Math Dojo README

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Math Dojo is a mobile application for Android and iOS devices. To login to the app, users must click “Don’t have an account?” below the password box in the login page, where they are taken to the sign up page and asked to create an account. Once users have inputted their username and password, they are taken back to the login page to log in. Once in the app, users can select a variety of icons to take them to different sections of the app, such as the tutorial, game, and profile. The tutorial grants an overview of the game’s mechanics. In the game, users are given a question and four answers. Users must select the correct answer in a given amount of time. Correct answers give 100 points and add two seconds to the timer while incorrect answers give nothing. The goal is to acquire the highest score possible.

Features

- Designed for Android and iOS devices
- Features questions on basic arithmetic (addition, subtraction, multiplication, division) as well as one-step algebra equations
- Differing difficulty levels, allowing users to strengthen arithmetic skills
- Timed gameplay to challenge users and develop quick reaction times

Description

- Purpose: Many students struggle with mathematics and find difficulty in taking mathematical modules in standardized tests. This may result in these students becoming discouraged to further their learning in math. Having a place where students could learn

mathematics in a fun and engaging way could help them prepare for more advanced math classes and tests in the future.

- This topic is addressed through our mobile application, where users answer questions in the form of a timed game. A high score system incentivizes users to keep playing the game and progressing.
- This mobile application was developed using javascript through code.org. Our app can be run on all Android and iOS devices.

Resources Used

- Digital art from Canva's Magic Design AI- https://www.canva.com/magic-design/
- Pictures, icons, and elements from Canva - https://www.canva.com/

Software and Services Used

- Canva - https://www.canva.com/
    - Canva was used to create the slide presentation and the logo for our app
    - We also used Canva to create a wireframe of the entire app
- Code.org - https://code.org/
    - We developed our application in Code.org

References

- "FBLA." FBLA, https://www.fbla.org/
- "2024-25 Competitive Events Guidelines Mobile Application Development." FBLA, https://connect.fbla.org/headquarters/files/High%20School%20Competitive%20Events%20Resources/Individual%20Guidelines/Presentation%20Events/Mobile-Application-Development.pdf

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