# **Carson McMahan**

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# **Education:**

- Boise State University
- Games, Interactive, Media, Mobile (GIMM) program
- Bachelors of Science
  - Graduating May 2024

# **Experience:**

# Web Development:

Teachers Assist for GIMM 260

- Was a teacher's assistant for Professor Jack Polifka
- Helped him teach GIMM 260, which is a web development class
- My responsibilities included:
  - Taught on two different days
    - Bootstrap/Responsive Web Design
    - JavaScript Functions
  - Helping students when they had questions
- I gained *presentation skills* by *leading* class discusses related responsive web design and JavaScript Functions
- Gained a deeper understanding of those topics because I was able to teach them

#### AWS and Alexa Application

- Developed an application to send and receive data using Amazon Alexa
- Users can interact with Alexa by using four unique intents
- Utilized *MySQL* to store when users interact with Alexa
  - Intent name as well as the date and time
- Learned how to host a website using Amazon Web Services
- Strengthened my *problem-solving* ability as well as working in a group environment

#### CRUD API Mobile Website

- Created a CRUPD API website where users could enter their own data using MySQL
- Users were able to sort through all of the data entered into the database as well as edit and delete selected data

## Fall of 2023

Fall of 2023

Spring of 2023

- Learned how to use MySQL statements such as select, insert, update, and delete
- Strengthened my *problem-solving* skills and improved upon my ability to create an interactive website

#### WordPress Portfolio Website

- Made a portfolio website using *WordPress*
- Learned how to create pages and utilize plugins
- Used templates to create the base website and then build upon that
- Learned a new skill, *WordPress*, and strengthened my ability to learn and *problem-solve*

#### IUPAC Project

- Developed a website template for Systems Thinking in Chemistry.
- Created templates using *Adobe XD*
- Did UX texting by doing a simple card sort with a total of 10 people
- Currently finalizing the navigation bar and will then move on to coding the actual template using *HTML*, *CSS*, *JavaScript*, and some *Word Press as well*.

#### Mobile Form Website

- Developed a form website which asks users questions based on a prompt
- My prompt was League of Legends and I asked a total of right questions utilizing *HTML* form elements such as dropdowns text boxes and file uploads
- Utilized *express validator* to validate user input on a *Node.js* server
- JavaScript, HTML, and CSS were used for this website.

#### Mobile Narrative Website

- Created a website designed to tell a story using data visualizations on the Dodgers stats between 2021 1971
- Total of four visualizations each showcasing something different: total attendance between each season, total runs scored, Dodgers vs Giants wins, and a table of top players each season and whether they won an award or not
- Utilized *Visual Studio Code* to create this project, *HTML, CSS, JavaScript* and some JS frameworks such as *Node.js* and *D3.js*
- Strengthened my skill to problem solve effectively and how to use *HTML*, *CSS*, and *JavaScript* to make an interactive website

## **Game Development:**

#### Unreal Multiplier Game

- Developed a multiplayer experience using Unreal Engine
- The concept for the game was an arena style fighting game where the players had gravity that could pick up and launch objects at one another
- Learnd how to use *Unreal Engine* and *Blueprints*

## Spring of 2023

Spring of 2023

Spring of 2023

Fall of 2022

Fall 2023

• Further improved upon *working in a group* and *problem solving* 

#### *Gravity Gauntlet*

- Created a space racing game where the idea is to allow the player to flip their own gravity
- Developed the game to be two players with split screen and had an AI which functioned as a third player
- Utilized the *Unity Engine* to create this as well as C# to program all of the different features
- Strengthened my ability to *problem-solve*, *work with others*, and use C#

#### Thaumaturge

- Developing an open world spell casting game
- Wanted to create a unique spell casting system that strays away from traditional elements for spells
- Utilized Cinemachine in *Unity Engine* to develop a third person character controller as well as used *GitHub* for project management and version control
- Further developing my *problem-solving* skills and *working in a group setting*

#### Senior VR Game

- Developing a VR game for a senior project that started when I was a sophomore
- It is centered around using VR to help architecture allow client to design and develop their own house
- Utilized programs such as *Maya*, *Photoshop*, and *Unity* to get to the current stage that I am at
- This project is still in development however it has taught me how to work on long term projects and develop troubleshooting techniques

#### *Quantum Entanglement: For Dummies-by-Dummies*

- Created a gameplay experience centered around Quantum Entanglement
- Designed to be a comic but shifted to focus more on gameplay by using puzzles to explain Quantum Entanglement
- Had different design stages including storyboards showing art and workflow as well as a final Unity project
- Utilized Adobe Creative Cloud programs to create animations, Audacity to record voice overs, C# and Unity Engine to create the project
- Further improved upon *working in group* setting, *problem solving*, as well as *design* stages

#### Augmented Reality Mobile Game



Spring of 2022

Spring 2022 to Fall 2023

Spring 2023

Fall 2023

- Created an AR game for Android smartphones in a group setting
- Designed as a turn-based RPG where the player can choose what character they play as and can choose the enemy they could fight against
- Had different design stages including conception, prototype, and final version
- Used Vuforia, Unity UI, and C#
- Learned how to effectively *work in a group* and *problem solve* issues