

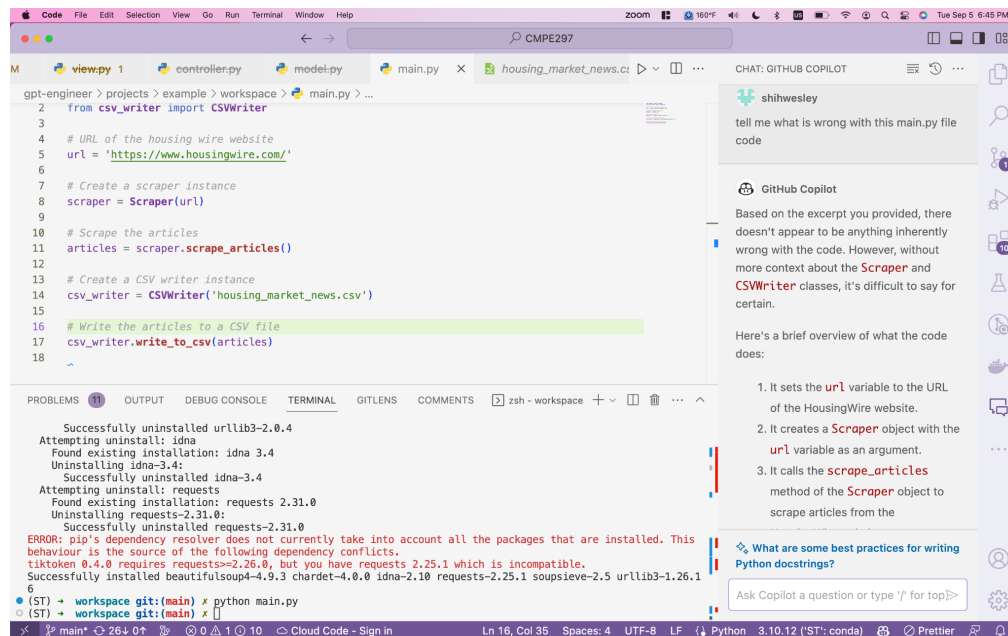
Assignment 1:

<https://chat.openai.com/share/68943906-b8d5-475d-a9b5-e1b7dabc6531>

<https://medium.com/@shih.wesley/using-chatgpts-advanced-data-analysis-function-90a3426dce47>

Assignment 2:

I installed gpt-engineer and github copilot chat. Here are some screenshots of using gpt-engineer and github copilot chat. For gpt-engineer, this is the prompt I used to ask to generate a web scraper for, “Build a web scraping application that extracts the latest housing market news articles from a news website. Store the extracted data in a CSV file.”

