Job Hunter: A Game about Getting a Job

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Summary

Many college students worry about getting a job after graduation. A video game about "getting a job" could help students see the humor in an often competitive and stressful process. Therefore, the author will be creating *Job Hunter*, a 3D action platformer that will be built in Unity and written in C#. Players will seek out the scattered pieces of their resume across wacky, surreal mindscapes. Many challenges await players as they strive to put their resume in front of the right eyes, get an interview, and defeat the Interviewer in verbal sparring. Job Hunter tackles the daunting task of gaining employment in a stress-free and relatable way, so it will be especially enjoyed by college students that are anxious about finding a job after graduation.

Background and Motivation

Getting a job is often considered a vital part of the human experience in developed nations. Hundreds of millions of Americans have at some point been employed or sought employment [2], and in America alone, the size of the work force is over 163 million [2] [3]. It is not surprising, therefore, that many college students feel the pressure to get a job as soon as possible after graduation. Indeed, a 2016 study in the UK found that over half of university students worry about finding a job after they graduate [4].

Job Hunter will address college students' common fear of finding a job after graduation. *Job Hunter*'s wacky characters and tasks will aim to ease students' anxieties by bringing a much-needed sense of humor and fun to the situation. Many scientific studies have shown that laughter

reduces anxiety and promotes learning [5]. By making people smile, *Job Hunter* can improve students' well-being and allow them to approach job-hunting with increased confidence.

Features

In *Job Hunter*, players explore the varied mindscapes of a person seeking employment. Environments and their inhabitants are not constricted to realism; instead, this wacky world is crafted through metaphor and parody. For example, one level consists of gigantic floating office supplies which the player must navigate through to construct their resume. Another level challenges players to infiltrate the heavily guarded Human Resources department. *Job Hunter* will be full of life and humorous characters. For example, players will defeat cartoonish alligator-shaped "Alligorithms" that try to keep their resume away from the Human Resources department. Additionally, the player can jump on Alligorithms in certain locations to reach new locations, just as one might use keywords in their writing to get noticed by potential employers.

Mechanically, *Job Hunter* is a 3D action platformer with collectathon elements. The player can jump and engage in simple combat. For example, they can stun enemies by flashing their resume or harm enemies by throwing their resume like a throwing star. The player can also pick up and place certain objects. The player can perform contextual actions, such as interacting with Non-Player Characters (NPCs). Boss battles will also feature contextual actions, such as choosing a dialogue response to an interviewer. The game is controlled by a standard controller, such as a Nintendo Switch Pro Controller.

Players can save their game or load previous game files to continue a playthrough. During gameplay, players can pause to view controls, restart, or exit a level. They can also replay levels at any time by choosing the level from a menu.

System Requirements

Hardware

The creator of this project will require the following hardware:

- A computer capable of running the most recent version of Unity
- A computer mouse for interfacing with Unity and Blender
- A mousepad
- Standard controller to play the game

A standard controller will be used as they are readily available to gamers and they are more ergonomic than keyboard controls.

Software

The creator of this project will require the following software

- Most recent version of Unity
- Photoshop CC for 2D art, such as textures
- Blender, an open-source 3D modeling software
- Text editor for code editing

Unity will be used as the game engine for this project because of several advantages it has over other free game engines. Firstly, Unity does not impose any royalties to sales of games made through their software, however their rival Unreal Engine 4 imposes a 5% royalty of sales (Except

on the first $3000 per quarter) [7]. Unity is also considered to be more user-friendly and suitable for beginners. Unreal Engine 4 is lauded for its ability to render more realistic graphics, but since *Job Hunter* will be cartoony, this does not present much of an advantage. Finally, Unity supports over 25 platforms, so porting the game would be very easy [9].

Blender is the modeling software of choice because it is free, even for commercial use, unlike other top products which have fees or restrictions on commercial use [8]. Photoshop CC will be used for any two-dimensional artwork because the author is familiar with it.

Each software will contribute to the final project in various ways (Figure 1). Artistic assets will be created in Photoshop and Blender, whereas game behavior will be built using Unity and C#. Finally, the game will be "built" or compiled into a portable playable form through Unity, resulting in a single file.

