**Step 1:**

**Illinois Housing Real Estate Chatbot**

For my final project I will be working on developing a real estate chatbot that provides users with property insights and other valuable information that will help them make informed decisions in the Illinois Housing Market. The problem I hope to address with this chatbot is making information more accessible and straightforward, as if one were speaking with a realtor, except without all the high fees.

First off, this chatbot will leverage AWS to make this chatbot accessible to many users. The plan of the chatbots functionality includes, answering general real estate questions, providing insights into home values, recent market trends, and available properties for sale or rent in Illinois.

I am interested in answering any general real estate type questions with this chatbot that will make users better educated before they wish to purchase a property within Illinois. Questions like these will be answered:

* What are the current rental prices in Naperville?
* How long do homes in Evanston typically stay on the market?
* What is the average home price in Chicago?

**Step 2:**

I'm developing a real estate chatbot for my final project that can dynamically respond to customer queries regarding Illinois real estate availability, rental trends, home pricing, and market activity. I'm going to utilize datasets from Zillow, such as the Zillow Observed Rent Index (ZORI) for rental prices at the city and county levels and the Zillow Home Value Index (ZHVI) for home values at the county and neighborhood levels. The chatbot will be able to respond to queries like "What is the average home price in Cook County?" and "What is the typical rent in Naperville?". In addition, the chatbot will be able to provide information on the quantity of available properties, current sales patterns, and whether the market is more favorable to buyers or sellers through datasets on for-sale inventory, sales numbers, and market sentiment. Additionally, in order to improve location-based insights, I might use OpenStreetMap's API to provide details on local schools and amenities.

Moreover, GitHub will help the development process by tracking changes and ensuring proper code organization. I will use GitHub to document the project in a README file and manage development activities with pull and push requests. My plan is to work on this in a virtual environment and then migrate it to AWS to make sure I don't incur any development costs along the way. When migrating to AWS, GitHub Actions will help with continuous integration and testing to automate the deployment process and guarantee the chatbot is ready for production.