

1. Introduction

Our project focuses on a 2-dimensional, side-scrolling platformer game that contains roguelike elements. Within the main gameplay loop, players will explore modularly generated levels, where the chain of premade levels gets shuffled upon each new run. Within each level, players can defeat monsters found and optionally inherit their abilities, using them to expand their combat abilities, as well as collect loot, which can be taken back to your home base, a top-down 2-dimensional area, in order to upgrade it and develop new buildings with their own purposes (some functional and some cosmetic). Additionally, there will be an optional 2-player cooperative mode, allowing players to team up and tackle the dungeons together.

The purpose of this feasibility study is to assess the interest and preferences of potential players in regards to these key gameplay elements. This study will help determine the viability of the game concept and guide design decisions based on player feedback.

2. Tools and Resources

The main resource we plan to utilize for the completion of this game is Godot, a versatile open-source game engine that can handle both front-end and back-end development and operations. Aseprite will be utilized as the main tool for developing the art, environmental assets, and character designs of our game, although additional resources may be collected from public, free-use locations, such as “itch.io”. Likewise, music and sound effects can be pulled from the public domain and free-use websites. To handle multiplayer functionality, Godot's High-Level Multiplayer API will be used to implement LAN multiplayer. Version control through Git and collaboration via GitHub will be critical for managing the project.

3. Survey Results

Based on the results of our marketability survey, we found that the majority of our large sample size of 48 people found a preference for cooperative gameplay over competitive gameplay if there were to be multiplayer functionality included. Additionally, the concept of an upgradable hub area was well-received, with many finding the idea an engaging feature to incorporate within our game. Random modular level generation proved to be another well-received feature, furthering the game's replayability. Interestingly though, the overall idea of some explorative platforming with live combat elements had a bit more of a spread from the audience's response, with roughly 25% of the audience being neutral or preferring something else over these mechanics.

4. Conclusion

Based on the survey results and our project analysis, the feasibility of the game appears strong, with significant interest in many of our proposed mechanics. Given this feedback, the project is likely to resonate with the target demographic and attract a large player base. However, some adjustments may be necessary to address the mixed reception of the explorative platforming and live combat mechanics. Refining these elements or providing alternative gameplay options could broaden the appeal. Overall, the highly positive reception regarding most of our core mechanics suggests the project is viable and has strong potential for success with the target audience.