

## LLMs in this App ideas Report

**Questions and Answers Generation:** Based on a topic or a few keywords the LLM could create relevant quiz questions. This will save time (because otherwise we would manually set the question) and allow for more interesting quizzes. These topics or keywords could be pre-entered by the programmer, or the User could enter them. If the user enters the input, the quiz would be even more relevant, dynamic and custom to the user – making the app more engaging compared to if a programmer had already chosen the input. The questions don't have to be about real-world facts, they could be riddles, puzzles or about grammar or spelling. LLMs are built on a large amount of data. Different LLMs might have different specialities though, so a relevant LLM would need to be chosen based on the functionality.

**Academic integrity:** LLMs could be used to construct questions in different ways for one user compared to the other who are on different sessions. This will help facilitate 'academic integrity' since they don't have the same questions, they can't share the correct answers with each other and cheat. In this situation it would also be beneficial for the Quiz to only be open at a specific time.

**Open-ended questions Validation:** LLMs could be used to determine if an answer is correct, instead of a human having to review it (saving time once again). If the user's input has spelling or grammar mistakes the LLM could also infer what the user meant, and respond accordingly.

**Explanation:** LLMs could be used to explain why a question's answer is wrong/right, or the context behind it, so that the user learns more from the quiz.

**Hints:** LLMs could be used to give the user hints to lead them to the correct answer.

**Language Translation:** If a User prefers a language other than English, LLMs could be used to convert the text in the app to the other language.

**Jargon/Difficulty Change:** If a user is good at answering questions LLMs could sent them questions with more difficult words or concepts.

**Recommend Quizzes to User:** The user's history of chosen quizzes could be used to recommend which quiz the user should do next. This would make the app even more engaging and relevant to the User.

**Recommend Quizzes Data Insights:** Similar to the above point, depending on the quiz that different Users prefer, LLMs could be used to gather data about which terms are popular for

which demographic. Then this data could be used to promote a quiz to a new user depending on the demographic they are part of.

**Verbal Interaction with App:** If LLMs are used as well as speech recognition, the user could interact with the functionality of the app through verbal communication. This would especially be useful for people who need accessibility features, or just people who want a hand-off experience when using the app.

**Customer Support:** If users have an issue when using the app, they could communicate with an agent that uses LLMs. The agent could answer the questions that the user has.