EXP NO 22. Create a Simple Web Application using Java or Python and host it in any Public Cloud Service Provider (Azure/GCP/AWS) to demonstrate Platform as a Service (PaaS).

AIM:

To Create a Simple Web Application using Java or Python and host it in any Public Cloud Service Provider (Azure/GCP/AWS) to demonstrate Platform as a Service (PaaS).

Procedure:

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1. **Create Flask App:**
   - Create a folder FlaskApp. ○ Create app.py with: from flask import Flask app = Flask(__name__) @app.route('/') def home():
     return "Hello! Flask App on Azure PaaS" if __name__ == '__main__':
     app.run()

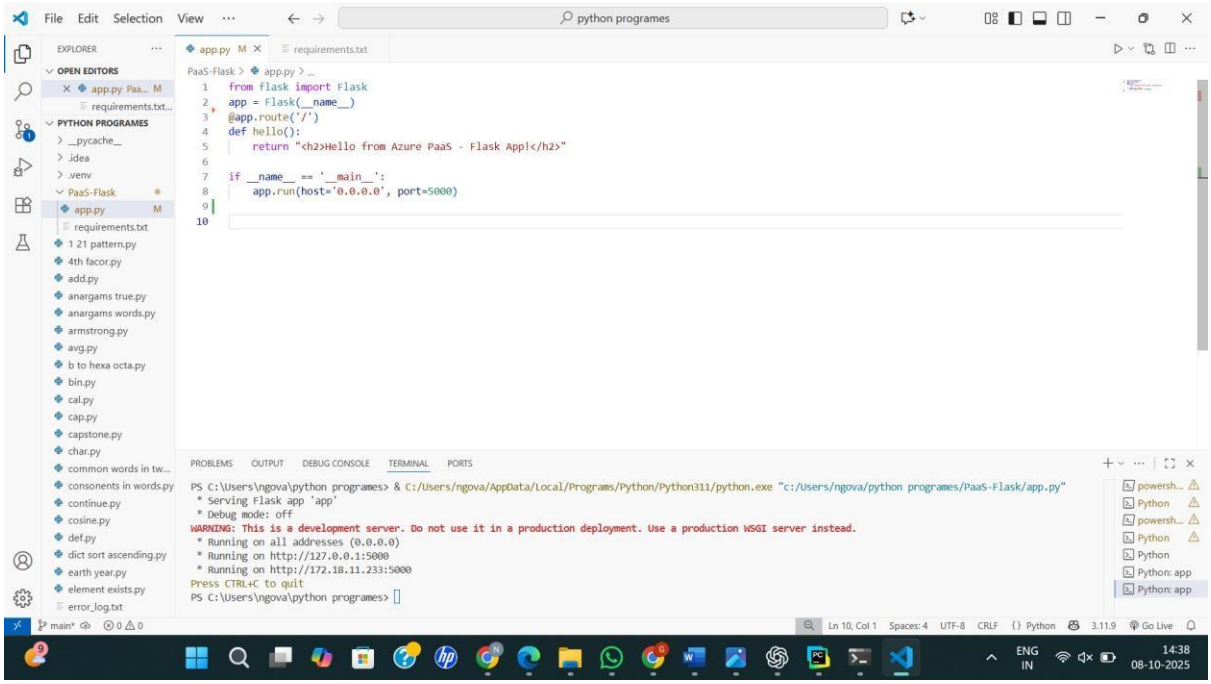
     Create requirements.txt:

     flask gunicorn
2. **Log in to Azure Portal:**
   - Go to https://portal.azure.com ○ Sign in.
3. **Create Web App (PaaS):**
   - Click **Create a Resource → Web App**
   - Fill details:
     - Resource Group: PaaS-Flask-RG
     - Name: flask-paas-demo
     - Runtime: Python 3.x
     - Region: nearest ○ Click **Create**.
4. **Deploy App:**
   - Compress the folder as .zip.
   - In Azure Portal → your Web App → **Deployment → ZIP Deploy** ○ Upload the .zip file.
