Mobile Application Development

SIT 305

Quiz App

Task 3.1C

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Short Report

Large Language Models (LLMs), such as Meta's Llama 2, present significant prospects to improve user experience, learning personalization, and functionality in mobile applications as a result of the quick development of AI technology. Our general knowledge quiz app's educational value, interaction, and adaptability might all be significantly increased by using such models.

Quiz questions are currently manually hardcoded into the application. Almost any topic can have excellent, pertinent multiple-choice questions dynamically generated by LLMs like as Llama 2. This would enable the software to provide an infinite number of questions based on the user's interests, current affairs, or academic requirements. For instance, if a user requested a quiz on "Space Exploration" or "Modern History," the app might use a cloud-based API driven by Llama 2 to create the questions quickly.

Users can engage in conversation with the app by incorporating a chatbot that is powered by Llama 2. "Why is Mars called the Red Planet?" or "Tell me more about Shakespeare?" are examples of follow-up inquiries they could pose. Learning becomes more personalized and participatory as a result. Like having a personal teacher, students can use the app to get real-time answers to their questions while preparing for examinations or competitive tests.

LLMs are able to evaluate user performance and modify the level of difficulty of questions accordingly. For instance, Llama 2 may be asked to produce intermediate or advanced-level questions if a user routinely provides accurate answers to basic-level questions. By keeping consumers interested and challenged, this adaptive strategy helps them gain more knowledge over time.

LLMs can facilitate voice-based communication as well because of their natural language capabilities. The software is accessible to visually impaired users and small children who might prefer speaking over typing because users can respond to queries or request topics by speaking.

To make sure user inputs and questions are free of prejudice, objectionable material, or false information, LLMs can be used to assess them. This preserves the app's educational value and makes learning safer, particularly for younger users.

Due to its size, Llama 2 is usually hosted on a cloud platform, such as Hugging Face Spaces, AWS, or Azure. The backend API receives a request from the Android app, such as "create an animal quiz," and provides a structured answer. After that, the software turns this into an intuitive quiz interface.

A basic quiz app becomes a clever, dynamic, and customized learning tool when LLMs like Llama 2 are incorporated. LLMs open the door to a future of immersive mobile education, from intelligent difficulty changes and accessibility to dynamic content creation and real-time tutoring. As this technology develops, producing significant user experiences will depend on its ethical and responsible integration.

References:

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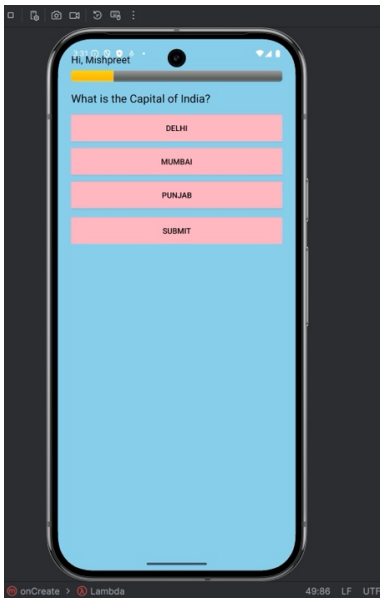
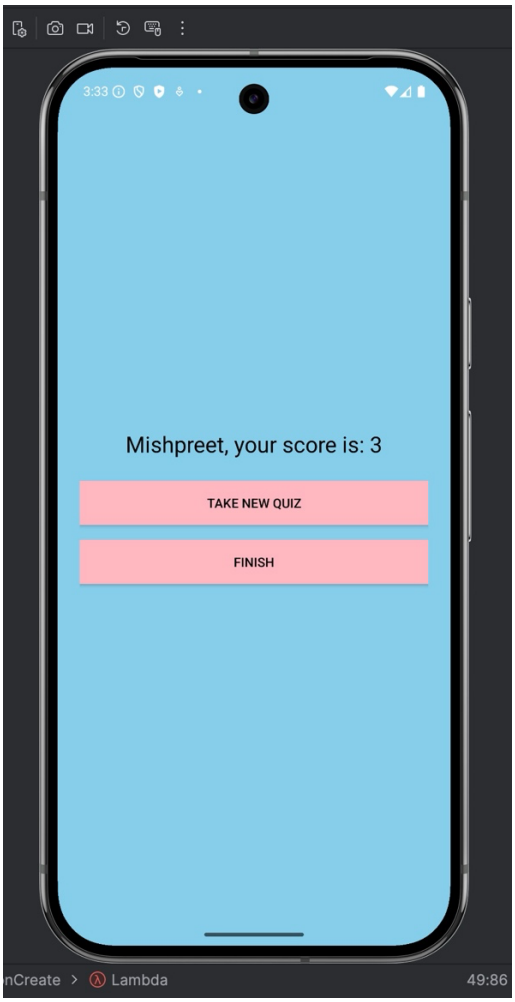
Screenshots of my application:





Github Link:

https://github.com/mishuarora/SIT305_3.1.git

Panopto Link:

https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=d436667f-f0fb-450e-8c60-b2ba012b79e0