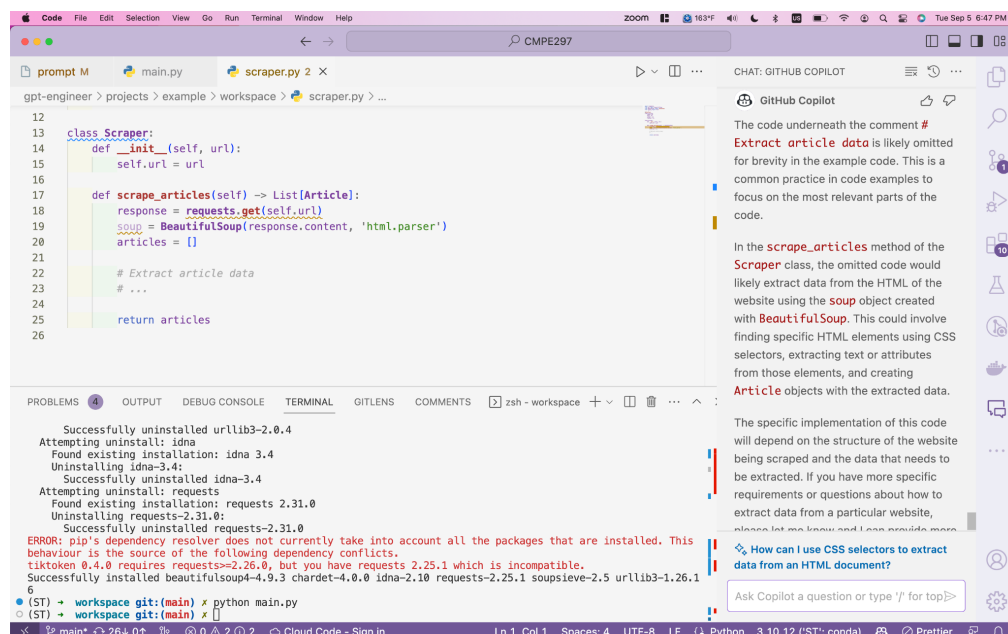


The screenshot shows a VS Code editor with a Python file named `main.py` in the `workspace` directory. The code is a web scraper for housing market news articles from `https://www.housingwire.com/`. It uses the `requests` library to fetch the page and `BeautifulSoup` to parse the HTML. The scraper class is defined with a `scrape_articles` method. The main function calls the scraper and writes the results to a CSV file named `housing_market_news.csv`.

```
gpt-engineer > projects > example > workspace > main.py > ...
1 from csv_writer import CSVWriter
2
3
4 # URL of the housing wire website
5 url = 'https://www.housingwire.com/'
6
7 # Create a scraper instance
8 scraper = Scraper(url)
9
10 # Scrape the articles
11 articles = scraper.scrape_articles()
12
13 # Create a CSV writer instance
14 csv_writer = CSVWriter('housing_market_news.csv')
15
16 # Write the articles to a CSV file
17 csv_writer.write_to_csv(articles)
18
```

The terminal shows the output of the command `python main.py`. It successfully uninstalls `urllib3-2.0.4` and `idna-3.4`, and installs `requests-2.31.0`. However, it encounters a dependency conflict with `requests-2.31.0` and `requests-2.25.1`, which is incompatible. The error message is:

```
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This
behaviour is the source of the following dependency conflicts.
tiktoken 0.4.0 requires requests>=2.26.0, but you have requests 2.25.1 which is incompatible.
Successfully installed beautifulsoup4-4.9.3 chardet-4.0.0 idna-2.10 requests-2.25.1 soupsieve-2.5 urllib3-1.26.1
```