5. **Test the App:**
   - Click **Browse** in the Web App Overview ○ Open the link, you will see:

- Hello! Flask App on Azure PaaS

6. **Cleanup (Optional):**
    - Delete the Resource Group to stop charges.

Design:


File Edit Selection View
python programes
app.py M
requirements.txt
PaaS-Flask > app.py > ...
from flask import Flask
app = Flask(__name__)
@app.route('/')
def hello():
return "<h2>Hello from Azure PaaS - Flask App!</h2>"
if __name__ == '__main__':
app.run(host='0.0.0.0', port=5000)
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\ngova\python programes> & C:/Users/ngova/AppData/Local/Programs/Python/Python311/python.exe "c:/Users/ngova/python programes/PaaS-Flask/app.py"
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.18.11.233:5000
Press CTRL+C to quit
PS C:\Users\ngova\python programes>
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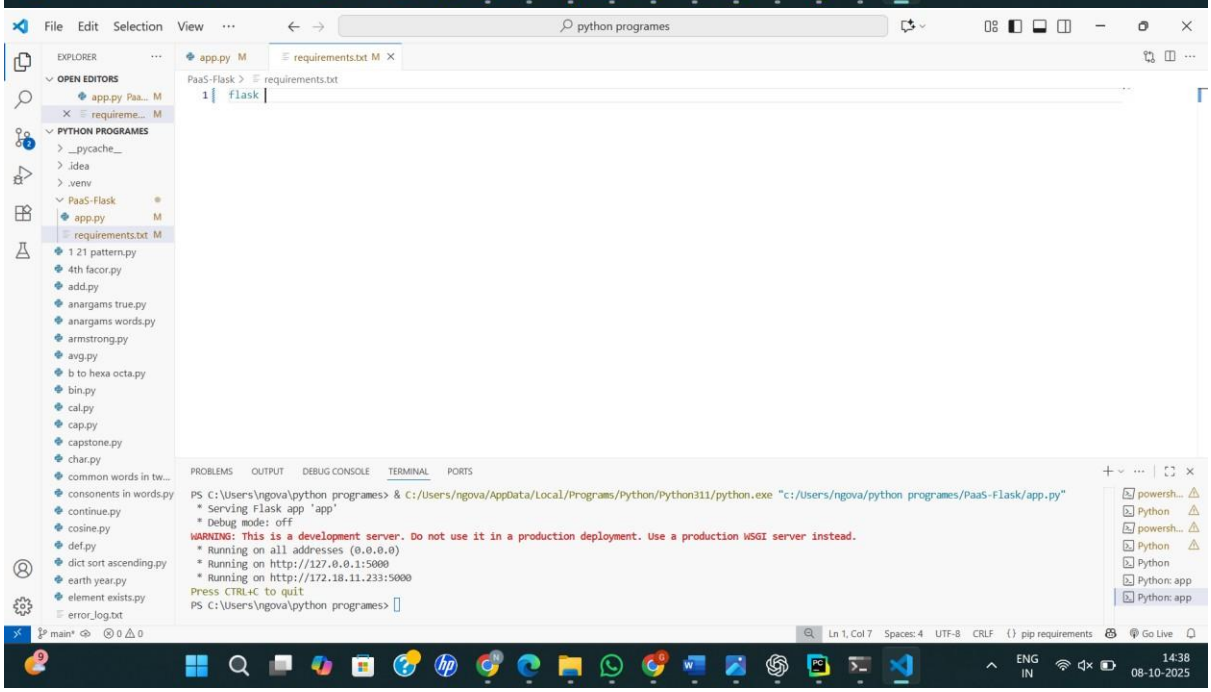
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PaaS-Flask > requirements.txt
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PS C:\Users\ngova\python programes> & C:/Users/ngova/AppData/Local/Programs/Python/Python311/python.exe "c:/Users/ngova/python programes/PaaS-Flask/app.py"
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.18.11.233:5000
