

Quiz App Using Python

1. Aim

To develop a dynamic quiz application using **Python** and **CustomTkinter** that fetches questions from an online API and provides an interactive graphical user interface for users to test their knowledge.

2. Introduction

This project is a GUI-based quiz application built with Python using the CustomTkinter library. It enables users to dynamically choose the number of questions, difficulty level, and quiz topic. The app then fetches relevant questions in real-time from the [Open Trivia Database API](#).

CustomTkinter is used to enhance the aesthetics and functionality of the interface, giving a modern and intuitive look. The app evaluates answers, keeps track of the score, and provides feedback upon completion.

3. Features / Functionality

->User Input Settings

- Number of Questions
- Category (General Knowledge, Computers, History, Sports, etc.)
- Difficulty Level (Easy, Medium, Hard)

->Live API Integration

- Questions fetched dynamically from Open Trivia DB using HTTP requests

-> Shuffled Options

- Randomizes answers to prevent position bias

-> Score Calculation

- Tracks and displays score at the end

->Responsive UI

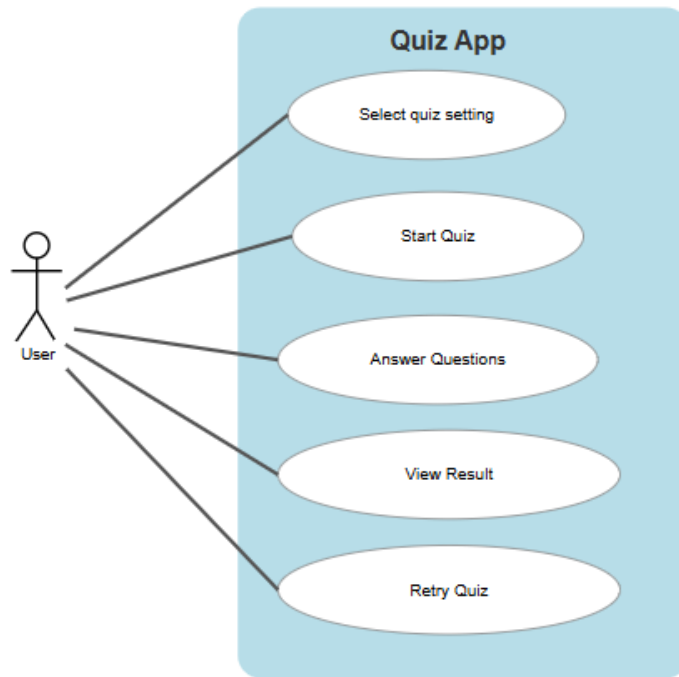
- Created using CustomTkinter with dark/light themes
- Fully responsive layout with enhanced fonts and spacing

-> Retry Option

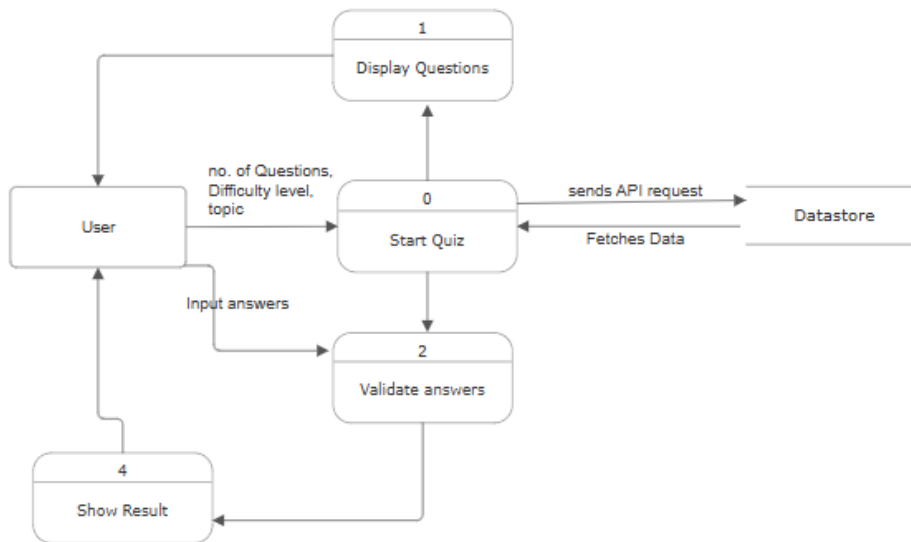
- Allows users to attempt a new quiz without restarting the app

4. Diagrams

Use Case Diagram

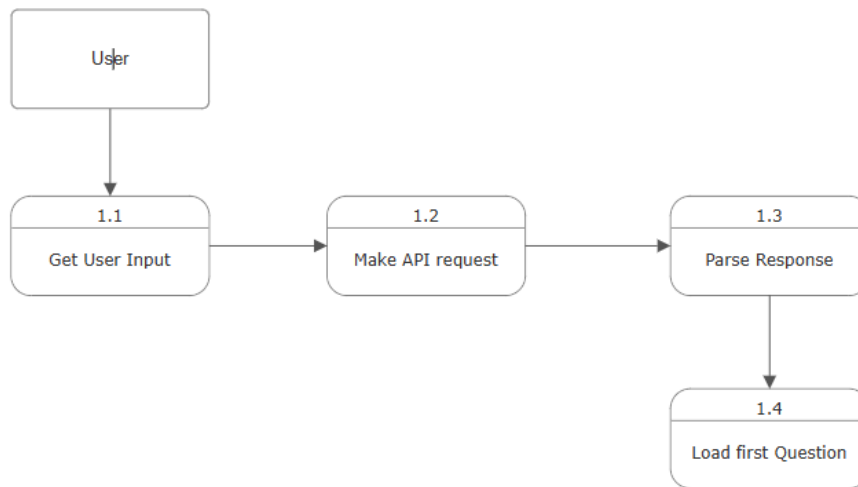


DFD level 0



DFD level 1:

Process1: Start Quiz



DFD level 1:

