

MGMT 638

Session 2: Stock Market Database & Claude Code Setup

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<https://portal-guide.rice-business.org>

Reference for all tables and variables in the database.

Get an Access Token and view the Data Portal

- Visit data-portal.rice-business.org
- Confirm your Rice email to receive an access token

How Does the Data Portal Work?

- The data portal is an AI agent. It is an app running in the cloud that has an API connection to ChatGPT (using my API key).
- The database itself is stored at a different cloud location.
- The app sends a system prompt explaining the database structure to ChatGPT along with the user prompt to get SQL code from ChatGPT.
- The app then sends the SQL code to the database to get data.

Claude as a General Agent

- The recent trend is to configure Claude, ChatGPT, and Gemini as general agents, rather than creating separate apps for different purposes.
- Model Context Protocol (MCP) introduced by Anthropic in Nov, 2024 was the first step.
- It has been adopted by everyone.
- The new method, introduced by Anthropic on Oct 16, 2025, is Claude Skills.

Create .env File

In VS Code:

- Tell Claude Code to create a `.env` file
- Click the files icon in the left toolbar to open a file explorer tab
- Open the `.env` file, and add this line: `RICE_ACCESS_TOKEN=your_token_here`
- Replace `your_token_here` with your actual token.

Download and Install Skill File

- Ask Claude to create a folder: `.claude/skills/rice-data-query/`
- Download SKILL.md from <https://mgmt638.kerryback.com/SKILL.md>
- Save as `.claude/skills/rice-data-query/SKILL.md`
- If SKILL.md opens in your web browser, right-click it and select 'Save As.'
- Select File → Close Folder and then File → Open Folder and reopen your course folder.

Example prompts to try:

- Create a Jupyter notebook to get daily adjusted closing prices for AAPL since Jan 1, 2024 from the Rice database and plot them.
- Create a Jupyter notebook to get ROE for TSLA by quarter on a trailing 4-quarters basis since the start of 2021 from the Rice database and plot it.
- Get gross profits, total assets, ticker and date filed from all 10k's filed in 2025 from the Rice database and save the data as 10k_2025.csv.