Press CTRL+C to quit
PS C:\Users\ngova\python programes>
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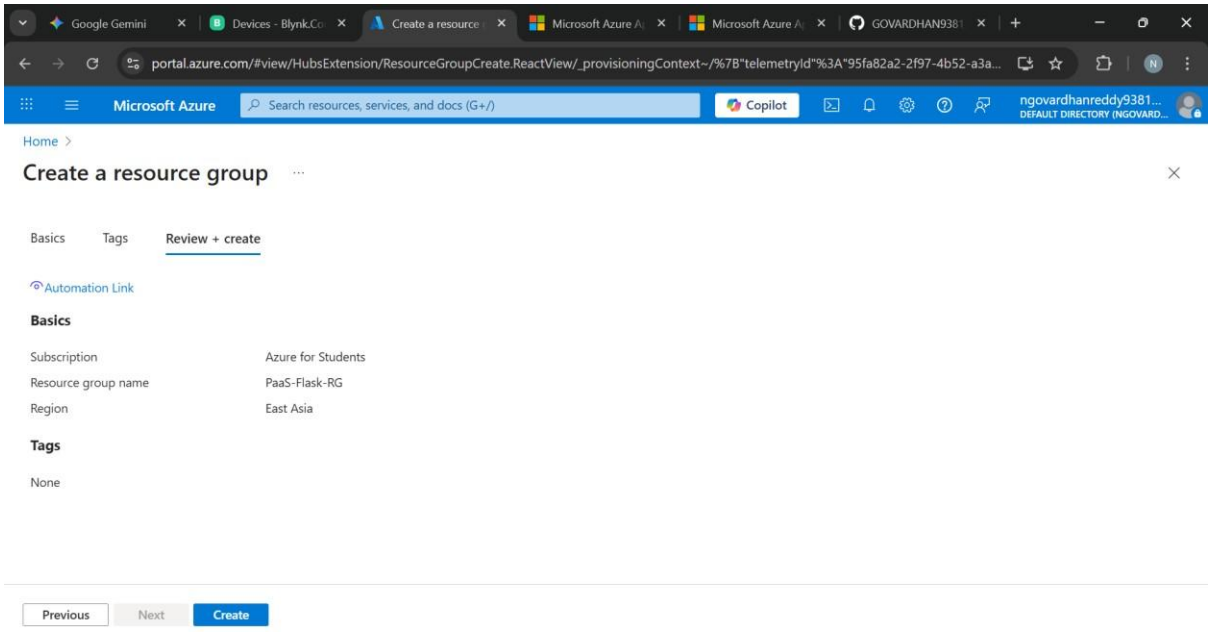
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Create a resource
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Resource group name
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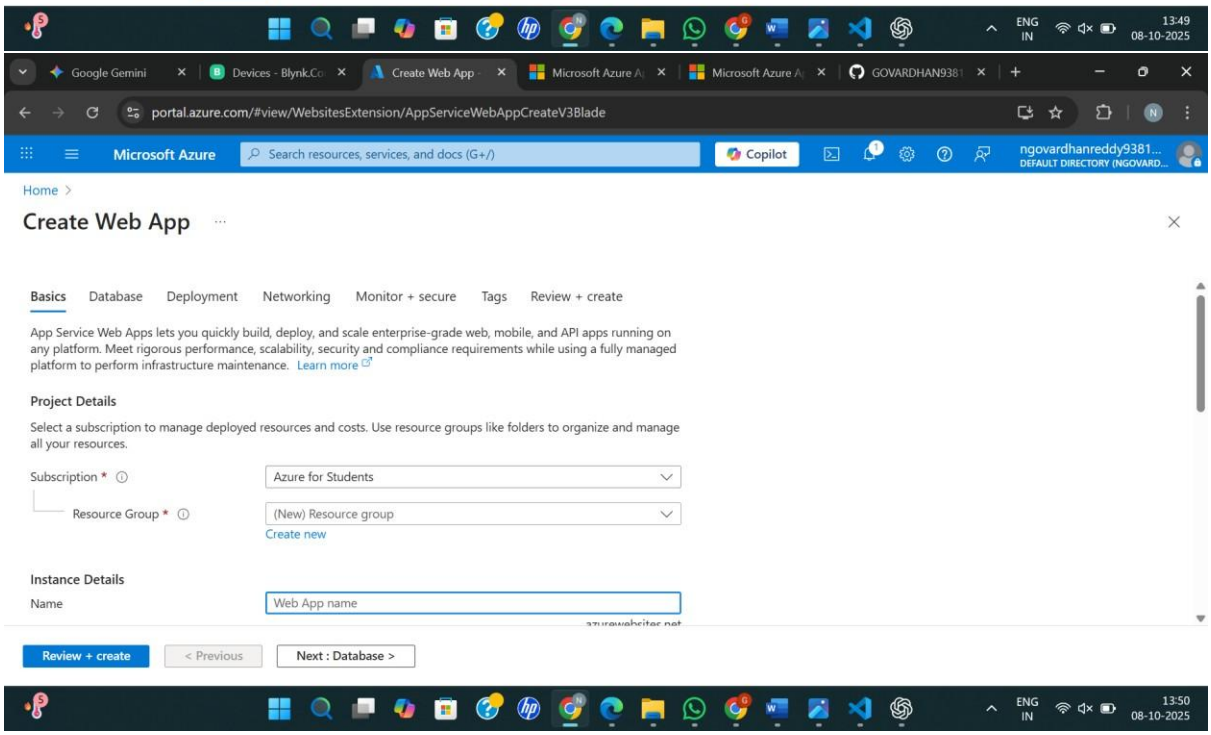
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Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
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Web App name
