

FileEditSelectionViewGoRunTerminalHelp<=>Search

job_market_analysis.ipynb

E: > AI job Recommendation Project > job_market_analysis.ipynb > from google.colab import files

GenerateCodeMarkdownRun All

Select Kernel

```
from google.colab import files
uploaded = files.upload()
import pandas as pd
import re
filename = list(uploaded.keys())[0]
df = pd.read_csv(filename)
print("Dataset Loaded Successfully!")
print("Shape:", df.shape)
df = df[['posting_title', 'location', 'description', 'industries', 'job_function', 'seniority_level']]
df.dropna(inplace=True)
def clean_text(text):
    text = text.lower()
    text = re.sub(r'^a-zA-Z\s', '', text)
    return text
df['clean_description'] = df['description'].apply(clean_text)
print("\nCleaned Data Preview:")
df.head()
```

Python

Choose FilesNo file chosen

Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

...

Saving linkedin_jobs_2025_11_13.csv to linkedin_jobs_2025_11_13.csv

Dataset Loaded Successfully!

Shape: (1035, 15)

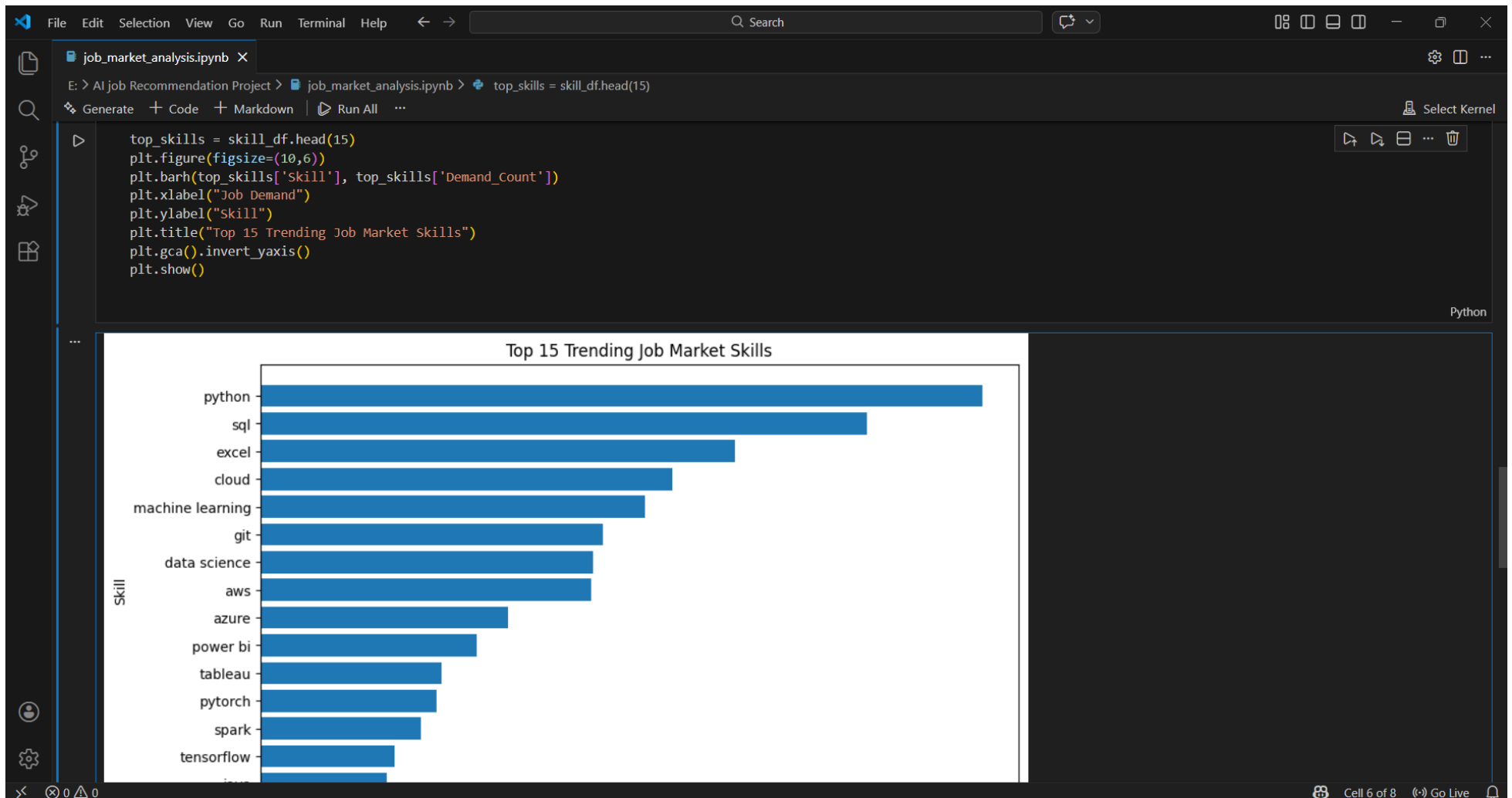
Cleaned Data Preview:

