

PROJECT: Creating and Deploying a Simple Website using Google Cloud Run

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Project Name: Malleeswari Beauty Product Website

Objective:

To build and deploy a basic website for showcasing makeup products using Python (Flask) and Google Cloud Run, using only Google Cloud Shell.

Step-by-Step Procedure:

Step 1: Open Google Cloud Shell

- Use your GCP Console and click on the **Cloud Shell** icon to launch the terminal.

Step 2: Create a Working Directory

```
to select an already authenticated account to use:  
malleeswari1512003@cloudshell:~ (careful-synapse-461006-b5) $ mkdir business-website  
cd business-website
```

Step 3: Create Python Web Application (Flask)

```
nano main.py
```

Paste the following content:

```

C: > Users > malle > app.py
1  from flask import Flask
2
3  app = Flask(__name__)
4
5  @app.route('/')
6  def home():
7      return '''
8      <html>
9          <head>
10             <title>Malleeswari Beauty Product</title>
11          </head>
12          <body style="text-align:center;">
13             <h1>👩‍💇 Welcome to Malleeswari Beauty Product 🌸 </h1>
14             <p>Explore high-quality makeup products designed just for you.</p>
15             <form action="/products">
16                 <button type="submit">View Products</button>
17             </form>
18          </body>
19      </html>
20      '''
21
22  @app.route('/products')
23  def products():
24      return '''
25      <html>
26          <head>
27             <title>Our Products</title>
28          </head>
29          <body style="text-align:center;">
30             <h1>📦 Product Catalog</h1>
31
32             <div>
33                 <h2>1. Liquid Foundation</h2>
34                 
35                 <p>🌟 Review: Smooth texture, long-lasting coverage</p>
36                 <p>💰 Price: ₹599</p>
37                 <form action="/order-foundation">

```

Step 4: Create Requirements File

nano requirements.txt

Add: Flask

Step 5: Create Docker file

nano Dockerfile

```

malleeswari1512003@cloudshell:~/business-website (careful-synapse-461006-b5) $ touch Dockerfile
nano Dockerfile

```

CMD ["python", "main.py"]

Step 6: Enable Cloud Build API (First Time Only)

```

malleeswari1512003@cloudshell:~/business-website (careful-synapse-461006-b5) $ gcloud services enable run.googleapis.com
Operation "operations/acf.p2-445230337936-5c0b539b-967c-4959-8386-2ca28d34c621" finished successfully.

```

```
malleeswari1512003@cloudshell:~/business-website (careful-synapse-461006-b5) $ gcloud builds submit --tag gcr.io/$(gcloud config get-value project)/business-website
Your active configuration is: [cloudshell-22013]
Creating temporary archive of 2 file(s) totalling 4.1 KiB before compression.
Uploading tarball of [.] to [gs://careful-synapse-461006-b5_cloudbuild/source/1749278175.097258-20f05ba1719147bb8fdb06c4c537a85.tgz]
API [cloudbuild.googleapis.com] not enabled on project [careful-synapse-461006-b5]. Would you like to enable and retry (this will take a few minutes)? (y/N)? y

Enabling service [cloudbuild.googleapis.com] on project [careful-synapse-461006-b5]...
Operation "operations/acf.p2-445230337936-fl24cfib-c9f7-4000-a847-8f2c6083e81b" finished successfully.
Created [https://cloudbuild.googleapis.com/v1/projects/careful-synapse-461006-b5/locations/global/builds/f3b65c6f-1f0a-4ba9-b326-74e50def3733].
Logs are available at [ https://console.cloud.google.com/cloud-build/builds/f3b65c6f-1f0a-4ba9-b326-74e50def3733?project=445230337936 ].
Waiting for build to complete. Polling interval: 1 second(s).

----- REMOTE BUILD OUTPUT -----
starting build "f3b65c6f-1f0a-4ba9-b326-74e50def3733"
```

```
ID: f3b65c6f-1f0a-4ba9-b326-74e50def3733
CREATE_TIME: 2025-06-07T06:36:37+00:00
DURATION: 24s
SOURCE: gs://careful-synapse-461006-b5_cloudbuild/source/1749278175.097258-20f05ba1719147bb8fdb06c4c537a85.tgz
IMAGES: gcr.io/careful-synapse-461006-b5/business-website (+1 more)
STATUS: SUCCESS
```

You will be prompted during the build process. Type y to enable.

Step 7: Deploy the App on Cloud Run

```
malleeswari1512003@cloudshell:~/business-website (careful-synapse-461006-b5) $ gcloud run deploy business-website \
--image gcr.io/$(gcloud config get-value project)/business-website \
--platform managed \
--region asia-south1 \
--allow-unauthenticated
Your active configuration is: [cloudshell-22013]
Deploying container to Cloud Run service [business-website] in project [careful-synapse-461006-b5] region [asia-south1]
```

Step 8: Access the Website

- After deployment, a URL will be provided.
- Click or open the URL to access your live website.
- <https://business-website-445230337936.asia-south1.run.app/>

Summary:

This document outlines how to build and deploy a personal business website using Flask, Docker, and Google Cloud Run via Cloud Shell. The project includes static routing for homepage, product listing, and buy confirmation pages.
