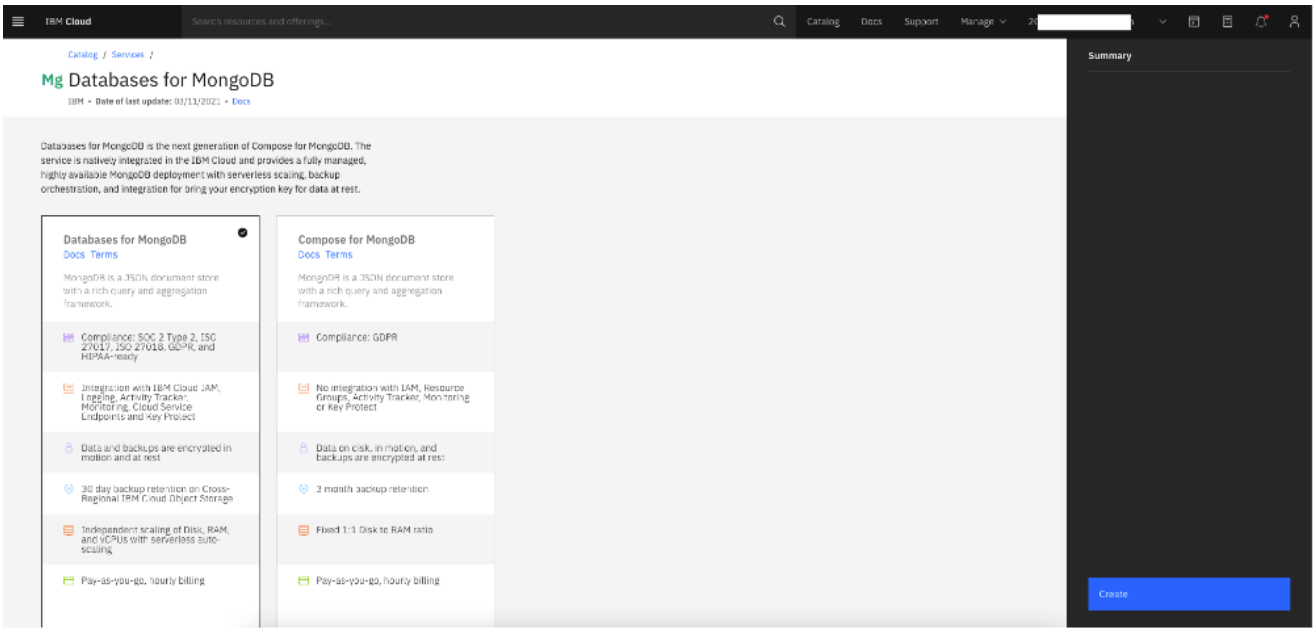
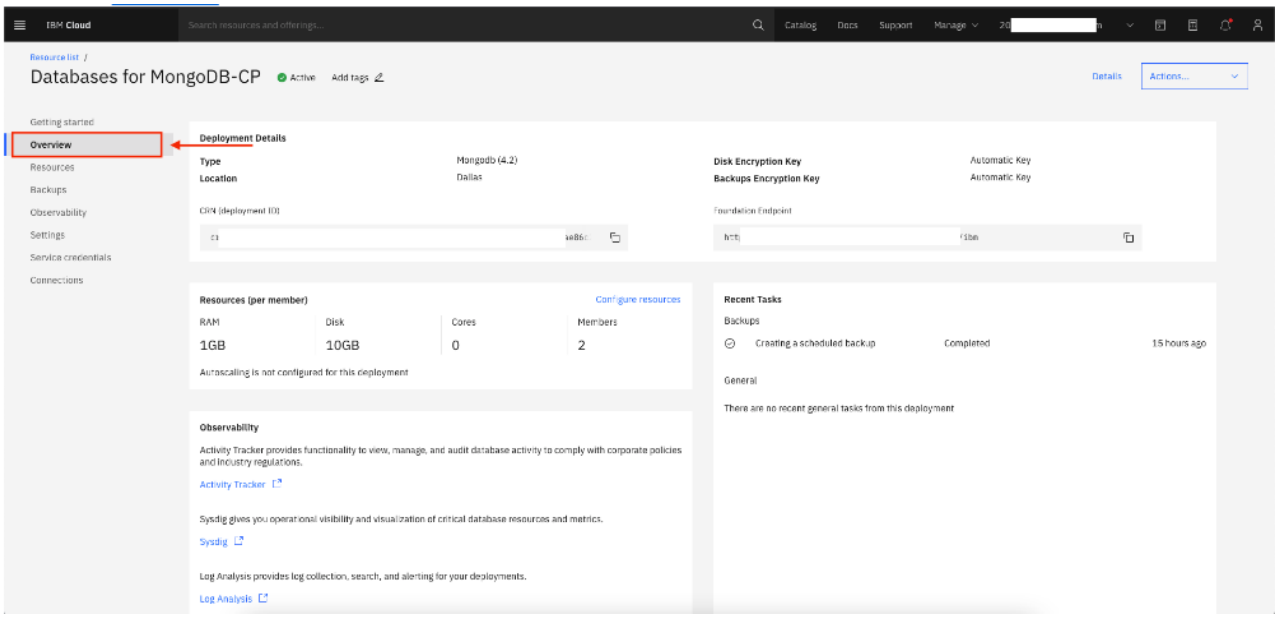
E-COMMERCE APPLICATION ON IBM CLOUD FAUNDRY

