

Lab 1

AutoGen Workbench

Instructions:

1. Complete the tasks and steps listed under the Requirements section below.
2. Participate in the Lab Discussions on Canvas/Module 1

Requirements:

1. Install Python 3.10 from this URL:
 - <https://www.python.org/downloads/release/python-3100/>
2. Install VS Code from this URL:
 - <https://code.visualstudio.com/download>
3. Check python versions installed on your computer and verify that you have Python 3.10 installed by executing from the terminal/window the command:
 - `py -list`
4. Create python 3.10 virtual environment by executing the following commands from the terminal/window:
 - `py -3.10 -m pip install virtualenv`
 - `py -3.10 -m virtualenv venv-autogen`
 - `venv-autogen\Scripts\activate`
5. From venv terminal/window, execute the following commands to install pyautogen:
 - `pip install uv`
 - `uv pip install pyautogen`
6. Use your personal email account to create a login and API KEY for OpenAI gtp-3.5-turbo from this URL:
 - <https://platform.openai.com/api-keys>

7. Set up your environment variables for OpenAI Key

- `set OPENAI_API_KEY=ADD_YOUR_OPENAI_API_KEY_HERE`

8. Use your school email or gmail account and enroll in AutoGen course for free

- <https://learn.deeplearning.ai/courses/ai-agentic-design-patterns-with-autogen/lesson/1/introduction>
- Complete the entire set of videos for AutoGen
- Run Lesson 6 on your personal development computer:
<https://learn.deeplearning.ai/courses/ai-agentic-design-patterns-with-autogen/lesson/7/planning-and-stock-report-generation>

The screenshot displays the AutoGen course interface. On the left, a sidebar lists course topics: Introduction, Multi-Agent Conversation and Stand-up Comedy, Sequential Chats and Customer Onboarding, Reflection and Blogpost Writing, Tool Use and Conversational Chess, Coding and Financial Analysis, Planning and Stock Report Generation (highlighted in red), and Conclusion. Below the sidebar are links for Course Feedback and Community.

The main content area shows a Jupyter Notebook titled "L6-Planning_and_Stock_Report_Gen...". The notebook content includes:

- Lesson 6: Planning and Stock Report Generation**
- Setup**: A code cell with `llm_config={"model": "gpt-4-turbo"}`.
- The task!**: A code cell with `task = "Write a blogpost about the stock price of Nvidia in the past month. Today's date is 2024-08-01"`.
- Build a group chat**: Text indicating the group chat will include these agents: `llm_config` and `task`.

On the right, a video player shows the title "AI Agentic Design Patterns with AutoGen" and "Planning and Stock Report Generation". The video player includes logos for Microsoft, PennState, and DeepLearning.AI, along with a progress bar at 0:00 / 15:25.