Name – Joshoua Simon

Class – LYIT (Core)

Enrollment Number – MITU20BTIT0030

Roll No – 2205011

Lab Assignment 4 - Hosting using Google App engine

Google App Engine is a Platform as a Service (PaaS) offering by Google Cloud that allows developers to build, deploy, and scale applications easily without having to manage the underlying infrastructure. It is designed to provide a simple and scalable way to host web applications and APIs, handling tasks such as automatic scaling, load balancing, and server maintenance.

Yaml code-

```
runtime: python

api_version: false


handlers:

 - url: /.*

   script: app.py
```

App .py code-

```
print("HELLO")
```

GCLOUD COMMANDS-

```
C:\Users\simon\AppData\Local\Google\Cloud SDK>google-cloud-sdk\bin\dev_appserver.py "C:\Users\simon\OneDrive\Desktop\GAE"
```

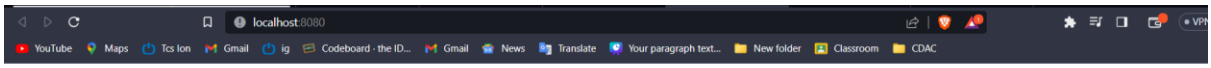
```
C:\Users\simon\AppData\Local\Google\Cloud SDK>google-cloud-sdk\bin\dev_appserver.py "C:\Users\simon\OneDrive\Desktop\GAE"
INFO     2023-08-16 10:10:32,364 devappserver2.py:240] Using Cloud Datastore Emulator.
We are gradually rolling out the emulator as the default datastore implementation of dev_appserver.
If broken, you can temporarily disable it by --support_datastore_emulator=False
Read the documentation: https://cloud.google.com/appengine/docs/standard/python/tools/migrate-cloud-datastore-emulator
Help us validate that the feature is ready by taking this survey: https://goo.gl/forms/UArIcs8K9CUSCm733
Report issues at: https://issuetracker.google.com/issues/new?component=187272

Traceback (most recent call last):
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\dev_appserver.py", line 109, in <module>
    _run_file(__file__, globals())
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\dev_appserver.py", line 103, in _run_file
    _execfile(_PATHS.script_file(script_name), globals_)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\dev_appserver.py", line 83, in _execfile
    execfile(fn, scope)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\devappserver2.py", lin
e 641, in <module>
    main()
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\devappserver2.py", lin
e 629, in main
    dev_server.start(options)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\devappserver2.py", lin
e 310, in start
    env_variables=parsed_env_variables)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\application_configurat
ion.py", line 908, in __init__
    env_variables)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\application_configurat
ion.py", line 143, in __init__
    self._config_path)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\application_configurat
ion.py", line 494, in _parse_configuration
    config, files = appinfo_includes.ParseAndReturnIncludePaths(f)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\appinfo_includes.py", line 82, in Pars
eAndReturnIncludePaths
    appyaml = appinfo.LoadSingleAppInfo(appinfo_file)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\appinfo.py", line 2766, in LoadSingleA
ppInfo
    listener.Parse(app_info)
```

```
    self._config_path)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\tools\devappserver2\application_configurat
ion.py", line 494, in _parse_configuration
    config, files = appinfo_includes.ParseAndReturnIncludePaths(f)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\appinfo_includes.py", line 82, in Pars
eAndReturnIncludePaths
    appyaml = appinfo.LoadSingleAppInfo(appinfo_file)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\appinfo.py", line 2766, in LoadSingleA
ppInfo
    listener.Parse(app_info)
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\yaml_listener.py", line 240, in Parse
    stream, loader_class, version=version, **loader_args))
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\yaml_listener.py", line 173, in _Handl
eEvents
    for event in events:
  File "C:\Users\simon\AppData\Local\Google\Cloud SDK\google-cloud-sdk\platform\google_appengine\google\appengine\api\yaml_listener.py", line 217, in _Gener
ateEventParameters
    raise yaml_errors.EventListenerYAMLError(e)
google.appengine.api.yaml_errors.EventListenerYAMLError: while scanning for the next token
found character '\t' that cannot start any token
  in "C:\Users\simon\OneDrive\Desktop\GAE\app.yaml", line 6, column 1

C:\Users\simon\AppData\Local\Google\Cloud SDK>google-cloud-sdk\bin\dev_appserver.py "C:\Users\simon\OneDrive\Desktop\GAE"
INFO     2023-08-16 10:11:36,642 devappserver2.py:240] Using Cloud Datastore Emulator.
We are gradually rolling out the emulator as the default datastore implementation of dev_appserver.
If broken, you can temporarily disable it by --support_datastore_emulator=False
Read the documentation: https://cloud.google.com/appengine/docs/standard/python/tools/migrate-cloud-datastore-emulator
Help us validate that the feature is ready by taking this survey: https://goo.gl/forms/UArIcs8K9CUSCm733
Report issues at: https://issuetracker.google.com/issues/new?component=187272

WARNING  2023-08-16 10:11:36,674 application_configuration.py:184] The "python" runtime specified in "C:\Users\simon\OneDrive\Desktop\GAE\app.yaml" is not s
upported - the "python27" runtime will be used instead. A description of the differences between the two can be found here:
https://developers.google.com/appengine/docs/python/python25/diff27
INFO     2023-08-16 10:11:36,674 devappserver2.py:321] Skipping SDK update check.
INFO     2023-08-16 10:11:37,529 datastore_emulator.py:156] Starting Cloud Datastore emulator at: http://localhost:49185WARNING  2023-08-16 10:11:38,969 sim
ple_search_stub.py:1196] Could not read search indexes from c:\users\simon\appdata\local\temp\appengine.None\search_indexes
INFO     2023-08-16 10:11:40,855 datastore_emulator.py:162] Cloud Datastore emulator responded after 3.327000 seconds
INFO     2023-08-16 10:11:40,859 <string>:398] Starting API server at: http://localhost:49191
INFO     2023-08-16 10:11:40,914 <string>:388] Starting gRPC API server at: http://localhost:49192
INFO     2023-08-16 10:11:41,025 dispatcher.py:276] Starting module "default" running at: http://localhost:8080
```



