

Requirements

Software Testing

Name: Scott Adamson
Class#: Software Testing

February 3, 2023

1 Requirements

1.1 Stakeholders

The stakeholders of this project include (but not limited to):

- Development Team (me): responsible for designing, implementing and testing of the app.
- Dissertation Supervisor - overseeing the project
- Potential Investors - future applications of the game involve serving to a customer, this may involve investment
- End-users - Those who download and play the game, important role in design influence
- Third party resources - Unity game engine, Google Play Store, server hosts

1.2 Requirements

Functional requirements:

- must generate a valid 9x9 Sudoku puzzle with a unique solution.
- must remove cells two at a time to ensure only a unique solution exists.
- must ensure the Sudoku's are symmetrical
- must allow two players to join a game.
- must detect when a player has completed the puzzle correctly.
- must allow users to enter a nickname to identify each other
- must allow players to enter potential solutions for cells.
- must check each solution entered by the players for correctness.
- The app must accurately detect when a player has completed the puzzle correctly.

User requirements:

- must have a user-friendly interface.
- must provide clear instructions for how to play the game.
- must allow players to pause and resume the game at any time.

Performance requirements:

- must generate and check solutions in real-time.
- must handle multiple concurrent games.

- must respond to user inputs quickly and smoothly.
- must have low latency.

Compliance requirements:

- must comply with all applicable laws and regulations.
- must adhere to relevant industry standards, i.e play store requires a privacy policy

Accessibility requirements:

- must be accessible to all players, regardless of their ability level.