**Initial Product Definition and Scrum Team Plan**

**Submitted by**

Team West

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**Team Members**

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**1. Product Name and Description**

Product Name: WordWhizz

Word Wizard is a single player anagram puzzle game designed to operate on devices utilizing the Android mobile operating system. Anagram puzzles are displayed in grid a format with each grid displaying 16 random letters. Players select letters on the grid that form words based on data from a chosen English dictionary API.

Players score points based on the per letter score and the character length of the word. Letters are scored by difficulty of use where vowels are scored low while rare-use letters such as Z and Q are scored high. Puzzle grids are timed at 60 seconds per grid which generates several scoring categories such as Total Number of Words, Average Score Per Word, Total Grid Score, Highest Word Score and Longest Word.

Although players compete individually, scores are registered for each category displaying game winners and high achievers. Scores are registered as scores for the Day, Month and All-Time.

**2. Functionality Overview**

Word Wizard is a touch-screen game and operates by user interaction touching the screens of Android devices with a touch-enabled screen. The product does not function via keyboard, mouse or voice input. Word Wizard functions include the following:

* Touch activated buttons
* Letter randomizer algorithm
* Puzzle grid timer
* English word database
* Player register
* Player score register
* Scoring system
* Puzzle grid display
* Grid/game timer
* Player achievement badges
* Pause game, with reset or quit
* Reset the letters at the cost of points or time
* Score multiplier letters
* Danger letters or traps that cause the other letters to flash or disappear for a set amount of time.

**3. Overview of Architecture**

Word Wizard is designed for use in Android OS devices. The primary program language for Android APPs is Java but is more efficient using the Java derivative, Kotlin. The product will utilize a full Android Studio and Android Developer Tools tech stack including SQLite for the database.

**4. Scrum Team Members**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Role | Hours/Week | Responsibility | Skillsets |
| Jeremy Gallagher | Scrum Developer | 40 |  | Programming and Database design/management |
| Hailey Gibson | Product Owner | 40 |  |  |
| Jon-Erik Prichard | Master | 40 | Project management as Scrum Master, UI Design and programming. Secondary database programming | Graphic Design, Front-end (UI) programming, database design and programming |

**5. Virtual Daily Scrum Meetings**

* Location: Discord
* Daily, 5:00 PM PST

**6. Final Test Platform**

Team West will utilize Android Developer Tools (ADT) for code editing, debugging, performance tooling, unit testing and final testing.

**7. Screenshot Examples of the Final Test Platform**

A screenshot of a cell phone

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Example of Android UI on Android powered device.

**A screenshot of a computer screen

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Installation of Android Development Environment.

A screenshot of a cell phone

Description automatically generated

License agreement acceptance as software developer.

A screenshot of a computer

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Android SDK interface settings