PHASE-4

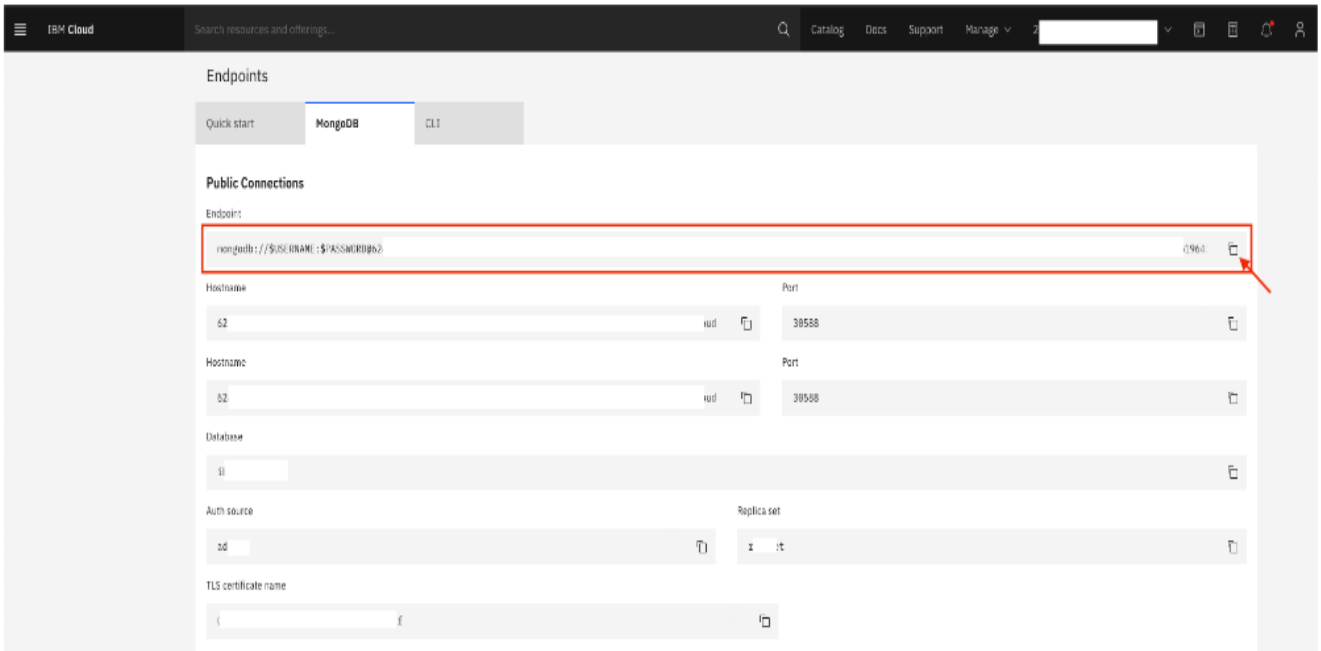
STEP-1: SETUP MONGODB ON IBM CLOUD.



