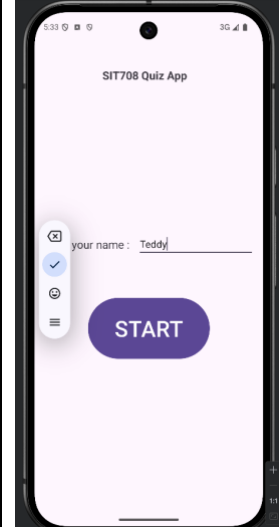
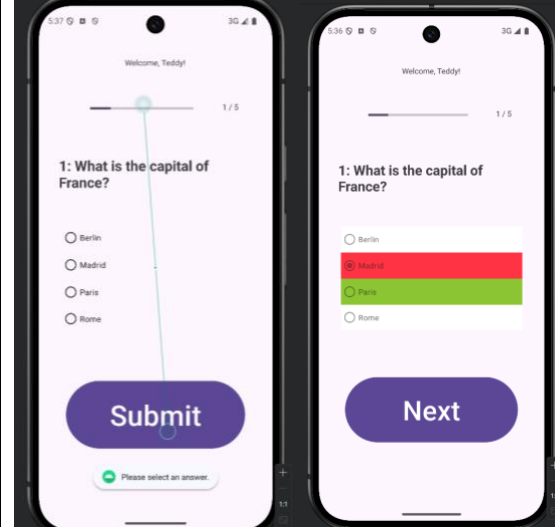
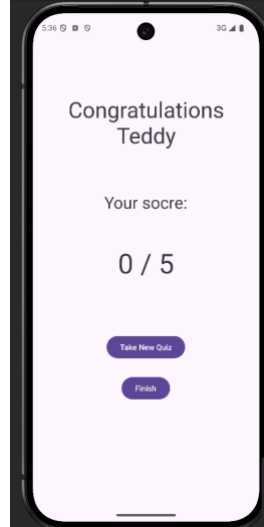
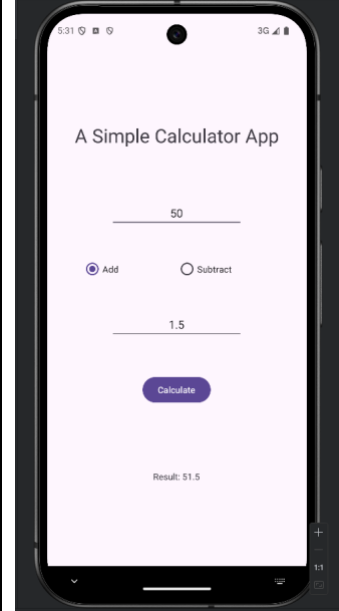
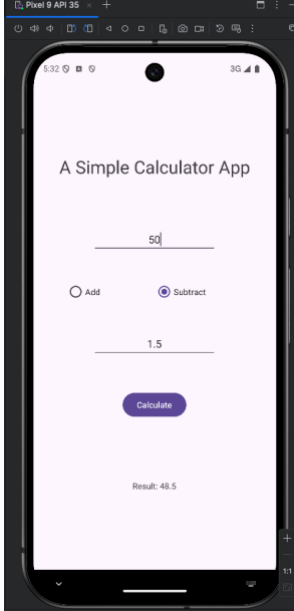


<b>Git repo link:</b>	<a href="https://github.com/TeddyScript101/SIT708/tree/master/Task%203.1C">https://github.com/TeddyScript101/SIT708/tree/master/Task%203.1C</a>
<b>Quiz App Demo Video Link:</b>	<a href="https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=62399c1a-8669-4c38-b850-b2b7007a855f">https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=62399c1a-8669-4c38-b850-b2b7007a855f</a>
<b>Calculator App Demo Video Link</b>	<a href="https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=b8dcd3f4-4b5c-4475-97a2-b2b7007b7661">https://deakin.au.panopto.com/Panopto/Pages/Viewer.aspx?id=b8dcd3f4-4b5c-4475-97a2-b2b7007b7661</a>

## Quiz App Screenshots

MainActivity	QuestionActivity	ResultActivity
		

## Calculator App Screenshots

Add	Subtract
	

## **A short report of ideas on how to harness LLM in a quiz app**

I have created a quiz app in 3.1C, which is a quiz app. If I want use Llama 2 and similar LLMs (Large Language Models), I will want to have the following features which harnessing the LLM.

### **Interactive Feature: Better Explanations of Answers and Conversational Quizzing**

LLM can elaborate on that answer to the user. For example, if the user studies physics and the question is about how to calculate the final speed of an object when someone kicks the ball, the LLM could provide a detailed, step-by-step calculation to the user. One of the most useful aspects of LLM is being able to give a natural-sounding, conversational explanation as opposed to just presenting the results. In the case of a wrong answer, the app generates an even clearer use of the LLM to show the solution to that answer in a straightforward way. It would also give analogies, definitions, or further examples, all of which make it so much easier to understand complex topics better. This turns the quiz application into more than a simple testing tool and turns it into an interesting tutor.

The application can create a virtual tutor that asks questions and responds to what the user says. Here, engagement is higher and less mechanical than the usual quizzing methods, leading to some deep thinking and reflection.

In Duolingo, the AI-powered app responds and explains answers in an interactive manner. This app has features such as roleplaying, where learners can practice their real-life conversation skills with in-character avatars. While learners aren't really speaking to a live teacher, the AI component offers a responsive interactive interface [2].

### **Unlimited Quiz Questions**

Quiz questions are generated according to the current knowledge level, learning goal as well as past performance of the individual user can be incorporated into the LLMs. After solving certain questions, the LLM may generate new questions that are targeted on weak areas or get higher in level so as not to let the learner feel too bored. The variety of question-generating formats could include multiple-choice questions, true/false questions, fill-in-the-blanks, or short answer questions which could map to different learning styles.

Quillionz, an Artificial Intelligence-Based Question Generator, aims at optimizing education through advanced machine learning question generation using sophisticated ML algorithms. Additionally, it supports the essential Wh questions and provides diverse question export formats [PDF, TXT, DOC, QTI, etc.] so they can easily be integrated into various LMS or used offline. Quillionz Pro for Machine Learning [1].

## Support for Multiple Language and Levels

With the new LLMs such as Llama 2, you can convert text into several languages or even simpler text for younger audiences. This gives the quiz app a plethora of access and inclusiveness for diverse users.

Duolingo is a popular company which is using ChatGPT-4 for a language learning app, it utilizes GPT-4 to create AI-generated explanations and curriculum in a fun way. English, Spanish, French, German, Italian, and Portuguese can be learnt in the app [4].

## Reference

- [1] Quillionz, "AI-Based Question Generator," *Quillionz*. [Online]. Available: <https://www.quillionz.com/>. [Accessed: Apr. 6, 2025].
- [2] Duolingo Team, "Introducing Duolingo Max, a learning experience powered by GPT-4," Duolingo Blog, Mar. 14, 2023. [Online]. Available: <https://blog.duolingo.com/duolingo-max/>. [Accessed: Apr. 6, 2025].