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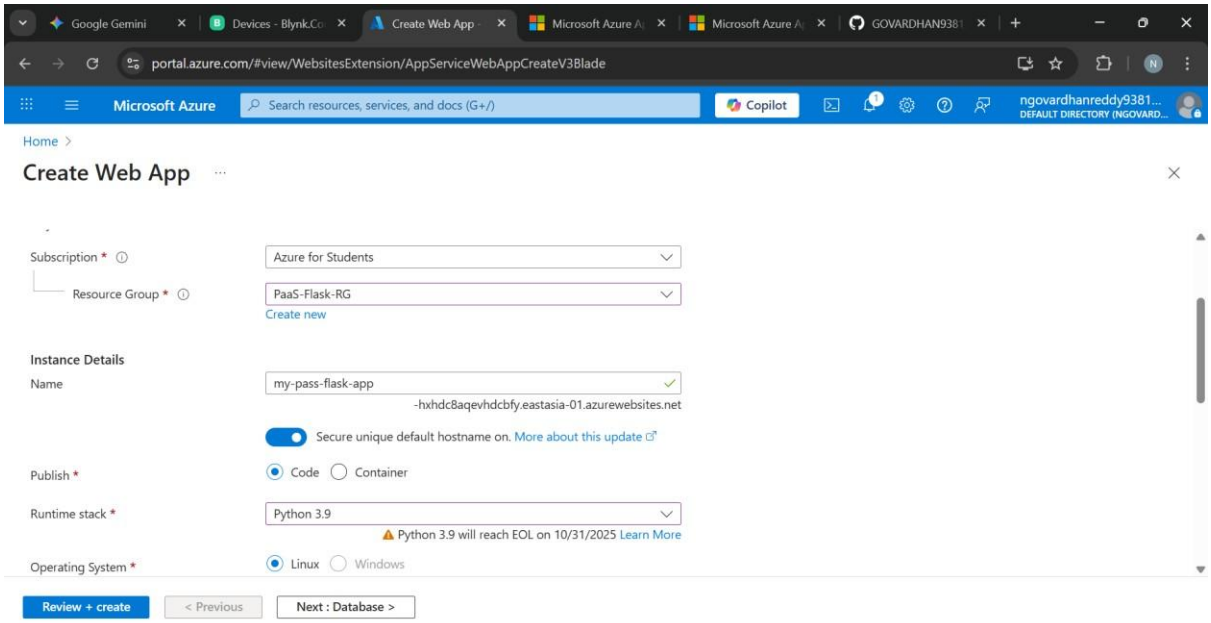
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Secure unique default hostname on. More about this update
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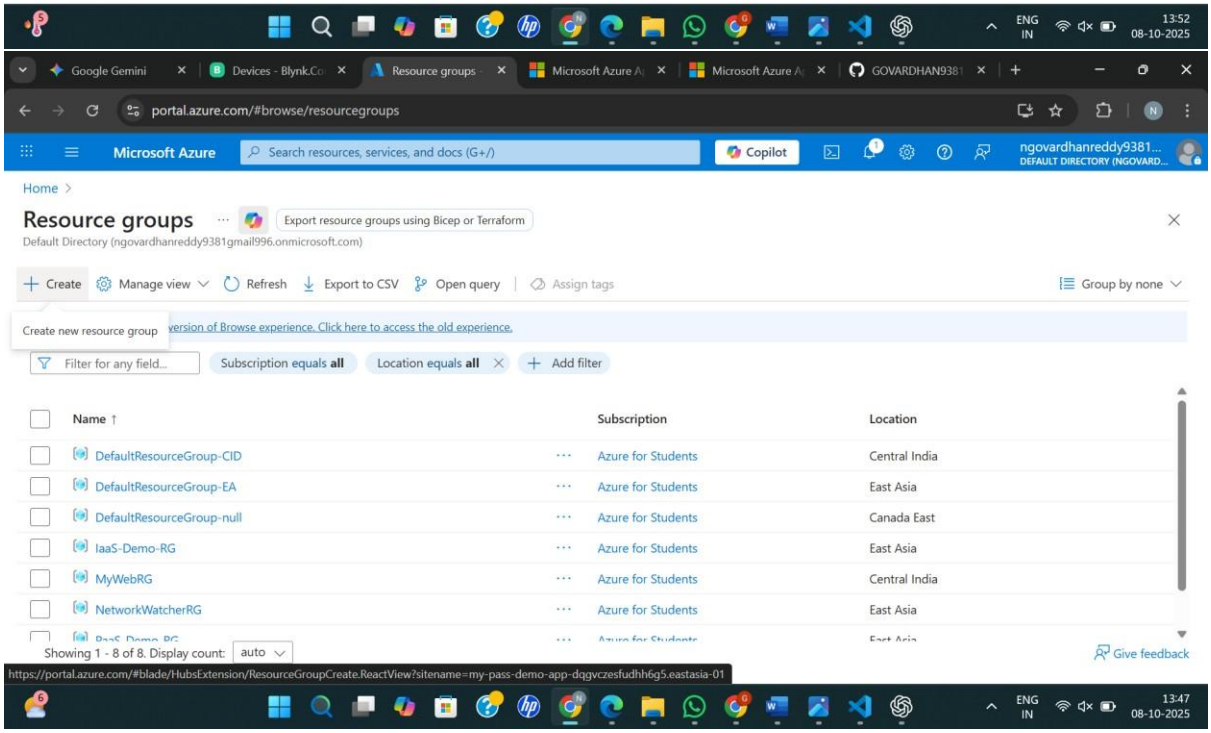
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Export resource groups using Bicep or Terraform
Default Directory (ngovardhanreddy9381gmail996.onmicrosoft.com)
Create
Manage view
Refresh
Export to CSV
Open query
Assign tags
Group by none
Create new resource group
version of Browse experience. Click here to access the old experience.
Filter for any field...
