

Instructions: Implementing a GCP Sample Application

Step 1: Set Up Your GCP Account

1. Create a Google Cloud Platform account at <https://cloud.google.com>.
2. Set up a billing account: You'll need to enter your credit card information, but Google offers a free trial with some credit that you can use to explore their services.

Step 2: Install Google Cloud SDK

The Google Cloud SDK is a set of tools that allows you to manage resources and applications hosted on Google Cloud.

1. Download the installer from <https://cloud.google.com/sdk>.
2. Follow the installation instructions for your operating system.
3. Initialize the SDK by opening a command-line interface and running `gcloud init`. Follow the on-screen instructions to authenticate your account.

Step 3: Create a New Project

1. Go to the GCP Console at <https://console.cloud.google.com>.
2. Click "Create Project", give it a name, and select the billing account you set up earlier.

Step 4: Enable App Engine

1. Navigate to "App Engine" in the console.
2. Select your project, and click "Create Application."
3. Choose a region, which is where your application will be hosted.

Step 5: Develop a Simple Web Application

You can develop a simple "Hello World" application using any programming language supported by GCP (e.g., Python, Java).

Here's an example using Python:

1. Install Python if it's not already on your system.
2. Create a new directory for your project and navigate there in your command-line interface.
3. Create a file called `main.py` with the following code:

```
python
```

```
from flask import Flask

app = Flask(__name__)

@app.route('/')
def hello():
    return 'Hello, World!'

if __name__ == '__main__':
    app.run(port=8080)
```

4. Create a file called requirements.txt with this line:

```
makefile
```

```
Flask==1.0.2
```

5. Install Flask by running:

```
bash
```

```
pip install -r requirements.txt
```

Step 6: Deploy the Application

1. Deploy the application to App Engine by running:

```
bash
```

```
gcloud app deploy
```

2. Follow the prompts and wait for the deployment to complete.
3. Visit the URL provided to see your live web application.

And that's it! You've now created and deployed a simple web application on Google Cloud Platform. These are the essential steps to get started, and you can explore more complex features and services as you become more comfortable with GCP.