Flash-a-card: An Interactive Flashcard Quiz Website for Student Review

Problem Statement:
Ever had that feeling where you need to review your notes but can't seem to understand anything or don't even know how to start? This often leads to lower test scores and stress. Our system will provide an interactive quiz using flashcards that shows questions, gives explanations after each answer, and helps students focus on the areas they get wrong.

Project Objectives:
- Provide an interactive quiz using flashcards.
- Show explanations for every question.
- Sort questions into correct and wrong piles to focus on review.
- Allow users to retry questions they got wrong.
- Help students improve knowledge efficiently through repeated practice.

Planned Features:
- Display questions in flashcard format.
- Show explanations immediately after answering.
- Track correct and incorrect answers in separate piles.
- Option to retry wrong answers for additional practice.
- Categorize questions by subject and then by topic.
- Shuffle questions for variety.
- Show progress summary at the end of a quiz session.

Planned Inputs and Outputs:
A. Inputs
- Select subject
- Select topic
- Answer a question (multiple choice)
- Mark question as complete
- Request next question
- Retry wrong questions
- Shuffle questions
B. Outputs
- Display list of topics for the selected subject
- Load quiz questions for selected topic
- Show correct/incorrect feedback + explanation
- Update correct/wrong pile
- Show next flashcard/question
- Display all questions answered incorrectly
- Show questions in random order

Logic Plan (Pseudocode)
Start Program

Display list of subjects
User selects a subject
Display list of topics within that subject
User selects a topic
Load quiz questions for the selected topic
Initialize empty piles: CorrectPile, WrongPile

Repeat for each question:
    Display question
    Wait for user answer
    If answer is correct:
        Show explanation
        Add question to CorrectPile
    Else:
        Show explanation
        Add question to WrongPile
    Ask if user wants next question
End Repeat

Display summary:
    Number of correct answers
    Number of wrong answers
    Option to retry WrongPile questions

End Program