Project Proposal

Archie-ology, A Video Game

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### Motivation:

The namesake of the game’s protagonist is our outdoor cat, Archie. Archie would often brings home dead - and sometimes live - birds as gifts as signs of affection and appreciation towards his owner. While endearing, finding an animal - dead or live - was not appealing; however, it planted the idea of attaching a pet camera to their cat. This game project is the imaginative rendition of what a “cat cam” captures - a cat’s journey as it traverse the outdoors.

The genre for metroidvania platformers are full of dark games such as Hollow Knight and Dead Cells. We want to create a game with a brighter atmosphere that embodies the grace and curiosity of a cat. Players that play this game should be able to feel what it’s like to explore the world and the beauty that it contains.

The aim is to develop and produce a challenging platformer that rewards the player for perseverance and creative thought while encouraging the player to plan ahead and prep for the next obstacle. This fast thinking and reaction time is inspired from the phrase “cat like reflexes” where a split second decision could be the the difference in success or failure.

### Proposed Project:

The desired game is a platformer with Metroidvania elements and a risk-reward system. Gameplay focuses heavily on acquiring items via exploration and overcoming obstacles via unlockable abilities and aerobatic maneuvers. Items and item management provides the player with a wide range tools and abilities to reach new areas that were previously impassable. The game takes place within one world and on one map; sections of the map/world will be uncovered as the player progresses.

The player is to play as Archie, a cat whose owner is a the curator of an established yet well-worn museum. Determined to acquire rare artifacts to fill his owner’s aging museum, Archie leaves the his home and ventures into the great outdoors. Seeking treasures, Archie jumps and dashes over terrain in order to reach new areas. Reaching new areas allows for new artifacts to be discovered that help with Archie’s goal, giving exploration a purpose and provides the player with a sense of accomplishment. Once acquiring an artifact, Archie can return home to fill his collection of treasures that he will present to his owner once finding all of the artifacts. Each artifact will have an unique ability that will help Archie on his quest; likewise, Archie can switch between abilities so that he can easily and quickly adapt to a sudden obstacle.

Features of the game include: an adorable player (cat) with character customization so that player can feel in tune with their avatar; carefully crafted level designs that challenges and stimulates the player; a risk-reward system that rewards the player's preservene when accomplishing a difficult task; smooth, dynamic gameplay that provides a satisfying experience throughout the game; an achievement system that sets goals to encourage the player and promote replayability; and collectible items that change gameplay to create a unique experience.

This will technically require a database of character sprite options; controls and a user interface that are clear and easy to use; a way to track and save changes to the game state; designed obstacles and levels with definite ways to pass them; a physics system that takes into account all power ups the player could get; and a series of flags to determine the player's progress and acknowledge it. The client side should only have the data needed to produce each frame while the server should store all game data not currently in use and the game state for future play.

The idea is to have a game where the challenge comes from solving the puzzles that occur while navigating levels. The player will have some choices as to what order they wish to unlock new mechanics. This will provide a more engaging experience for the player since their choices will affect gameplay. The end result should be an enjoyable escape for players that hopefully they willing to play again, this time making different choices to fully explore what the game has to offer. By providing quality mechanics, atmospheric music and queues, and visually appealing graphics this can be done and an interesting product will be produced.

### Constraints:

The focus of this game should be quality over quantity. There should be a solid amount of content to the game that a player can experience, but the quality of everything produced is more important than having a large amount of content. This means that if some non-essential features need to be left out in order to have the features that are included be as amazing as they can be then that is what should be done. Improvements can be made if the schedule allows for extra time to have them developed to standards, but it is not guaranteed as part of the proposed project.

Time and resources are an added constraint that this project faces. It needs to be done by the deadline. The people working on it are committed to the time it will take to design, produce, and test, along with responding to feedback throughout the process. However, other commitments are also unable to be ignored. Scheduling needs to be realistic based on time and manpower and so not every feature that could be imagined for the game can be added. Requirements can change if necessary but the schedule would need to be reworked each time a major feature is changed so that the project can stay on course.

### Deliverables:

Project proposal 09/20/2018

Software Business Specification (RAS) 10/04/2018

Software Requirement and Analysis Specification (RAS) 10/18/2018

Software Project Management Plan (SPMP) 11/01/2018

Software Analysis Specification – Final (RAS) 11/20/2018

Software Design Document (SDD) 11/29/2018