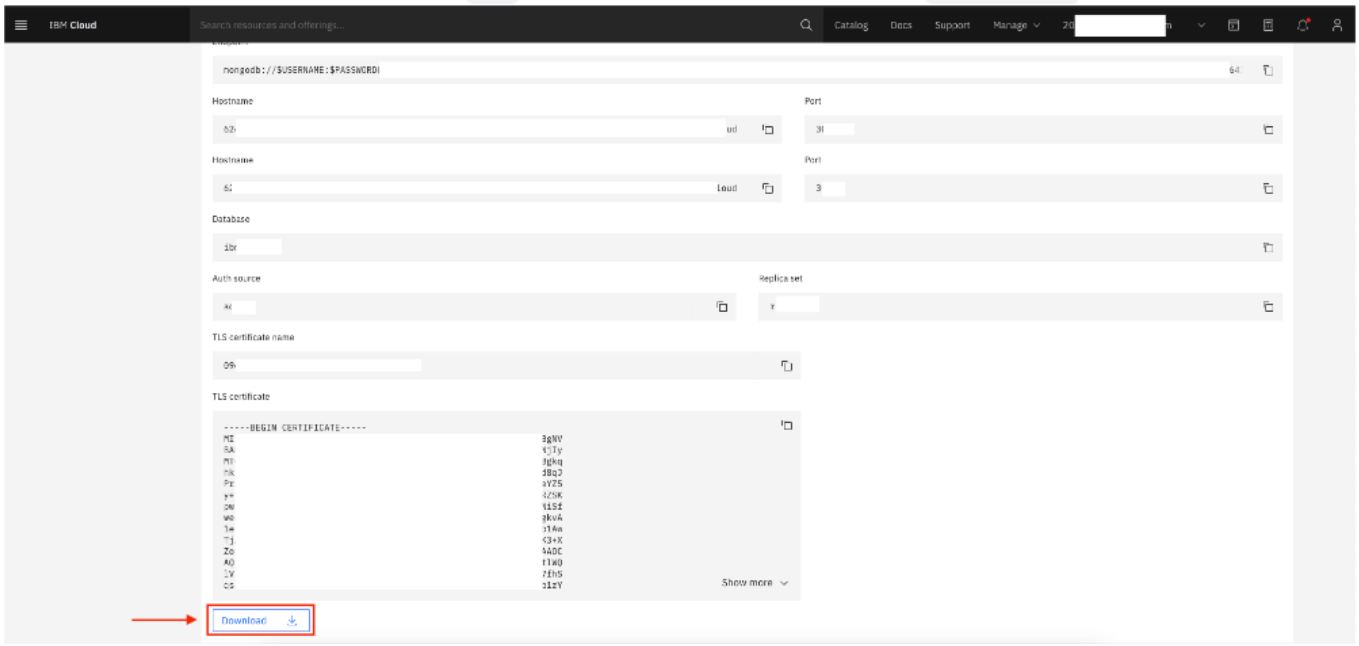
STEP-2: From the resources open Databases for MongoDB instance, and select Overview in the left panel as shown.



STEP-3: Scroll down to the Endpoints section and click on MongoDB, copy the Endpoint in a notepad and replace the $USERNAME and $PASSWORD with admin and password that you created previously



STEP-4: Scroll further down and download the ssl certificate and rename the file as ssl4mongodb as shown.



STEP-5: Host competitors webpage on cloud

- **Before you proceed, make sure you have installed IBM Cloud CLI in your deployment machine.**
- **From the cloned repo, goto competitors-websites directory in terminal, and run the following commands to deploy the Application to IBM Cloud Foundry.**

$ cd competitors-websites/

- **Log in to your IBM Cloud account, and select an API endpoint.**

$ ibmcloud login

NOTE: If you have a federated user ID, instead use the following command to log in with your single sign-on ID.

$ ibmcloud login --sso

- **Target a Cloud Foundry org and space:**

$ ibmcloud target --cf

- **From within the competitors-websites directory push your app to IBM Cloud.**

$ ibmcloud cf push competitors-websites

- **The manifest.yml file will be used here to deploy the application to IBM Cloud Foundry.**
- **On Successful deployment of the application you will see something similar on your terminal as shown.**

Invoking 'cf push'...

Pushing from manifest to org XXXXXXXX@in.ibm.com / space dev as XXXXXXXX@in.ibm.com...

