

### Day 3 Lab assignments

Your task is to create a simple clone from ChatGPT using OpenAI APIs (or any other Gen AI API provider) and the programming language you know (.Net, Python, Node,...). Please follow the following steps:

1. Create a developer account on [OpenAI API platform](#) (or any other provider), and generate an [API key](#) (free tier)
2. Use GitHub Copilot to build a simple UI interface like ChatGPT.
3. Note: Don't use JavaScript like used in the Demo, use only: [.Net (ASP.Net Core MVC/API, Python (Django), PHP (Laravel), Node.JS (Express)]
4. Use [Chat Completion APIs](#) to add the chat feature, using [gpt-4o-mini](#)
5. Handle full chat including replies (User can reply to the model's response), and display the full history.
6. Explore [Hugging face](#) and [GitHub Models](#) for available models, and try some open-source models.
7. It's allowed to use Github Copilot (But not preferred in the core parts of calling APIs)

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### Bonus Tasks (Optional)

1. Add Drop-down for the user to select the model, and add models from other provides (Google, Anthropic, DeepSeek, Llama,...)
2. Watch this [YouTube short Video](#), then use Ollama to install a small open-source model in your laptop and test it.
3. Search for models supporting the following features and add them to your ChatGPT Clone:
  - a. Vision (Can attach images)
  - b. File input (Attaching files)
  - c. Generating images
  - d. TTS and STT models
  - e. Fine-tuning
4. Enhance your ChatGPT Clone with the following features:
  - a. Add streaming for the model responses
  - b. Save the chat history in a database
  - c. Display old history, so users can select a history item and view it.
  - d. Add other features in the chat:
    - i. Re-generate
    - ii. User can edit his last prompt
    - iii. User can delete his last prompt