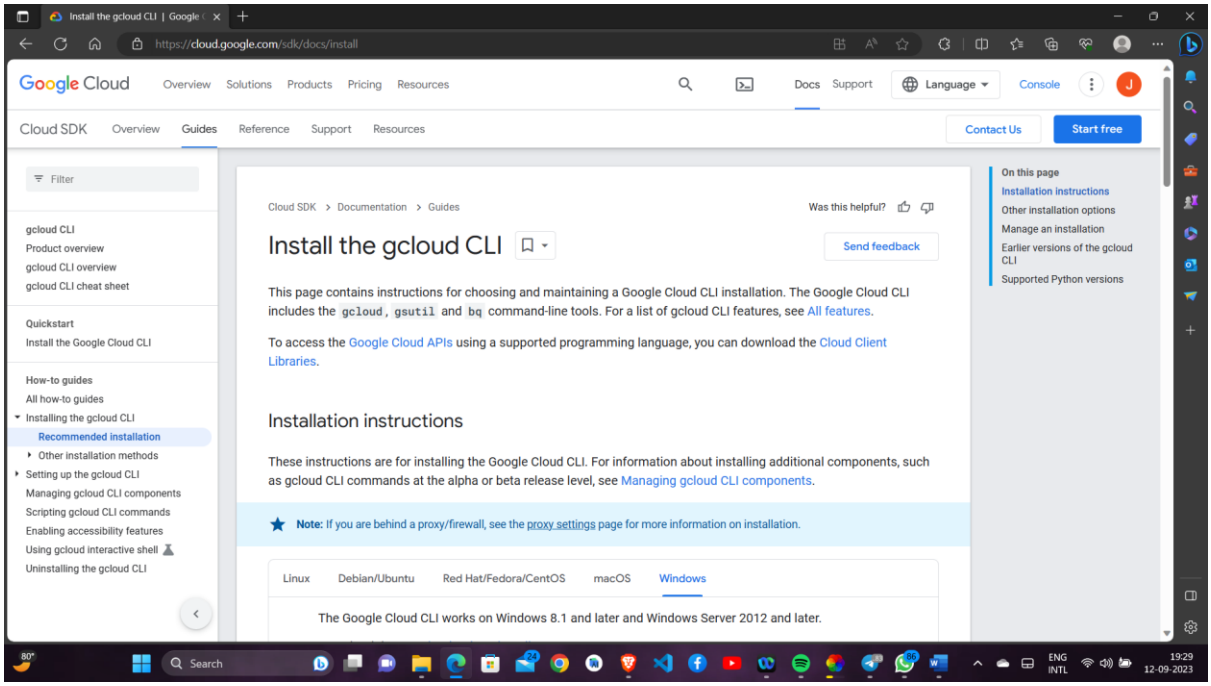
HELLO

STEPS-

Install Google Cloud SDK:

If you haven't already, you'll need to install the Google Cloud SDK on your local machine. This SDK provides the command-line tools and libraries required to interact with Google Cloud services.

You can download and install the SDK from the official Google Cloud website.



Authenticate with Google Cloud:

After installing the SDK, you'll need to authenticate yourself to access your Google Cloud resources. Run the following command and follow the prompts to log in:

gcloud auth login

Create a Project:

If you haven't created a Google Cloud project for your website, you'll need to do so. You can create a project using the following command:

gcloud projects create PROJECT_ID

Set Project Configuration:

Set your default project configuration using the project ID you've just created:

gcloud config set project PROJECT_ID

Enable App Engine:

If you're planning to use Google App Engine to host your website, you'll need to enable it for your project:

gcloud app create

Deploy Your Website:

Use the following command to deploy your website to Google App Engine. Replace YOUR_APP_NAME with a suitable name for your app and PATH_TO_WEBSITE_FILES with the local path to your website's files.

gcloud app deploy --project=PROJECT_ID --version=VERSION_ID PATH_TO_WEBSITE_FILES

Access Your Website:

Once the deployment is successful, you'll receive a URL where your website is accessible. You can also open the URL using the following command:

gcloud app browse