Subscription equals all
Location equals all
Add filter
Name
Subscription
Location
DefaultResourceGroup-CID
Azure for Students
Central India
DefaultResourceGroup-EA
Azure for Students
East Asia
DefaultResourceGroup-null
Azure for Students
Canada East
IaaS-Demo-RG
Azure for Students
East Asia
MyWebRG
Azure for Students
Central India
NetworkWatcherRG
Azure for Students
East Asia
Showing 1 - 8 of 8. Display count:
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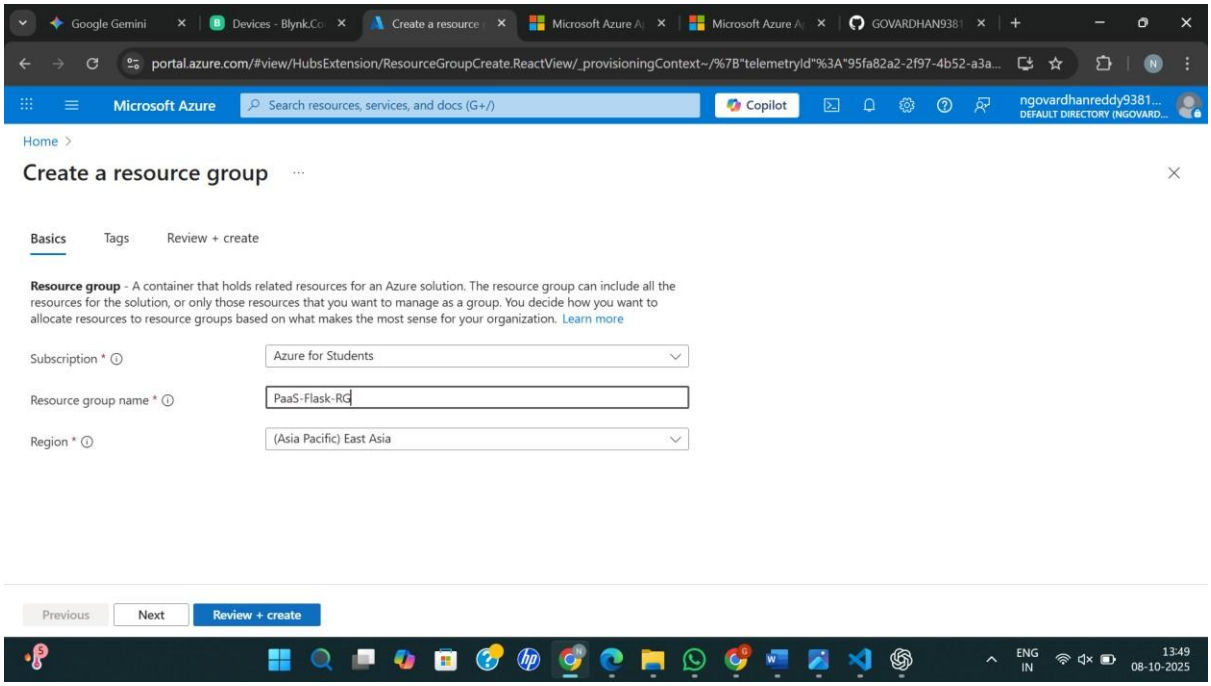
Give feedback