...

	posting_title	location	description	industries	job_function	seniority_level	clean_description
0	Data Engineer	European Union	Freelance Data Engineer (Remote – Europe) 🌐 ...	IT Services and IT Consulting	Information Technology	Mid-Senior level	freelance data engineer remote europe \ncont...
1	Junior Data Engineer	Athens, Attiki, Greece	We are looking for two Junior to Mid-level Dat...	IT Services and IT Consulting	Other	Mid-Senior level	we are looking for two junior to midlevel data...

Junior Data...Company DescriptionEuropean is a...Information Technology and...company description\nsenior is a...

Spaces: 4 () 🛑 Cell 1 of 8 (c) Go Live



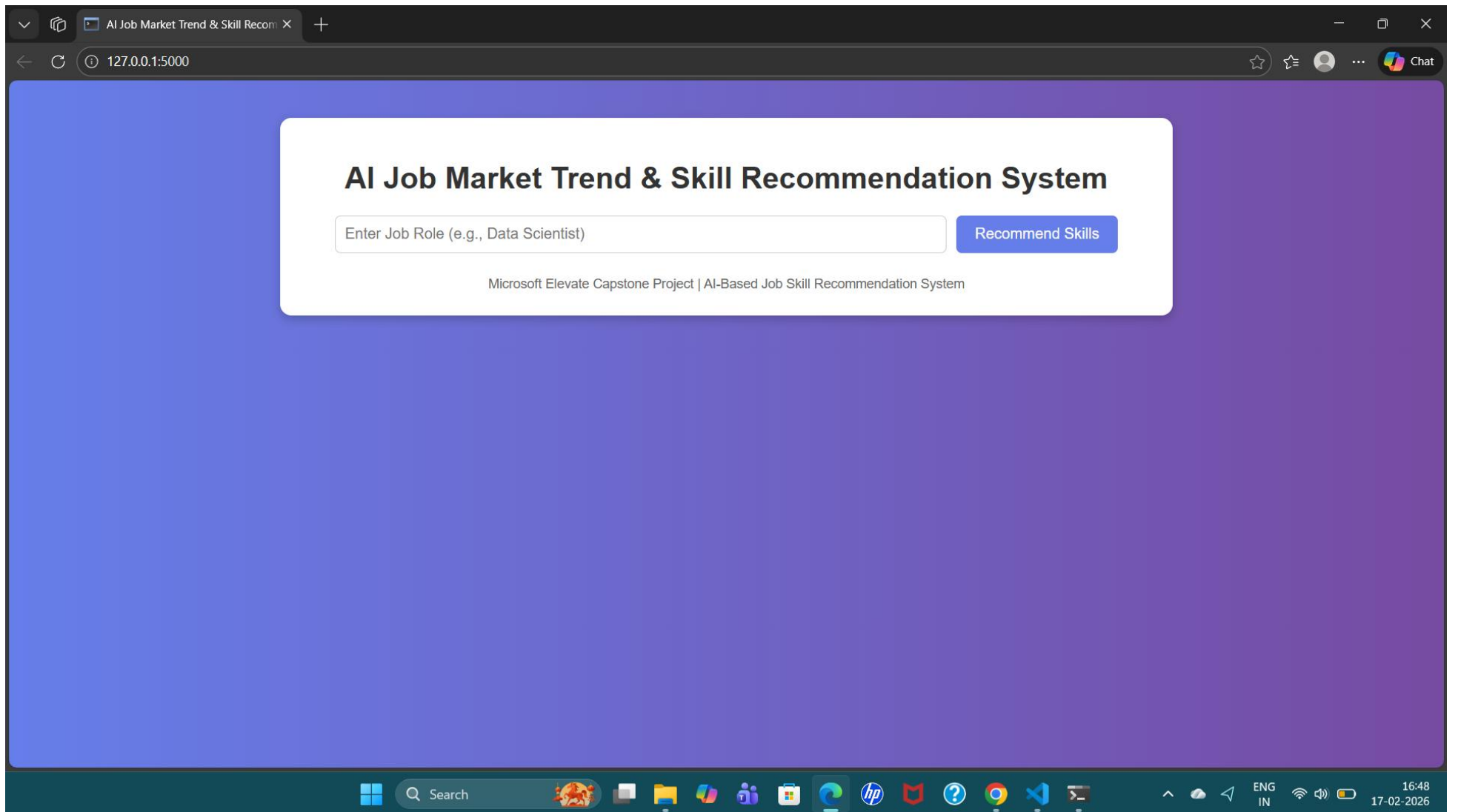
File Edit Selection View Go Run Terminal Help Search

