

SIT305 - 3.1C

Llama2 Ideas Report

Jonathan Tynan

1 LLM Ideas

Large Language Models (LLMs) have immense potential to dramatically enhance app functionality and user experience. Llama2, in particular, offers significant potential in expanding this and other Android Quiz apps. One of the immediate ideas in using Llama 2 is to leverage its ability to generate content. We could implement Llama 2 in the generation of questions and answers across a wide range of topics or even difficulty levels, thus effectively enabling a near limitless pool of data to populate our app. These questions could be tailored to the user's knowledge level or specifications, however the biggest detriment with this approach is that these LLM's are known to hallucinate, and so there must be some kind of verification of the questions and their answers before use within the app.

Another use could be to implement some kind of chat function, in which the users could request detailed explanations or clarifications for any quiz question, directly within the app interface. This would provide immediate feedback to the user and comprehensive explanations as needed. Llama 2 would then help to solidify the understanding and retention of knowledge, and so make learning both more effective and engaging through helping the user to correct misunderstandings quickly and efficiently.

Instead of the traditional quiz format, in which a question and several answers are displayed for the user to make a choice, we could integrate Llama 2 to enable interactive learning through some kind of conversational interface. It could simulate a tutor-like interaction, where questions are presented in a conversational style and the LLM could prompt the user with questions that may help to guide the user to the correct answer. There is potential for this to make the learning process more relatable, as it allows for a more personalised learning experience in which the discussion is adapted according to the user and their response, for example analogies for a new concept could be made in relation to the user's past experience or prior learning.

In addition to the previous examples of integration, we could leverage Llama 2 to expand our quiz app to offer our questions in multiple languages. While the original Llama 2 is not intended to be used in languages other than English, it is permitted and there has been efforts to fine-tune the Llama 2 model to work with other languages. An example of this can be seen in the [LinkSoul-AI Chinese Llama project](#). By localising our content to the user's native language, our app can not only become more inclusive but be able to target and reach a wider, global audience. Furthermore, multilingual support could help in the teaching of new languages, by providing users with practice questions and allowing them to test their language skills in a practical engaging way.

There is a significant amount of potential in leveraging Llama 2, and similar LLM models, in our quiz app to expand our feature set. As this technology continues to evolve, the possibility for further innovations is immense, enabling the extension of our app to be a more engaging, effective, and personalised tool.