Llama2 for Android Mobile Application Development

Llama 2 is a collection of open-sourced large language models that are developed by Meta. Llama 2 is different to other popular large language models like GPT 3 and 4 since Llama 2 is released under a permissive licence that can be used for commercial purposes as well as research (Bergmann, 2023). That fact that it is so open means that it allows the LLM and it's AI capabilities be available to a wide range of software developers, particularly android application developers. This results in Android developers having the ability to incorporate the power of artificial intelligence in their applications easily and with less licensing issues (Stachowiak, 2023).

Android developers can benefit from the capabilities of Llama 2 in the following ways:

- Chat bots
    - A mobile application could include a self-service chat bot that asked the user what they are needing help with, and the user can type their question to this chatbot. Llama 2 can then understand the end-user's needs and requirements and then provide a text response answering their question with the mobile application in content. An example of this could be a self-service chat bot for a ecommerce mobile application, where the user can ask for more information about their recently placed order.
- Text composition and editing
    - A mobile application that revolves around writing and drafting text, messages, and emails can use Llama 2 to auto complete sentences that the user types, as well as summarise the content that the user provides into a more meaningful message based on the desired tone. AN example of this could be an email mobile application, where Llama 2 can rewrite an email draft using the tone that the end user would like so that the final draft is more suitable.
- Voice assistant
    - A mobile application can utilise Llama 2 to implement a voice assistance that takes into consideration the on screen context and the voice input of the user to provide a meaningful response or answer to questions. An example of this could be a study assistant application, where the user can provide a photo of their study notes and ask the voice assistant questions about the topic they are studying.
- Intelligent search
    - A mobile application such as a photo gallery app can use Llama 2 to include an intelligent search feature, where the user can provide a semantic description for the photo they are looking for, and Llama 2 can analyse the photos in their gallery and return the results best matching

that description. This does not need to be photos only but could be used in other contexts too.

- Accessibility features
    - A mobile app that uses Llama 2 could implement real time captioning on videos along with providing captions for images so that the mobile app is more accessible.

Works Cited

Bergmann, D. (2023, December 19). *What is Llama 2?* Retrieved from IBM: https://www.ibm.com/think/topics/llama-2

Stachowiak, D. (2023, November 30). *Llama 2. A significant milestone in the world of AI*. Retrieved from deepsense.ai: https://deepsense.ai/blog/llama-2-a-significant-milestone-in-the-world-of-ai/#:~:text=partnership%20with%20Microsoft.-,What%20is%20Llama%202%2C%20and%20why%20is%20there%20so%20much,competitors%20from%20utilizing%20the%20model.