**FAST National university Peshawar Campus**


**Lab 8**

**Submitted By:**
**Yousaf Maaz**
**22P-9349**

**Submitted to:**
**Sir Saud sawar**

**BSSE-5A**

**Department of Computer Science**

## Service Account JSON:

**The JSON file is  for security reasons. However, ensure that the `serviceAccountKey.`**

**`json` file is securely uploaded to your project directory on PythonAnywhere.**

**The recommended path for the file is `/home/yourusername/mysite/.`**

**This ensures that your application can authenticate with Firebase securely without exposing sensitive credentials in the codebase or submission.**

## Deployment Steps for Flask Application on PythonAnywhere:

1. **Sign up/Login to PythonAnywhere:**
    - **Go to PythonAnywhere and log in.**
2. **Create a New Flask App:**
    - **Navigate to the "Web" tab and click "Add a new web app."**
    - **Choose "Flask" as the framework and follow the prompts to set up the application.**

**3. Upload Service Account JSON File:**

- **In the PythonAnywhere Files section, upload your serviceAccountKey.json file to /home/yourusername/mysite/.**

**4. Configure WSGI File:**

- **Edit the WSGI file (found at /var/www/yourusername_pythonanywhere_com_wsgi.py) to point to the Flask app. Example**

**5.Reload the Web App:**

- **Go back to the Web tab and reload the app to apply all the changes.**

**6.Test Firestore Connection:**

- **Open a browser and go to `https://yourusername.pythonanywhere.com/test-firestore` to verify Firestore connection.**
- **If successful, you should receive a response listing the collections in Firestore.**

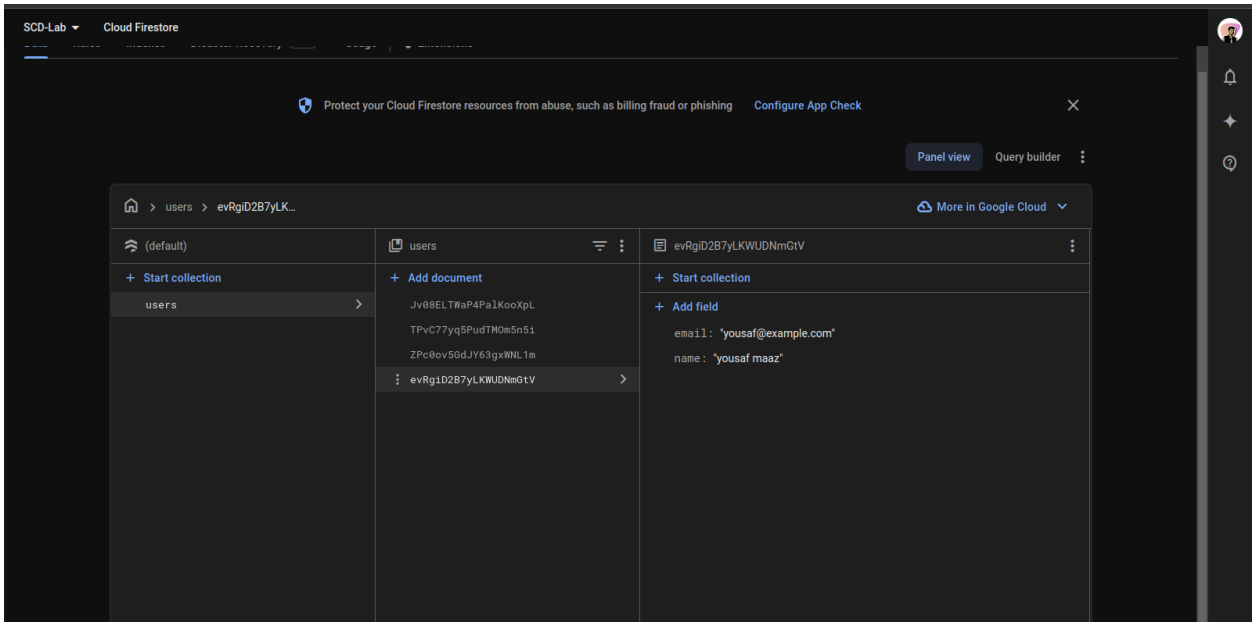
## Screenshots:

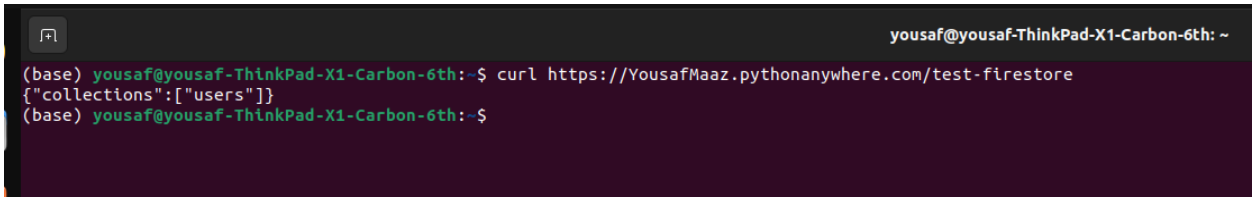
- **Successful response from the Jupyter notebook.**
- **Entry in Firestore Database under the users collection.**

In [1]:
```
import requests

# XML data to be sent
xml_data = """<?xml version="1.0" encoding="UTF-8"?>
<user>
    <name>yousafdon</name>
    <email>yousaf@example.com</email>
</user>"""

# Your Flask server URL on PythonAnywhere
url = 'https://YousafMaaz.pythonanywhere.com/receive-data'  # Update with your actual URL

# Send the request to the Flask server
response = requests.post(url, data=xml_data, headers={'Content-Type': 'application/xml'})

# Check if the response is successful
if response.status_code in [200, 201]:
    try:
        # Print the response from the server
        print(response.json())
    except ValueError as e:
        print("Error decoding JSON:", e)
        print("Response content:", response.text)
else:
    print("Error:", response.status_code)
    print("Response content:", response.text)
```

```
{'email': 'yousaf@example.com', 'id': 'ZPc0ov5GdJY63gxWNL1m', 'name': 'yousafdon'}
```

In [ ]:


SCD-Lab
Cloud Firestore
Protect your Cloud Firestore resources from abuse, such as billing fraud or phishing
Configure App Check
Panel view
Query builder
users
evRgiD2B7yLK...
More in Google Cloud
(default)
Start collection
users
users
Add document
Jv08ELTWaP4PalKooXpL
TPvC77yq5PudTMOm5n5i
ZPc0ov5GdJY63gxWNL1m
evRgiD2B7yLKWUDNmGtV
evRgiD2B7yLKWUDNmGtV
Start collection
Add field
email: "yousaf@example.com"
name: "yousaf maaz"


yousaf@yousaf-ThinkPad-X1-Carbon-6th: ~
(base) yousaf@yousaf-ThinkPad-X1-Carbon-6th:~$ curl https://YousafMaaz.pythonanywhere.com/test-firestore
{"collections":["users"]}
(base) yousaf@yousaf-ThinkPad-X1-Carbon-6th:~$