

References & Generative AI Usage

Generative AI usage for Testing

Our testing team members were unfamiliar with use of pytest and using mocking in python. We used ChatGPT & Grock AI to understand unit testing concepts, how to mock dependencies, such as Firebase authentication using MagicMock() and using pytest fixtures. While the AI was helpful, it sometimes produced inaccurate responses or included real dependencies despite requests for mocked examples. Nonetheless, it supported our learning and improved our testing approach.

Generative AI/Other sources used for Unity Integration

The frontend team used generative AI navigate through the DG Tween animation library in Unity, a library which helped create user interface animations like pop ins or pop outs. AI was also used to create web requests as Unity's web requests are not as plug and play in comparison to JavaScript/Web development. AI was also used for the creation of the "Wizdom Run" logo, menu background, and app icon which was first prompted with DALLE and then modified on an online photoshop (Photopea) to better suit the game's style. As the frontend team did not have prior experience in building a full-scale game, AI was used to learn what design patterns to follow in game development, mainly, the singleton design pattern which was used for various "Manager" objects.

Generative AI/Other sources used for LLM Integration

The AI team mainly used AI to improve the multiple-choice question (MCQ) generation prompt. We made sure the questions were unique by incorporating logic to monitor previously generated ones. Additionally, AI assisted in organizing the output by adding questions, answers, and difficulty levels in a JSON format. To put the logic for setting up and conducting QA sessions and effectively loading PDF documents into practice, we also referred to a YouTube video produced by Automata Learning Lab.

Generative AI/ Other sources used for Backend Development

The backend team leveraged AI technology including ChatGPT to aid in development. ChatGPT was primarily used to provide development overviews and structure, giving insights into steps for development. While AI was used to provide assistance, it was not used to provide entire segments of code, just provide steps to develop the code and aid in debugging. The backend team also used W3 schools to provide the basics for PostgreSQL, as only MySQL had been used in that past. Various YouTube videos were watched to understand the process of building a Flask App, however no code was taken directly from the videos.

Unity Game Assets List:

Assets were mainly sourced off itch io, with artists who gave permission for both commercial and non-commercial use of their assets. Any paid asset was purchased for use in this project.

Music

<https://elvgames.itch.io/sound-effects-user-interface>

<https://elvgames.itch.io/cosy-melodies-music-4>

<https://elvgames.itch.io/cute-rpg-music-pack-1>

<https://elvgames.itch.io/cute-rpg-music-pack-2>

<https://elvgames.itch.io/cute-rpg-music-pack-4>

<https://elvgames.itch.io/cute-rpg-music-pack-5>

<https://xdeviruchi.itch.io/16-bit-fantasy-adventure-music-pack>

Enemies

<https://admurin.itch.io/mega-pack-top-down-monsters>

<https://free-game-assets.itch.io/free-predator-plant-mobs-pixel-art-pack>

Player

<https://sscary.itch.io/the-adventurer-male>

<https://sscary.itch.io/the-adventurer-female>

Gear/Items

<https://alwore.itch.io/wizard-icon-set>

User Interface

<https://franuka.itch.io/rpg-ui-pack>

<https://pixerelia.itch.io/vas-basic-spells-and-buffs>

<https://crusenho.itch.io/icons-essential-pack-free-icons>

<https://shikashipx.itch.io/shikashis-600-icon-pack>

Tilesets (Levels)

<https://snowhex.itch.io/harvest-summer-forest-pack>

<https://snowhex.itch.io/dungeon-gathering>

<https://snowhex.itch.io/dungeon-gathering-fire-zone-expansion>
<https://beyondboy.itch.io/desert-map-tileset-16x16>
<https://beyondboy.itch.io/top-down-lava-tileset-16x16>
<https://elvgames.itch.io/rogue-adventure-world>
<https://finalbossblues.itch.io/tf-beach-tileset?download>
<https://butterhands.itch.io/doomland-kit>
<https://mr-pixelz.itch.io/16x16-pixel-snow-environment>
<https://gif-superretroworld.itch.io/interior-pack>
<https://petricakegames.itch.io/faerie-forest-dungeon-tileset>
<https://aku-jpkg.itch.io/fantasyville-cave-dungeon>
<https://ninjikin.itch.io/water>
<https://nultale.itch.io/dungeon-tale>
<https://free-game-assets.itch.io/free-undead-tileset-top-down-pixel-art?download>
<https://finalbossblues.itch.io/cloud-city-tileset?download>
<https://scarloxy.itch.io/mpo07?download>
<https://finalbossblues.itch.io/dark-dimension-tileset>
<https://blockydk.itch.io/twilight-village-rpg-tileset>
<https://szadiart.itch.io/rogue-fantasy-catacombs>

Tilesets (Special Events)

<https://sparksandpixels.itch.io/indoor-library-assetpack>

Sprite Effects:

<https://foozlecc.itch.io/pixel-magic-sprite-effects>
<https://bdragon1727.itch.io/free-effect-and-bullet-16x16>
<https://bdragon1727.itch.io/effect-and-fx-pixel-part-4>
<https://bdragon1727.itch.io/effect-and-fx-pixel-part-5>
<https://bdragon1727.itch.io/effect-and-fx-pixel-part-14>

<https://foozlecc.itch.io/trap-pack>

<https://free-game-assets.itch.io/free-pixel-magic-sprite-effects-pack>

<https://frakassets.itch.io/free-dark-crystal-shrine>

<https://codemanu.itch.io/pixelart-effect-pack>

Fonts:

<https://ggbot.itch.io/public-pixel-font>

NPCS:

<https://caz-creates-games.itch.io/>

<https://xzany.itch.io/npc-characters-2d-pixel-art>

Shop ICON:

<https://b2719680.itch.io/shop-label>

Loading:

<https://davitheoles.itch.io/inverted-hourglass>