https://portal.azure.com/#blade/HubsExtension/ResourceGroupCreate.ReactView?sitename=my-pass-demo-app-dqgvczesfudhh6g5.eastasia-01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Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. Learn more
Subscription *
Azure for Students
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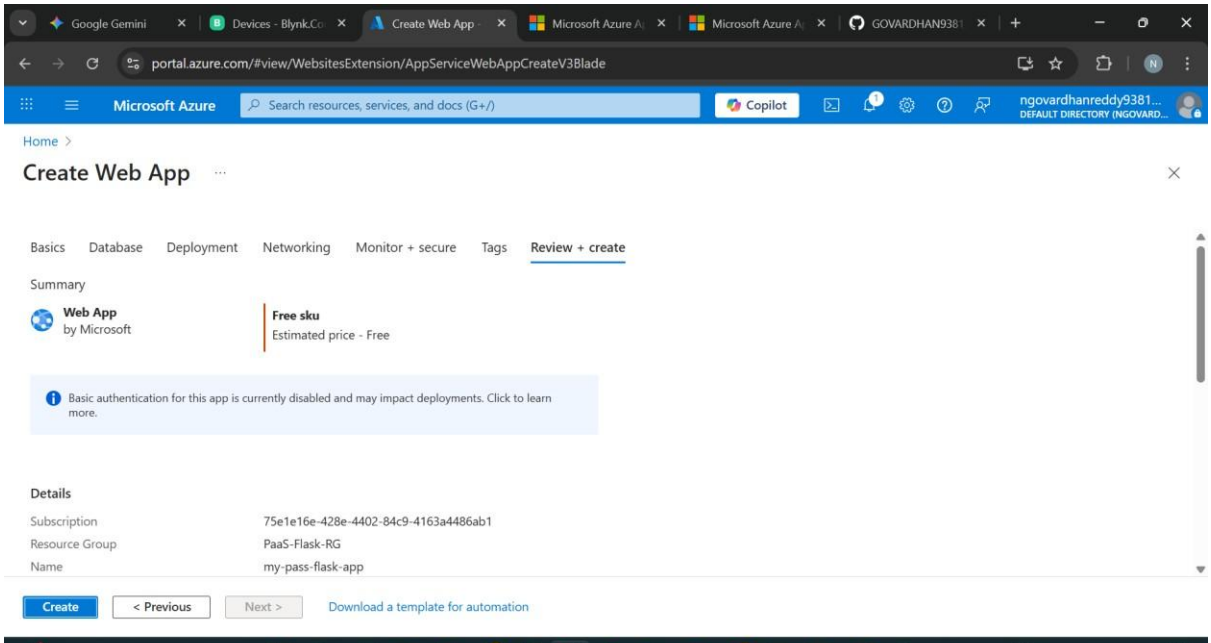
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Summary
Web App
by Microsoft
Free sku
Estimated price - Free
Basic authentication for this app is currently disabled and may impact deployments. Click to learn more.
