**Approach and Feasibility Report**

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Mango WEB

Collin Epstein

Julian Bertini

Caleb Warren

**Introduction:**

We propose to develop a simple 3-d puzzle game for mobile platforms. From a third-person perspective, the player can navigate and control an avatar through a treacherous environment. Players will develop spatial thinking skills by solving a wide variety of puzzles using tetris-like blocks to bridge otherwise impassable chasms. We expect to include puzzles of varying complexity and difficulty as the game progresses.

**Questions and Answers:**

**1.** **Does the team wish to reconsider the project?**

We do not plan to reconsider this project. We are excited about our design and idea, and believe we have defined the scope of this project such that we can complete it within our allotted time.

**2.** **Platform (smartphone, web app, tablet, etc.)**

The target deployment platform will be mobile devices, primarily iOS and Android devices. The game will be developed in the Unity environment, and will be coded entirely in C#.

**3.** **What skills does the team have for this project?**

All team members have experience in object-oriented design and programming. Some team members have experience in C# and Unity, and the remaining team members are willing to learn this language and gaming engine.

**4.** **What skills does the team need to develop?**

The team will need to augment its understanding how Unity works, learn C#, and perhaps graphic design. Some basic research on game design is also necessary in order to understand deeper elements of gaming (i.e. keeping score, winning, saving, loading, etc.).

**5.** **What Process Model should the team use?**

We plan to use Spiral Model. We are attracted to this model because it encourages rapid development and testing of small and simple elements of the project that later comprise the whole. After each iteration of the model, a functional version of the application will be available for use. This way we can meet scheduled deadlines and have a functional project at every step. It also allows us to easily continue working on this project beyond the time allotted by this class.

**6.** **Is this project actually feasible for development by this team?**

Significant additional learning and planning is needed to determine the size and complexity of this project and a feasible schedule. We have drastically narrowed the idea of the game, so there is currently no reason to doubt the feasibility of the project. We feel good about our ability to produce code, so if we maintain focus of a narrow scope on features we will include, this project will be a success. Unity takes care of creating complex graphics and offers an extensive library of templates, allowing us to focus our energy on the implementation of our idea.

**7.** **How will the team be managed?**

Major components of the game will require full consensus of the team, whereas minor tasks will be considered under light management. We plan to use GitHub for version control, and a group messaging platform to communicate readily. We will have weekly standups to discuss pertinent issues and ensure all members remain aligned with the same vision.