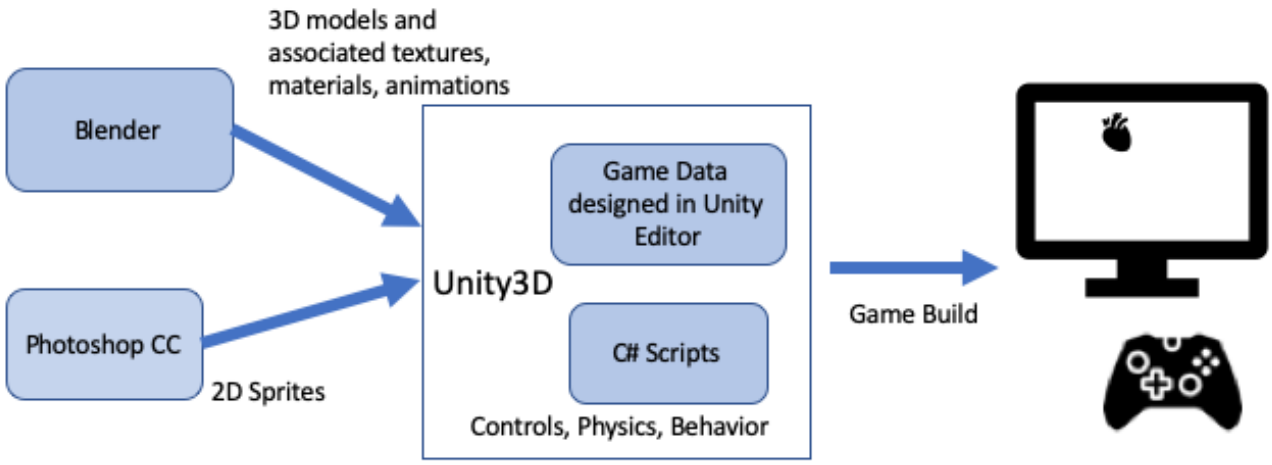

Figure 1 - Various software will be utilized in building the final game.

Timeline

Note: The first semester is focused on building the game mechanics. The second semester is focused on visual design.

FALL SEMESTER

Start Date	End Date	Tasks	Deliverable (s)	Notes
9/3/19	9/17/19	Create first draft of project proposal and timeline.	First draft of Project proposal and timeline, 3-5 pages, w/ references	Took a lot longer than expected
9/18/19	9/30/19	Gain basic understanding of Unity Physics Create a health stat and display health bar on UI Create an enemy that harms player Start working on designing the story progression of levels and the role of different NPCS.	A player that can move, jump, and push other physics-enabled objects, but that can also collect non-physics-enabled entities. An enemy that can harm and kill the player A sketch demonstrating the story progression and characters.	
9/30/19	10/14/19	Design and prototype player attacks and movements. Design additional enemies and create prototypes. Create a prototype of level one. Gather feedback about level 1	1+ additional player abilities added to prototype. 3+ Enemy designs 2+ Enemy prototypes Prototype of level one. It will include several platforms, a few collectables, at least one enemy, and a goal point. A short document describing the feedback received.	

10/14/19	**10/28/19**	Implement feedback from previous sprint, if necessary. Continue working on designing the story progression of levels and the role of different NPCS. Build UI for selecting Levels Start learning blender	Game with improvements implemented, if necessary. A complete drawing or diagram demonstrating the story progression and characters. UI menu to select Level 1 or Level 2 (placeholder) implemented into prototype, with empty spaces for later levels. 2 basic models of inanimate objects	
10/28/19		Prototype Level 2 Add NPCs with dialogue. Add level introduction camera movement.	Prototype of level 2. NPCs with dialogue throughout levels 1 and 2. A camera that pans over each level before the player begins.	
11/11/19	11/26/19 (Tuesday before Thanksgiving)	Gather feedback for level 2 Refine levels 1 and 2. Add contextual camera movement.	Description of feedback received. A demo-ready level 1 and 2. The camera will move intuitively when traversing different areas to give the player the best view.	

Bonus: Gather feedback from Traveler's presentation

SPRING SEMESTER

Start Date	End Date	Goal	Deliverable	Notes
1/6/20	1/27/20	Prototype levels 3 and 4 Practice with Blender.	Prototype including levels 3 and 4 and the final boss. Modeled and rigged Player Character.	

1/27/20	2/17/20	Create game assets, such as textures, 3D models, and animations. Implement game file saving and loading. Gather feedback on levels 3, 4, and the boss.	All 3D models All textures Some animations. Game save and load menu that "just works" Description of feedback received.	
2/17/20	3/9/20	Learn about Unity's lighting system and adjust the game to be more visually appealing. Implement particle effects.	A new-and-improved look for *Job Hunter.* Particle effects implemented, such as smoke.	
3/9/20	3/30/20	Learn about performance in Unity and make changes to optimize your game.	Description of changes made and their reasoning.	
3/30/20	4/21/20	Gather user feedback and refine the game for final presentation.	A polished version of *Job Hunter.*	

References

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[7] Unreal Games. 2019. Unreal Engine 4 Commercial Game Deployment Guidelines. Retrieved September 14, 2019 from https://www.unrealengine.com/en-US/release

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