Details
Subscription
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Name
my-pass-flask-app
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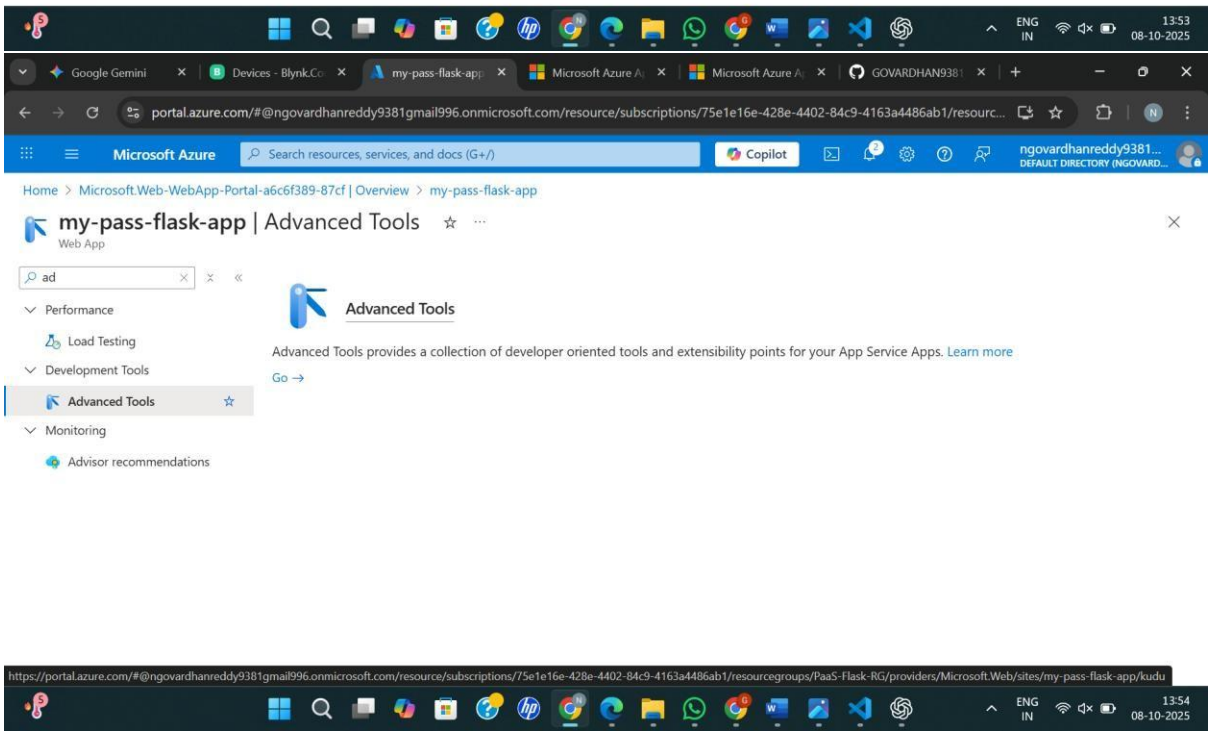
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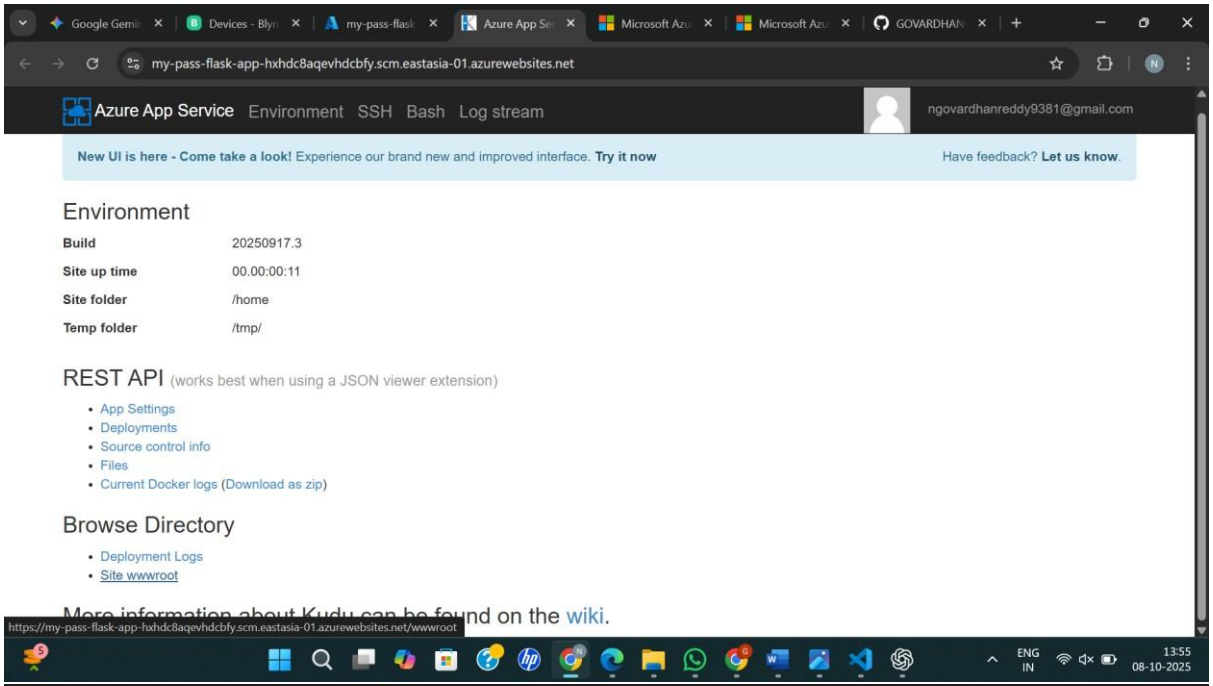

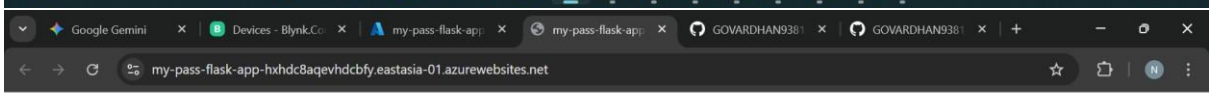

Hello from Azure PaaS - Flask App!

RESULT:

Created a Simple Web Application using Java or Python and host it in any Public Cloud Service Provider (Azure/GCP/AWS) to demonstrate Platform as a Service (PaaS).