



Dungeon Jump  
Request for Proposal  
Version 1.0

## Document History

When	Who	What
February 13th	Ethan Hinkle	Initial Formatting
February 14th	Ethan Hinkle	Sections 7, 8, 9
February 16th	Seth Cram	Sections 1, 6 started, 10 started
February 16th	Dawson Burgess	Sections 3, 4, 5
February 16th	Chadwick Goodall	Section 6, updated section 10
February 16th	Khoi Nguyen	Section 2
February 17th	Seth Cram	Section 6 finished
February 17th	Ethan Hinkle	Updated section 1, 5, 10
February 18th	Kurian Georly Kunnathushery	Updated Sections 3,4,5,10
February 19th	Seth Cram	Updated sections 1-6 and 10
February 19th	Khoi Nguyen	Updated Section 2

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## 1.0 Problem description / opportunity / expression of need

The Hex Boyz need an engaging, jaw-clenching, and innovative switch-perspective 2D game to draw in gamers around the world. Our goal is to establish a base in the entertainment industry as a lighthearted studio capable of creating consistent and enrapturing video games. We believe a switch-perspective aspect implemented in a 2D game will make this possible.

This game should bring new life and ideas to the 2D genre through drawing on RPG and platformer design aspects. RPG games are built upon choice and freedom within a premade world, allowing players to make decisions, while keeping game mechanics simple and providing players with an engaging narrative. Platformers are built upon linearity and structure, providing players with a simple and fun experience. This game should combine these elements to give players a fun and interesting world to explore while keeping the simplicity and joy garnered from older platformer games.

As video game technologies advance at a rapid pace, the Hez Boyz plan to capitalize on this through exploiting and intermingling multiple perspectives throughout a single video game type that's traditionally thought to be more one dimensional. This should garner attention as something new and innovative, while still drawing off of key ingredients that have made previous video games so successful.

## 2.0 Project Objectives

The Hex Boyz are looking to commission a single-player 2D computer game with a top-down player perspective in the navigational portion of the game, and platforming instances in the progression portion. Players of this game will be able to enjoy the compact combination of RPG elements through quests and items, in addition to the increased speed of gameplay provided by interactive platforming levels.

The game should implement the following features:

1. Player character
  - a. The game will be told from the perspective of the player character, and hence their presence is required
  - b. Has associated health points, quest progress, and items obtained
2. Overworld
  - a. The overworld will be necessary as the primary area of exploration for the player character

- b. Contains level gates that allow access into the platforming levels
  - c. Divided into four primary sections
  - d. Contains NPCs that give quests for the player to complete
- 3. Platforming levels
  - a. The platforming levels are needed to constitute the primary gameplay; these contain the most interactive parts of the game
  - b. Will feature items that, when obtained, allow the player to progress to new portions of the overworld
  - c. Can be accessed from the overworld through level gates
- 4. User interface
  - a. The user interface is necessary to allow the player to observe their progress in the game, as well as enter and exit the game
  - b. Main menu that opens when the game is loaded
  - c. Player UI that displays their health and NPC/world information
  - d. Pause menu that displays the current quest, items obtained and controls
    - i. Also, options to resume game and exit game
- 5. NPC's
  - a. Overworld
    - i. Will act as guides and are required to help players/game move forward
    - ii. Each NPC should feel unique in dialogue and appearance
    - iii. Certain dialogue options will lead to world/player edits
    - iv. Provide players with various tasks to complete
  - b. Platform
    - i. Interaction with most platform NPC's is non-essential to game progression, with few exceptions, but they are pertinent to add character to the level design
    - ii. Levels can be made easier or harder based on player choice
    - iii. Depending on interaction, the player can receive a companion for the level, or an NPC which can become hostile to the player

### 3.0 Current system(s) – if any / similar systems

The Hex Boyz are looking to implement 2 systems into the game - one for top down overworld design and one for overall platform design. Top Down design tends to produce game elements with a tight alignment between rules and narrative concept, as the rules are naturally subservient to the concept and story. Top Down Design is very useful when you have a more "open puzzle" - i.e. you are generating more game elements to fill a blank canvas. Too much Top Down design tends to produce

unbalanced game elements without lots of Development. A platformer, or platform video game, is one that traditionally features two-dimensional graphics in which players control characters who jump or climb between different platforms on the screen. It's a subgenre of the Action category, which is one of the many different types of video games. These two perspectives should come together to create the full game, and the player should traverse through these two different environments in the game.

The overworld system will be based around a top down perspective, where most of the navigation will be done. A system similar to this would be - Stardew Valley.