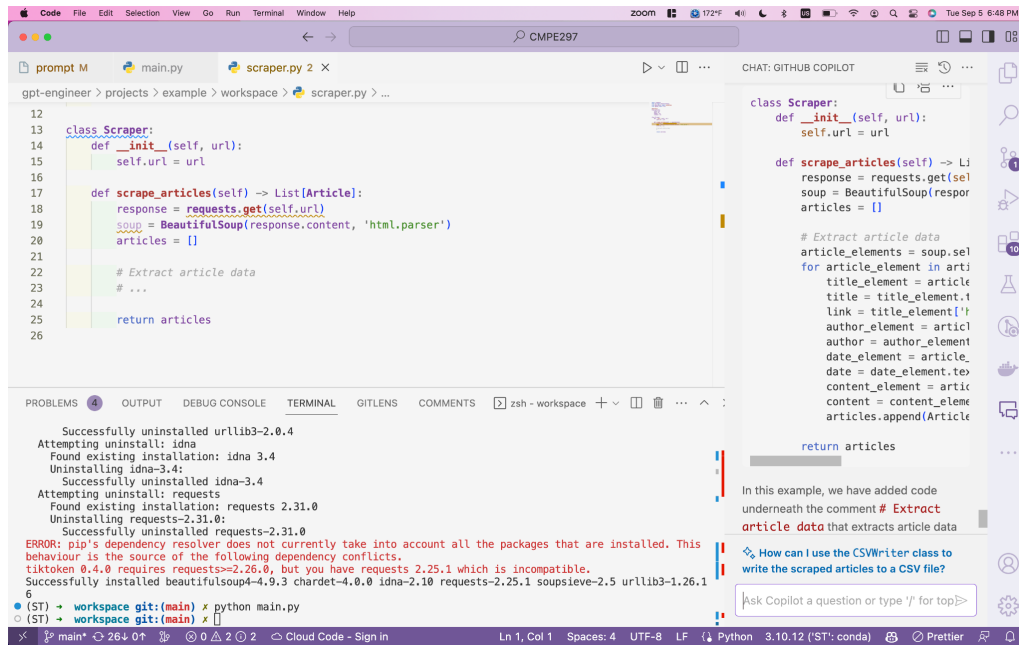
The screenshot shows a VS Code editor with a Python file named `scraper.py` in the `workspace` directory. The code defines a `Scraper` class with a `scrape_articles` method. The method uses the `requests` library to fetch the page and `BeautifulSoup` to parse the HTML. The scraper class is defined with a `scrape_articles` method. The main function calls the scraper and writes the results to a CSV file named `housing_market_news.csv`.

```
gpt-engineer > projects > example > workspace > scraper.py > ...
12
13 class Scraper:
14     def __init__(self, url):
15         self.url = url
16
17     def scrape_articles(self) -> List[Article]:
18         response = requests.get(self.url)
19         soup = BeautifulSoup(response.content, 'html.parser')
20         articles = []
21
22         # Extract article data
23         # ...
24
25         return articles
26
```

The terminal shows the output of the command `python main.py`. It successfully uninstalls `urllib3-2.0.4` and `idna-3.4`, and installs `requests-2.31.0`. However, it encounters a dependency conflict with `requests-2.31.0` and `requests-2.25.1`, which is incompatible. The error message is:

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```

One of the issues that I am running into with this gpt-engineer is that it is only creating empty skeleton boilerplate code and missing out actual code for important functions. So, I use copilot chat to help me fill in those gaps.



The screenshot shows a VS Code editor with a Python file named `scraper.py` and a terminal window. The `scraper.py` file contains a `Scraper` class with an `__init__` method and a `scrape_articles` method. The `scrape_articles` method is currently empty, with only a comment indicating where to extract article data. The terminal window shows the output of running `python main.py`, which includes several dependency conflict messages from pip, such as "ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This behaviour is the source of the following dependency conflicts." and "tiktoken 0.4.0 requires requests>=2.26.0, but you have requests 2.25.1 which is incompatible." The right sidebar shows the "CHAT: GITHUB COPILOT" panel with a message asking for help to fill in the `scrape_articles` method.

```
class Scraper:
    def __init__(self, url):
        self.url = url

    def scrape_articles(self) -> List[Article]:
        response = requests.get(self.url)
        soup = BeautifulSoup(response.content, 'html.parser')
        articles = []

        # Extract article data
        # ...

        return articles
```

```
Successfully uninstalled urllib3-2.0.4
Attempting uninstall: idna
Found existing installation: idna 3.4
Uninstalling idna-3.4:
Successfully uninstalled idna-3.4
Attempting uninstall: requests
Found existing installation: requests 2.31.0
Uninstalling requests-2.31.0:
Successfully uninstalled requests-2.31.0
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This
behaviour is the source of the following dependency conflicts.
tiktoken 0.4.0 requires requests>=2.26.0, but you have requests 2.25.1 which is incompatible.
Successfully installed beautifulsoup4-4.9.3 chardet-4.0.0 idna-2.10 requests-2.25.1 soupsieve-2.5 urllib3-1.26.1
6
(ST) -> workspace git:(main) x python main.py
(ST) -> workspace git:(main) x
```

In this example, we have added code underneath the comment `# Extract article data` that extracts article data

How can I use the CSVWriter class to write the scraped articles to a CSV file?

Ask Copilot a question or type '!' for top>