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**Low Effort Games**

**Beat Runner Game**

**Request for Proposal**

**Version 1.0**

**Beat Runner**

**Request for Proposal**

**Version 1.0**

**Document History:**

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| --- | --- | --- | --- |
| **Version** | **When** | **Who** | **What** |
| **1.0** | **February 6, 2018** | **Aaron, Irven, Jaiden, Jeff, Lennin, Yiqing** | **Initial Drafting** |

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**1.0 Problem Description**

The goal of this project is to develop a single player computer game called *Beat Runner* which combines aspects of the popular rhythm and runner game genres. In this game, the player character will travel down a bounded track performing actions based on user input in order to avoid obstacles which spawn in sync with the rhythm of the background music. We believe there is a market for this game due to the success of similar games in the genres it is based upon.

**2.0 Project Objectives**

*Low Effort Games* is looking to create a single player computer game called *Beat Runner* which combines elements of the runner and rhythm game genres into a new experience. Features of the game should include:

* A main menu which allows for setup, difficulty, and music selection options
* Different difficulty settings that scale how many obstacles are spawned and how quickly users must react to avoid them
* A player character which moves forward at a steady pace along a bounded track
* Intuitive user controls which allow the user to move the player character left, right, up, and down as well as to modify the player character’s dimensions to be taller and thinner or shorter and wider
* A scoring system that allows users to compete and evaluate their gameplay that deducts points for glancing collisions with obstacles
* A system which spawns obstacles on the track according to the selected music choice
* An end game menu which displays once the selected background music has finished or following a direct collision with an obstacle that shows the user’s final score and allows them to return to the main menu
* A pause menu which is displayed based on user input which freezes the player character, obstacles, and background music while active
* A clean gameplay experience that includes no glitches that alter user gameplay experience

**3.0 Similar Systems**

* Audiosurf - PC game

Audiosurf is a ship flying game whose track adapts to the music. It has blocks of various colors which can be combined to score points. The game supports imported music files, to play to any song the user wishes.

* Temple Run - Android App

An endless running video game that was initially developed as an Android app.

* Guitar Band - Gaming Consoles (PS3, Xbox, etc...)

A game where the user puts their reaction skills to test by hitting the right notes at the right time to rack up points and become a music superstar.

**4.0 Intended Users and Uses**

This is a 3D running game which has a similar playing method to Temple Run and Subway Surfers, so it will attract older viewers with its traditional style and gameplay. It is easy and simple to start and enjoy the game.

**Users**

* Anyone who likes playing running games at an amateur or experienced level

**Uses**

* Relaxing and pleasant gameplay
* Nostalgic gaming experience
* Competitive gaming experience

**5.0 Known Interactions with Other Systems**

* Window system for Vision 10 and with unity the latest
* Mac with unity the latest

**6.0 Known Constraints**

* Time for development is limited by the duration of the semester
* Complexity of the desired features may require compromises in efficiency

**7.0 Schedule**

|  |  |
| --- | --- |
| **Date**  **MM/DD/YYYY** | **Description of Event** |
| **02/06/2019** | **Software Analysis Deadline** |
| **02/07/2019** | **Software Analysis In-class Demo** |
| **02/14/2019** | **Set up code repository, Send invitation & Diagram Deadline** |
| **02/21/2019** | **Makefile set up, Public headers & group code compiles Deadline** |
| **02/28/2019** | **Master Test Plan & new make command** |
| **03/21/2019** | **Master Gantt Chart Deadline** |
| **04/04/2019** | **Final Documentation & User Manual** |
| **04/25/2019** | **Post Mortem** |
| **05/02/2019** | **Final presentation** |

**8.0 Client Team**

**Crawford, Jeff** Craw1594@vandals.uidaho.edu

* **Bio**: Senior Student at UI, 10 Years IT exp.
* Studies Cybersecurity
* **Certifications**: CompTIA A+, DoD Cyber Awareness Challenge, VET 304-Microsoft Technical Foundation I & II, Mechatronics Level 1, Army G3 Computer Security, WNSF- Thumb Drive Awareness, Threat Awareness and Reporting, WNSF- Phishing Awareness, WNSF-Safe Computing, WNSF-Port. Electronic Device media, WNSF- Personally Identifiable Information, Composite Risk Management, Six Sigma White Belt & *In-progress*: CompTIA Security+ SYS-501 (Summer 2019).

**Ludwig, Aaron** [ludw6356@vandals.uidaho.edu](mailto:ludw6356@vandals.uidaho.edu)

* **Bio:** Senior student at UI. Proficient in C, C++, jQuery, and JS/React
* Studies Computer Engineering

**Ma, Yiqing** [ma6724@vandals.uidaho.edu](mailto:ma6724@vandals.uidaho.edu)

* **Bio:** Junior student at UI. Proficient in C,C++, and some 3d model software
* Studies Computer Science

**Medina, Jaidin** [medi9614@vandals.uidaho.edu](mailto:medi9614@vandals.uidaho.edu)

* **Bio:** 3rd year student at UI. Proficient in C, C++, Python, and JS/React
* Studies Mathematics and Computer Science

**Perez, Irven** [pere5381@vandals.uidaho.edu](mailto:pere5381@vandals.uidaho.edu)

* **Bio:** Junior student at UI. Proficient C,C++, and Web Programming
* Studies Computer Science

**Rodriguez, Lennin** [rodr4719@vandals.uidaho.edu](mailto:rodr4719@vandals.uidaho.edu)

* **Bio:** 4th year student at UI. Proficient in C, C++, Javascript, and Web programming
* Studies Computer Science
* Works well with others in a group setting

**9.0 How to Submit Proposals**

Please email all proposals to our Team Lead 2 at *Low Effort Gaming* in pdf format at the address [ludw6356@vandals.uidaho.edu](mailto:ludw6356@vandals.uidaho.edu). Subject your proposal email as “Beat Runner Proposal Documents” so we don’t miss it. If you have any questions, please contact us at (208)380-9781 by text or send a message with the subject “Beat Runner Proposal Question” to the given email address.

**10.0 Dates**

All proposals must be submitted by 12:00pm PST on February 15th, 2019 to be considered. Proposal decisions will be made final and applicants will be notified by 5:00 pm PST on February 22nd, 2019.

**11.0 Glossary of Terms**

* **Bounded Track:** an area that is limited in how far something can move in any direction but forward
* **Glancing Collision:** a collision between the player character and the side of an object
* **Direct Collision:** a collision between the player character and the front of an object
* **Glitch:** an unintended behavior of the game system