XENON
Requirement Elicitation Specification

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Section 1. Introduction

1.1 Purpose of System

The purpose of the client's proposed system is an optimized mobile browser game that allows student to practice and master the skill of naming chemical formulas/nomenclature.

1.2 Scope of System

The scope of the system consists of delivering real-time interactions with the user by allowing them to see where they need to improve as far as learning formulas and what they already know through a series of levels and points gained or lost. The system is entirely touch screen-based and is designed to please users both visually and sensibly.

1.3 Objectives & success criteria of the project

- Allows the user to experience effective operation interaction and control the application from a human perspective, whilst the application simultaneously feeds game information from a series of JSON data files containing a variety of questions.

- Should keep track of points gained from correct answers and deduct points form incorrect answers.

- Should feedback game results from database structure to leaderboard. Allows players to compare their performance to others and keep track of their own progress.

Section 2. Current System

Xenon has not been implemented on any system previously. There is no current system in existence.

Section 3. Proposed System

3.1 Overview

Xenon allows students to have the convince of learning on the go, any time of the day. It's availability on any mobile browser provides easy accessibility for all mobile drivers/platforms. The intent of Xenon puts the interest of students above everything else and continues to think of

new convenient ways to reach bigger audiences and deliver new interesting ways to learn and retain information.

Section 4. Functional Requirements

1. The system will allow users 10 seconds to choose the right answer for each question. Game time will be implemented.
2. System will decrease time of game play as levels increase.
3. Score tracking functionality implemented.
4. Local player scoreboard implemented.
5. System should allow users three strikes of incorrect answers before a game over notification.
6. System should return to home screen after user receive game over notification.
7. Multiple levels of increased difficulty as game play prolongs.
8. In-Game (Mini Game) instructions implemented within each level.

Section 5. Non-Functional Requirements

I. Usability

- System should be accessible on desktop.

II. Reliability

- The system should support hundreds of users consecutively with continuous functionality without any freezes or delays.
- Shutdown occurrences or freeze ups should not occur for more than ten minutes.

III. Performance

- Application should be able to transition from one level to another in no more than ten seconds.

IV. Supportability

- The system supports multiple JSON game data files

- The system supports database of recorded scores for each play session and overall ranking of scores.

V. Implementation

- The system should implement a database to store player scores, keeping track of all scores within a user's personal play session, as well as overall.

- The system should implement JSON data files that can be accessible to the client for adding, deleting and updating the type of questions.

VI. Interface

- The system should have an option for the user to share their scores via email or social platform.