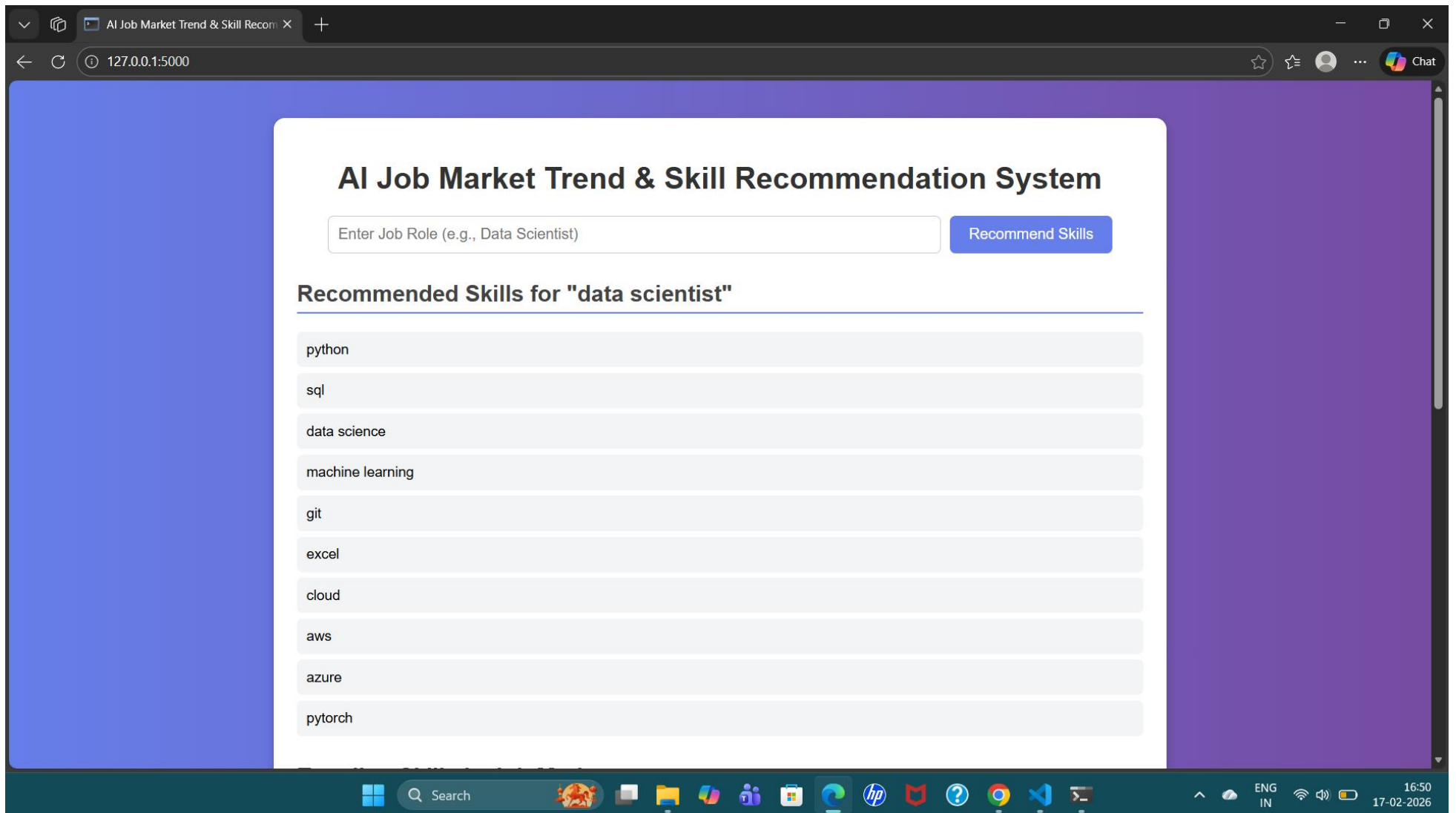
ai_logic.py X

E: > AI job Recommendation Project > ai_logic.py

```
1 import pandas as pd
2 import re
3 from collections import Counter
4 def load_data():
5     df = pd.read_csv('data/linkedin_jobs.csv')
6     df = df[['posting_title', 'description']].dropna()
7     return df
8 def clean_text(text):
9     text = text.lower()
10    text = re.sub(r'^a-zA-Z\s', '', text)
11    return text
12    skills_list = [
13        'python', 'java', 'c++', 'sql', 'machine learning', 'deep learning', 'data science',
14        'artificial intelligence', 'tensorflow', 'pytorch', 'nlp', 'power bi', 'tableau',
15        'excel', 'aws', 'azure', 'cloud', 'devops', 'docker', 'kubernetes', 'react', 'node',
16        'html', 'css', 'javascript', 'flask', 'django', 'git', 'linux', 'spark', 'hadoop'
17    ]
18 def extract_skills(text):
19     extracted = []
20     for skill in skills_list:
21         if skill in text:
22             extracted.append(skill)
23     return extracted
24 def get_trending_skills():
25     df = load_data()
26     df['clean_desc'] = df['description'].apply(clean_text)
27     df['skills'] = df['clean_desc'].apply(extract_skills)
28
29     all_skills = [skill for sublist in df['skills'] for skill in sublist]
30     skill_counts = Counter(all_skills)
31
32     return skill_counts.most_common(15)
33 def recommend_by_role(role):
34     role = role.lower()
35     df = load_data()
36
37     matched_jobs = df[df['posting_title'].str.lower().str.contains(role)]
```

Ln 27, Col 58 Spaces: 4 UTF-8 CRLF Python Go Live





AI Job Market Trend & Skill Recommendation

127.0.0.1:5000

Chat

Trending Skills in Job Market

python (735 jobs)

sql (617 jobs)

excel (483 jobs)

cloud (420 jobs)

machine learning (393 jobs)

git (349 jobs)

data science (340 jobs)

aws (337 jobs)

azure (252 jobs)

power bi (220 jobs)

tableau (184 jobs)

pytorch (179 jobs)

spark (163 jobs)

tensorflow (136 jobs)

java (128 jobs)

Search

ENG IN 16:50 17-02-2026