

MYORPG

Senior Design Group 24

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About Our Project

MYORPG=Make Your Own Role Playing Game

- Inspired by the numerous Flash Games made in the 2000s
 - Focus on player created content
 - Weapons, Armor, Items, Maps
 - Multiplayer allows players to experience content made by others

Technology Used

- JavaScript & Node.js
- Database: MySQL
- Libraries:
 - Express (Web Framework)
 - Handlebars (Template Engine)
 - Socket.io (Sockets)
 - Canvas API (Game)
 - SendGrid (Email Delivery Service)

Amazon Web Services

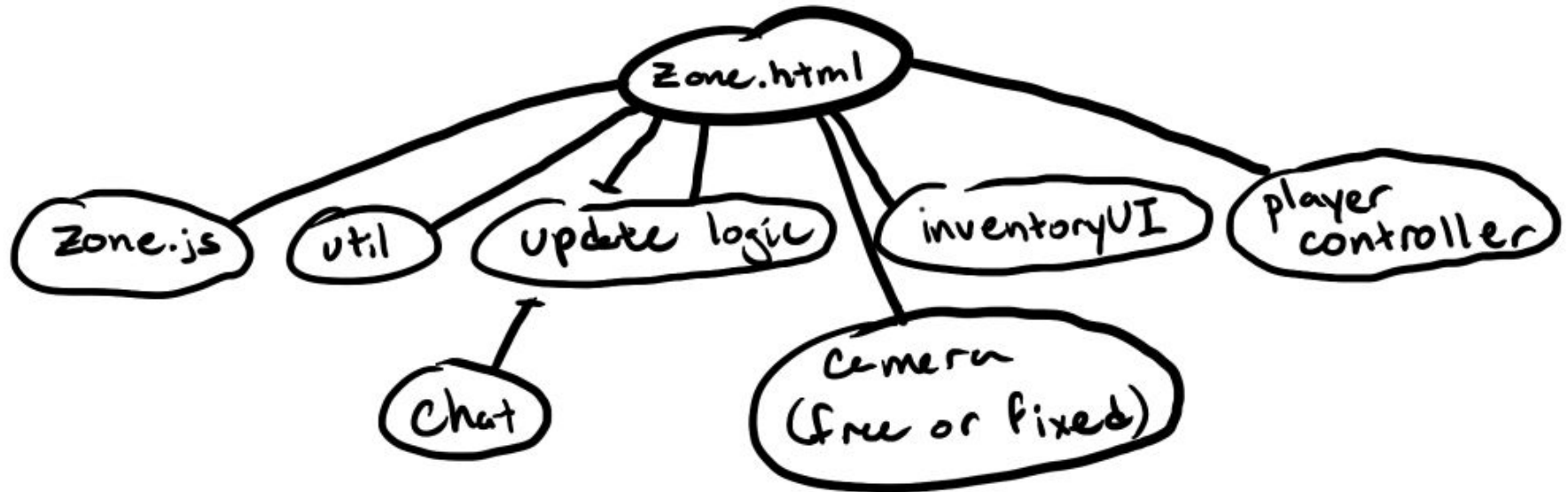
- Using AWS to host our project
 - Scalable
 - Taking advantage of Amazon services for different tasks
 - EC2 for servers
 - Runs the server code
 - S3 for storage
 - Offers storage for custom uploaded user content (Items, Weapons, Avatars..)
 - RDS for databases (MySQL)
 - Stores user's accounts, inventory, etc.

Database

A MySQL database is used to store player information and player made content. Content is persistent, so a player can log in and find that their progress and content will be there regardless of time passed.

