- Use meaningful names
  - x = "Hello, World!" (BAD)
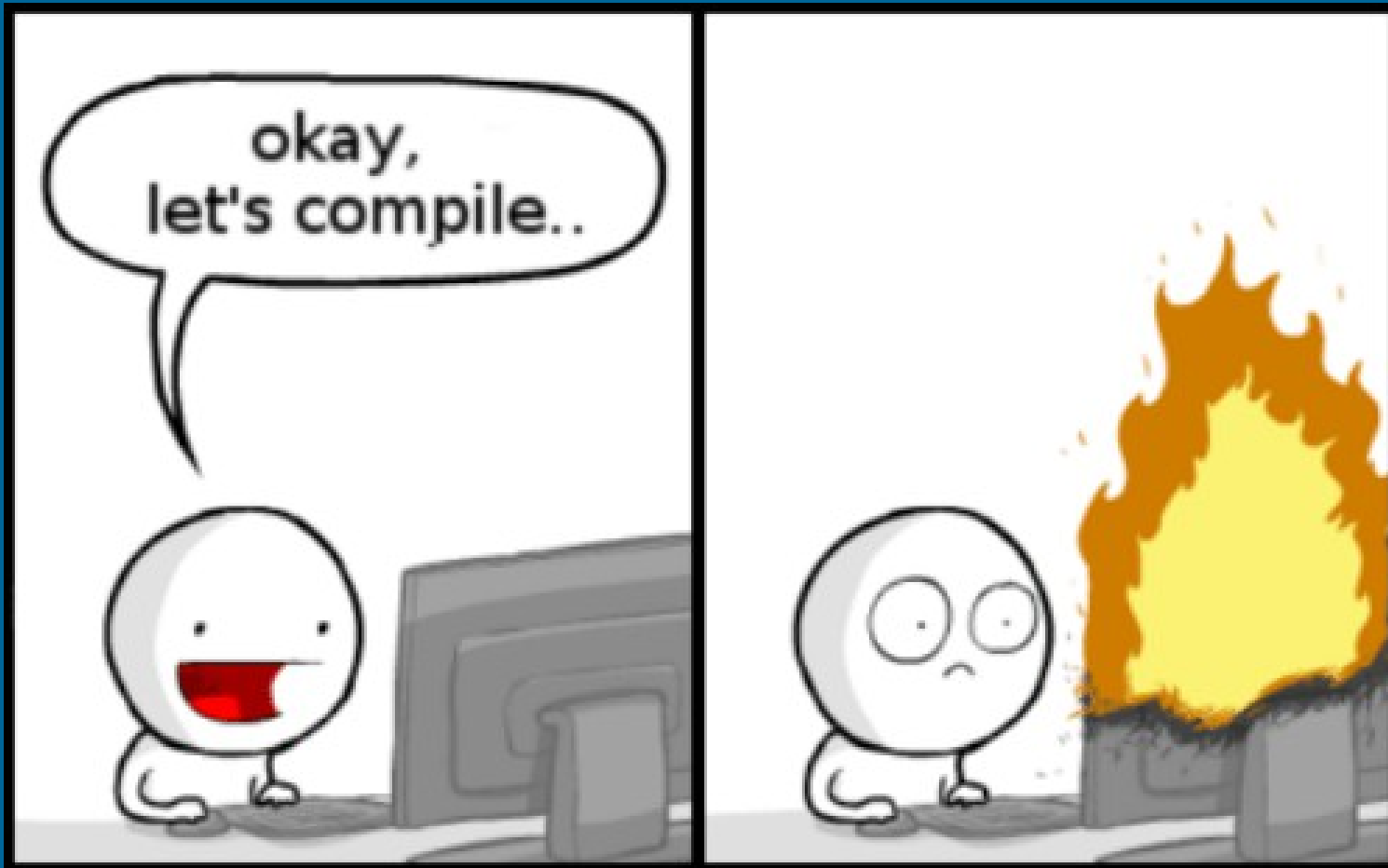 - greeting = "Hello, World!" (GOOD!)

Review – Values and Data Types

- **Operator:** Character that represents a computation to be made
  - You likely know: +, -, *, /
  - ** is exponent (5 ** 2 = 25)
  - ++ is increment (if x = 2, x++ = 3)
  - % is modulus
    - Divide two numbers, return the remainder
    - 7 % 2 = 1

Review – Values and Data Types

Questions?

Live Coding

Studio – Data and Variables

- Store data in variables
- Print data back to the user
- Format the output to look like the LC04 Form

```
------------------------------------
> LC04 – LAUNCH CHECKLIST
------------------------------------

Date: Monday 2019-03-18
Time: 10:05:34 AM


------------------------------------

> ASTRONAUT INFO
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* count: 7
* status: ready


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> FUEL DATA
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* Fuel temp celsius: -225 C
* Fuel level: 100%


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> MASS DATA
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* Crew mass: 564.9 kg
* Fuel mass: 760000 kg
* Shuttle mass: 74842.31 kg
* Total mass: 835407.21 kg
```

Now

- Find your group Zoom
  - Intros
  - Studio
  - Prep for next week
- Studio Review
  - This Zoom
  - 8:00pm