COMP3423 Human Computer Interaction

Assignment 1 (10%)

Deadline: 8th October, 2023 (Sunday), 23:59

Assignment: Tablet User Interface Design for Multiplication Table Learning App

Objective:

The objective of this assignment is to design a user-friendly and engaging tablet user interface for an app aimed at teaching students to learn and memorize the multiplication table. The focus should be on revamping the given example to make it more intuitive, visually appealing, and suitable for children.

Task:

Take the following game as a reference, and revamp the user interface design for a tablet app that helps students learn and memorize the multiplication table. The app should provide an interactive and enjoyable learning experience for children.
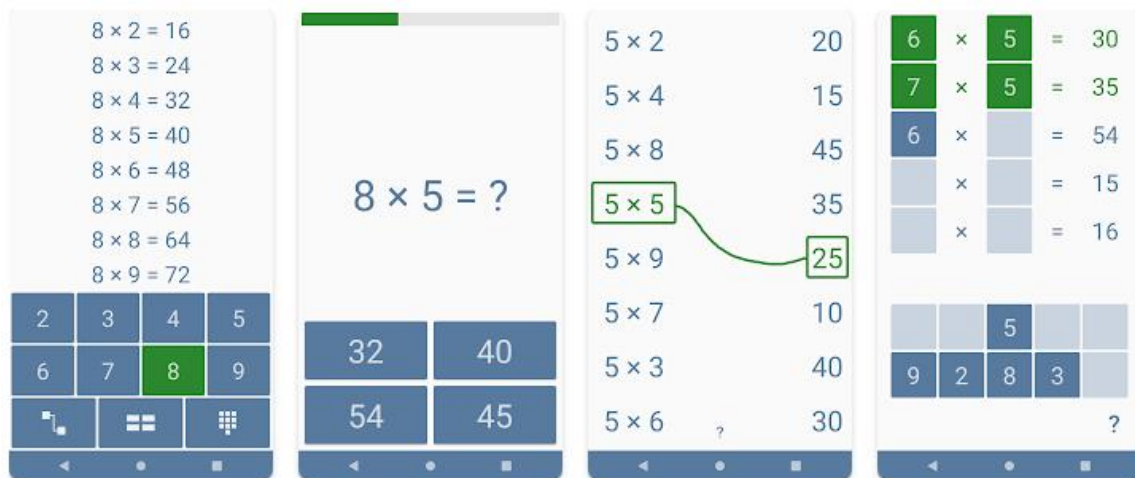
More app screens can be viewed in this url:

https://play.google.com/store/apps/details?id=com.agandeev.multiplication.free&hl=en_US&pli=1

To-do list:

1. Use Figma (www.figma.com) as design software to create the tablet user interface design for the app. The app is not required to have real functions (no coding needed!), but you need to

demonstrate a smooth walk-through of the whole design. Your design also needs to conform to the "Design Requirements" below.

2. Include all the required screens mentioned above, demonstrating the revamped design and improved user-friendliness.

3. Export your design as a clickable prototype or provide a video walkthrough showcasing the interactions. For this item, please provide a publicly accessible URL link for the instructor/markers to view them.

Design Requirements:

1. **Design the main screens:**
   a) Home screen: Provide clear and visually appealing navigation options for different sections of the app.
   b) Multiplication table screen: Display a well-organized and interactive multiplication table, highlighting patterns and relationships.
   c) Practice screen: Allow students to practice their multiplication skills through interactive quizzes or games.
   d) Progress tracking screen: Show students their progress, achievements, and areas for improvement.
   e) Settings screen: Enable customization options, such as sound settings or difficulty levels.

2. **Child-friendly and intuitive design:**
   a) Use age-appropriate colors, fonts, and visual elements to engage and captivate children's attention.
   b) Ensure clear and accessible navigation, with visible and recognizable icons or labels.
   c) Use playful and interactive design elements to make learning enjoyable and interactive for children.

3. **Interactive Learning Experience:**
   a) Incorporate engaging graphics or rewards to motivate and reward children's progress.
   b) Include interactive elements, such as draggable objects or touch-based interactions, to make learning interactive and hands-on.
   c) Provide immediate feedback and positive reinforcement during quizzes or games.

4. **Usability and Accessibility:**
   a) Design the app with a clear and intuitive layout, making it easy for children to navigate and understand.
   b) Consider the different learning abilities of children and provide options for adjusting difficulty levels or providing additional assistance.
   c) Ensure that text and visual elements are legible and appropriate for children.

Submission Guidelines:

- Submit a MS Word or PDF document
- In the document, show your design along with a brief explanation of your design choices, highlighting the improvements made to enhance usability and appeal for children (at least 250 words). In MS Word or PDF format.
  Hint: The document should include the screen captures of a suggested demo walk-through.

- End of assignment -

Suggested Rubric:

Criteria (Marks)

Criteria	Mark(s)
Child-friendly and Intuitive Design • Age-appropriate colors and fonts • Clear and accessible navigation	3 marks
Interactive Learning Experience • Engaging graphics and rewards • Interactive elements and feedback	3 marks
Usability and Accessibility • Clear and intuitive layout • Consideration of different abilities	3 marks
Explanation of Design Choices • Clear and concise explanation • Emphasis on usability improvements	1 mark
Total	**10 marks**