THE MIND MATH QUIZZER

SUBMITTED TO -
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Our Team

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What is "Mind Math Quizzer"?

- It's a simple, interactive web application built to make math practice fun and engaging.

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- It's a "gamified" learning tool that gives instant feedback.

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- Key Tools Used:

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- Python (for the game logic)

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- Streamlit (for the user interface)

Problem Statement & Objectives

Problem: Practicing mental math can be boring. We wanted to create an interactive tool to make it more exciting.

Objectives:

- Generate random math problems (+, -, *, /)
- Create a simple, user-friendly GUI.
- Provide instant "Correct" or "Wrong" feedback.
- Track the user's score over a 10-question quiz.
- Allow the user to restart the game.

Methodology

How It Works: The App's Memory

Problem: Streamlit reruns the whole script on every click.
How do we remember the score and the current question?

Solution: st.session_state

We used Streamlit's "Session State" as a "memory box."

It stores key variables like:

st.session_state.question

st.session_state.answer

st.session_state.score

st.session_state.question_number

Methodology

How It Works: The User Interface

Layout: We used st.columns(2) to create a clean side-by-side layout for the buttons.
Feedback: We used st.success("Correct!") for a green message and
st.error("Wrong!") for a red one.
Styling: We used st.markdown() to add custom colors to the text
and config.toml to set the default theme to "Light Mode."

LIVE DEMO

Future work

1. Add a timer and multiple difficulty levels.

2. Include a leaderboard and score-saving feature.

3. Improve the UI with sound and animations.
4. Add more types of questions and challenges.

Conclusion

In conclusion, we successfully built the Mind Math Quizzer, a functional and engaging web application that met all our project objectives. By using Python for the game logic and the Streamlit library for the user interface, we transformed basic mental math practice into an interactive quiz. Our final application provides instant feedback and accurate score tracking over 10 randomly generated questions, delivering a seamless and user-friendly experience as demonstrated in the live demo. This confirms our methodology was successful and all requirements were met.

Thank you for your time!

THANK YOU!