“***Stardew Valley*** is a simulation role-playing video game. The game is open-ended, allowing players to take on activities such as growing crops, raising livestock, mining and foraging, selling produce, and socializing with the townspeople”

The platform system will be based around a 2D platform style game, similar to popular games like Super Mario and Metroid. “*Super Mario Bros.* is a platform game. In the game, Mario must race through the Mushroom Kingdom and save Princess Toadstool from Bowser. Mario jumps, runs, and walks across each level. The worlds are full of enemies and platforms, and open holes. If Mario touches an enemy, he dies. If he falls down a hole or misses a jump, he will also lose a life.”

## 4.0 Intended users and their basic interaction with the system

- Users
  - Video game enthusiasts that enjoy the genres of top-down exploration, platformers, RPG or collect-a-thon
  - Gamers looking for a fresh new take on any of the above mentioned genres
  - More casual gamers looking for a lighthearted experience
  - People interested in the Indie game development scene.
  - College students in the CS383 class at the University of Idaho.
- Uses
  - Provide a fun, entertaining game to consumers
  - Inform users of a new world and its customs through engaging gameplay
  - Build a good reputation for Hex Boyz through positive consumer interaction
  - Give users a new way to experience video games through multiple perspectives

## 5.0 Known interactions with other systems within or outside of the client organization.

1. The game will be built and run using solely the Unity game engine.
  - a. So, Unity's interaction with the client's speaker system and display.
2. The game could possibly be downloaded from third party platforms such as:
  - a. Steam
  - b. GOG
  - c. Epic
  - d. Google Play Store
  - e. Apple App Store
  - f. Playstation Store
  - g. Microsoft Store
3. The game should be uploaded to Github so that it can be viewed by others.

## 6.0 Known constraints to development

Game Engine: The project must be made in the Unity game engine. The Hex Boyz won't be providing the funds necessary for Unreal Engine or other costly game engines. So, Unity's free license will work perfectly. Although we need to make a splash in the entertainment industry, this is a starter project and should be created to a scale as such. Because of this project being on a rather small scale, it's highly unlikely it'll make too much to exceed the licensing restrictions imposed by Unity's free license for commercial use. That being said, the imposing restriction is to use the Unity game engine because of: an advantage that'll be mentioned below, the incredible documentation, the debugging capabilities, and the responsive tech support. The license type can be determined by the group.

Playable Platforms: The game must be made cross-platform accessible. One of the advantages that come with using the Unity game engine includes Platform Support, which'll be needed to distribute the game to at least three different devices. One of these devices must be a phone due to their wide availability, or a VR headset because of their new and exciting technology. Cross-platform accessibility will make the game appeal to a wider audience. In this day and age, gaming is becoming more and more mainstream and not everybody has a desktop computer dedicated to playing games. The Hex Boyz are seeking to market to a variety of demographics.

## 7.0 Project Schedule

Dates	Description
February 1st, 2022	Code repository is created and submitted. Set structure to directories made.
February 15th, 2022	Systems Analysis demo presentation.
February 22nd, 2022	Basic project structure completed, will compile and run.
March 8th, 2022	Base game is functional for testing.
March 24th, 2022	Basic project will compile, core features will work while secondary features will be missing.
April 7th, 2022	Demo of the project will compile, all features present but require polish.
April 14th, 2022	Final product due.
May 5th, 2022	Presentation of final product.

## 8.0 How To Submit Proposals

All proposals for the project must be submitted in pdf form to Ryan Donaldson, the Contract Coordinator at HexBoyz, at [proposals@hex.boyz.com](mailto:proposals@hex.boyz.com). You can contact him directly by calling (208)-555-1984 if you have any questions about the process. Do note all question responses will be distributed to all active applicants.

## 9.0 Dates

All proposals must be submitted to Mr. Donaldson by February 17th, 2022 by 11:59 PM PST. Deliberation over proposals will occur over the next week, and all applicants will be informed of decisions regarding the proposal via email by 5:00 PM PST on the 24th of February.

## 10.0 Glossary of Terms

Term	Meaning
Level Gate	Any form of entryway that links the overworld to the platformer levels.



NPC	Non Player Character - a character in the game that exists in the world but the player has no control over.
Task	Any objective given to the player by an NPC to advance the story.
Tile	A fundamental building block that composes the environment of the game world.
UI	User Interface - the point of human-computer interaction and communication in a device.
Top Down	Looking at the player character from above.
Top Down Design	Design concerned with the areas that the player can traverse while looking at their character from above.
RPG	Role Playing Game - a game in which players assume the roles of characters in a fictional setting.
Collect-a-thon	A style of platform game which takes advantage of the explorable world through having the player collect items.

### Evaluation of Respondents Proposals Criteria

(HexBoyz Eyes Only)

	Category	Importance
1	Platforming Levels	16%
2	Player UI	10%
3	Story	8%
4	Hostile NPCs	14%
5	Friendly NPCs	10%
6	Dynamic Overworld	12%
7	Player Character	20%
8	Consumables	6%
9	Quest Lines	4%
	Grade	100%