

R1 The application shall contain games to reinforce learning of mathematical concepts

R2 The application shall implement a graphical user interface (UI)

R2.1 The application shall show a main menu on initial launch

R2.1.1 The main menu shall contain buttons to user profile, games, and tutorials

R2.2 The UI shall contain a tutorial section

R2.2.1 The tutorial screen shall display high-level tutorial categories for the user to choose from

R2.2.2 The tutorial categories shall display drop-downs of their contained tutorials upon being tapped

R2.2.3 The user shall be taken to the appropriate tutorial upon tapping a contained tutorial

R2.2.3.1 The tutorial shall be a text-based activity with scrolling

R2.2.3.2 The user shall be able to navigate back to other menus from the tutorial

R2.3 The UI shall contain games

R2.3.1 The UI shall provide a way for the user to select from the application's games

R2.3.1.1 The game select screen shall display categories for the user to chose from

R2.3.1.2 The user shall be taken to the game options screen upon tapping a catagory

R2.3.2 The UI shall provide a way for user to configure the game parameters

R2.3.2.1 The game options screen shall display options for the user to manipulate game time duration

R2.3.2.2 The game options screen shall display options for the user to specify the number of questions

R2.3.2.3 The game options screen shall display options for the user to specify whether or not problems will be scored

R2.3.2.4 The user shall be taken to the appropriate game upon tapping a game start button

R2.3.3 The UI shall provide a way for the user to play the application's games

R2.3.3.1 The in-game screens shall contain a button to end the current game

R2.4 The UI shall contain a section for viewing the user's statistics

R2.4.1 The statistics screen shall display high-level statistics categories for the user to view

R2.4.1.1 The high-level categories shall be displayed in a scrollable, horizontal bar

R2.4.2 The information within each category shall be presented graphically

R3 Tutorial

R3.1 Each tutorial shall be comprised of five attributes: name, category, difficulty, content, completion

R3.1.1 A tutorial's name shall describe the material to be learned in the content

R3.1.2 A tutorial's category shall describe which mathematical subject the content falls under

R3.1.3 A tutorial's difficulty shall display the level of difficulty of the tutorial

R3.1.3.1 A tutorial's difficulty is relative to that of another

R3.1.4 A tutorial's content shall be comprised of learning material and example problems

R3.1.4.1 Learning material shall be described in steps

R3.1.4.2 Example problems shall be worked out and solved within the content

R3.1.5 A tutorial's completion shall display how much of a tutorial has been completed

R3.2 All tutorials shall be sorted by name, category, and difficulty

R3.2.1 Tutorials shall be sorted by category

R3.2.2 Tutorials of the same category shall then be sorted by difficulty

R3.2.3 Tutorials of the same difficulty shall then be sorted by name

R4 User profile

R5 Feedback