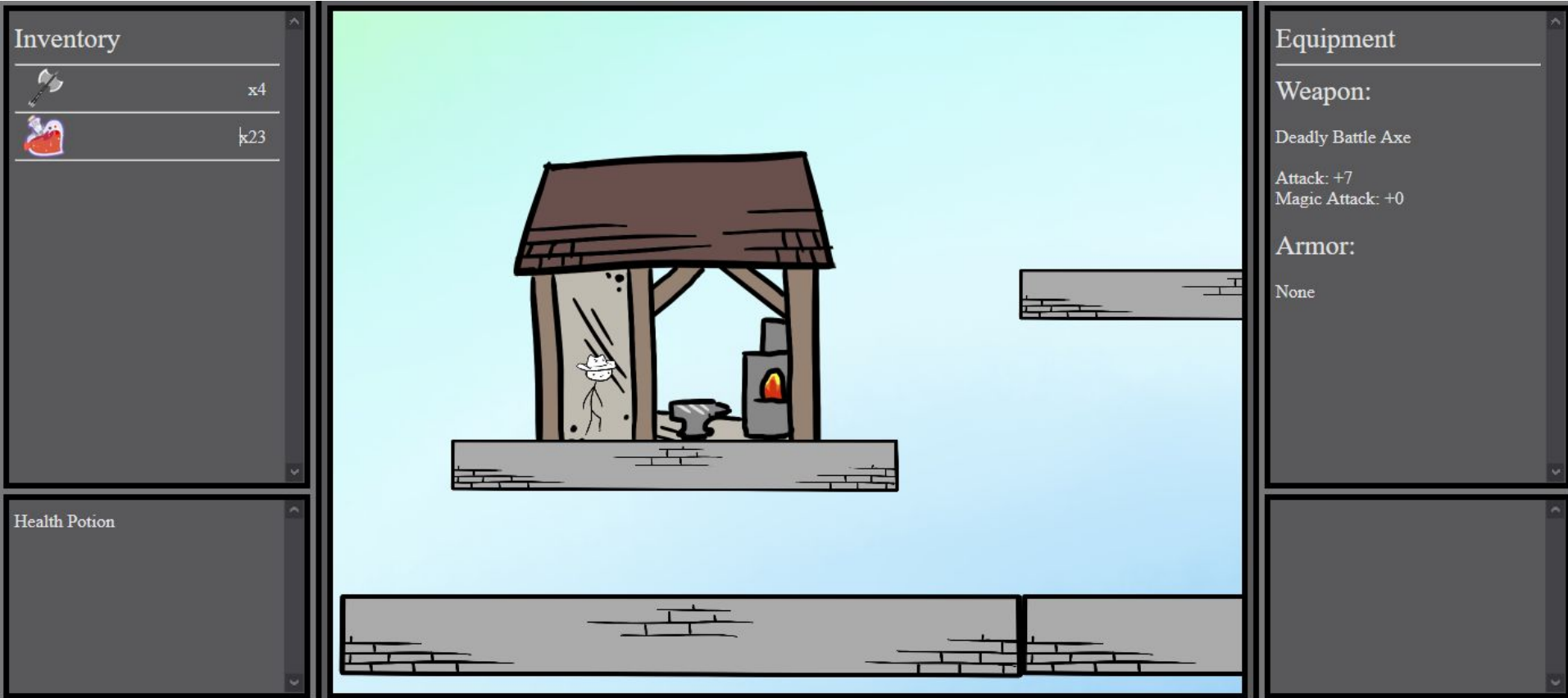
Client-side Script

The client-side script is highly modularized. Its main purposes are to store unique data to each zone, draw the game canvas, and handle player movement.



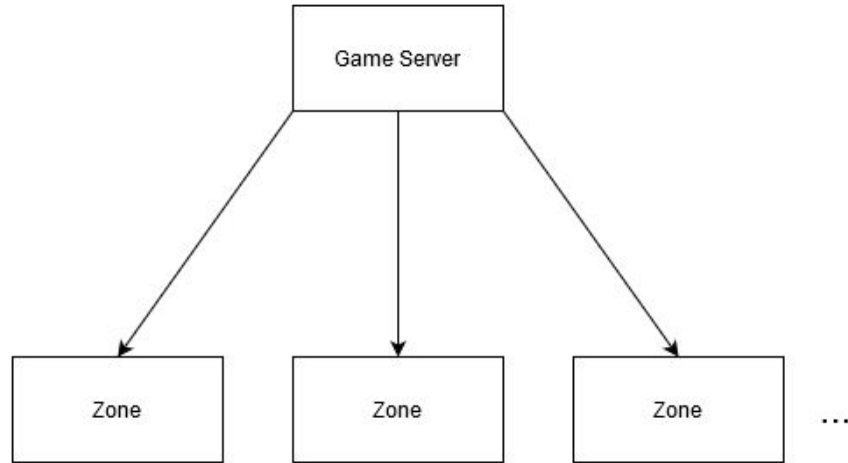
UI

The user interface is composed of multiple HTML Canvases, and when utilizing the functions of a shop, the additional menu is overlaid on the map.



The Server

This semester, the server was refactored to allow for multiple concurrent and independent gamezones to run at once.



Semester Goals

Monster Behavior

- Basic versus Boss

Dungeon Traversal and Creation

- Special kind of zone

File Uploading

- Upload custom content

Semester Goals

Account Page

- Players can add friends, send private messages to one another.

Stores and Interactable NPCs

- Ways to interact with non-player controlled content. Item combination will be implemented through this feature.

Multiple Zones

- Independent maps

Technical Challenges

Additional Maps

- Changing server code to account for multiple zones existing.

Data Storage

- Monster and Player statistics stored separately.