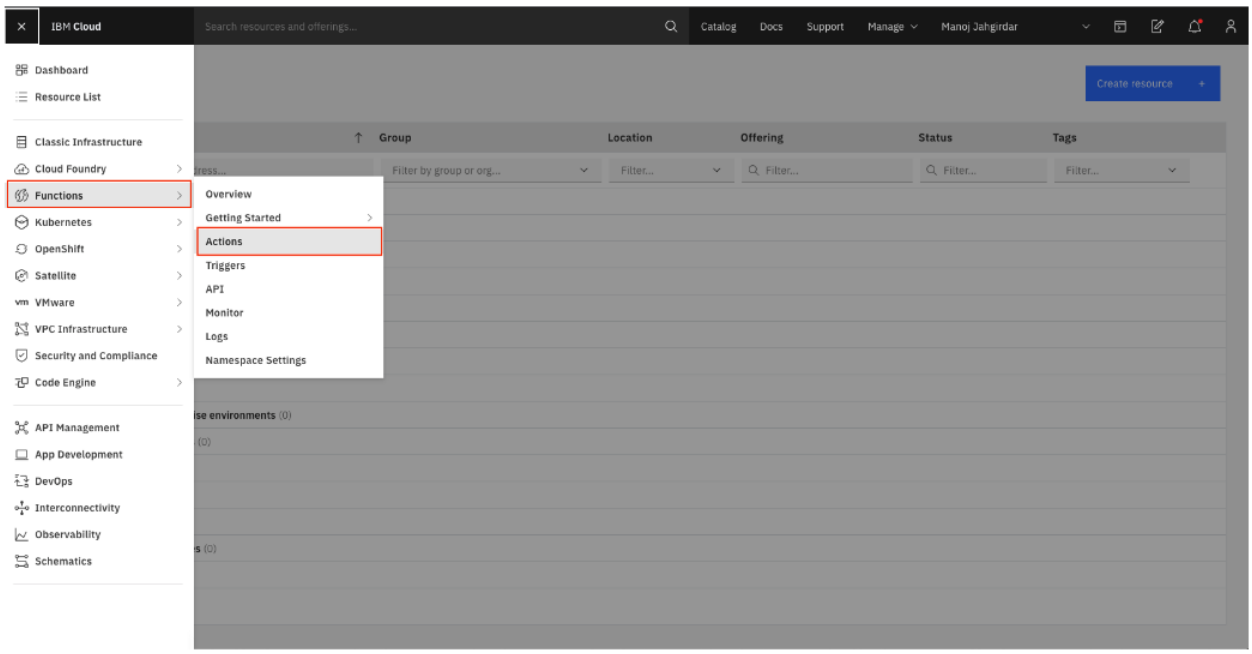
Waiting for app to start...

name: competitors-websites
requested state: started
routes: competitors-websites.xx-xx.mybluemix.net
last uploaded: Sat 16 May 18:05:16 IST 2020
stack: cflinuxfs3
buildpacks: python

type: web
instances: 1/1
memory usage: 256M
start command: python app.py
state since cpu memory disk details
#0 running 2020-05-16T12:36:15Z 25.6% 116.5M of 256M 796.2M of 1

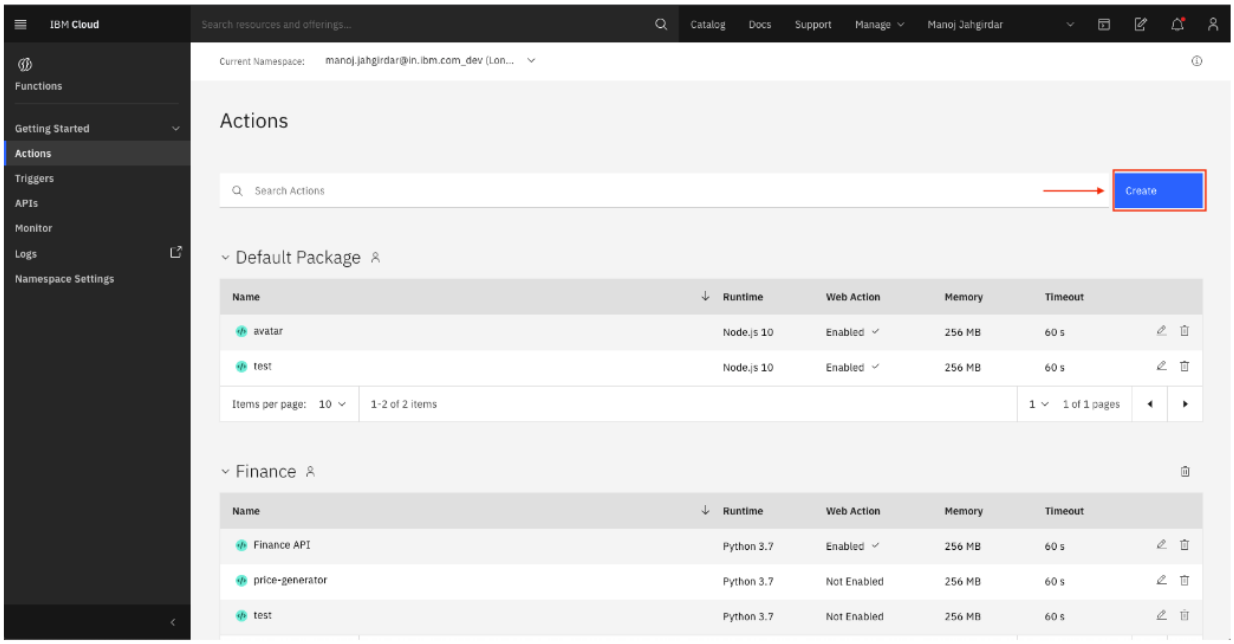
- **Once the app is deployed you can visit the routes to launch the application.**
-
- **Copy the URL in this step, eg: http://competitors-websites.xx-xx.mybluemix.net/ .This will be used in the next step.**

STEP-6: SETUP IBM CLOUD FUNCTIO

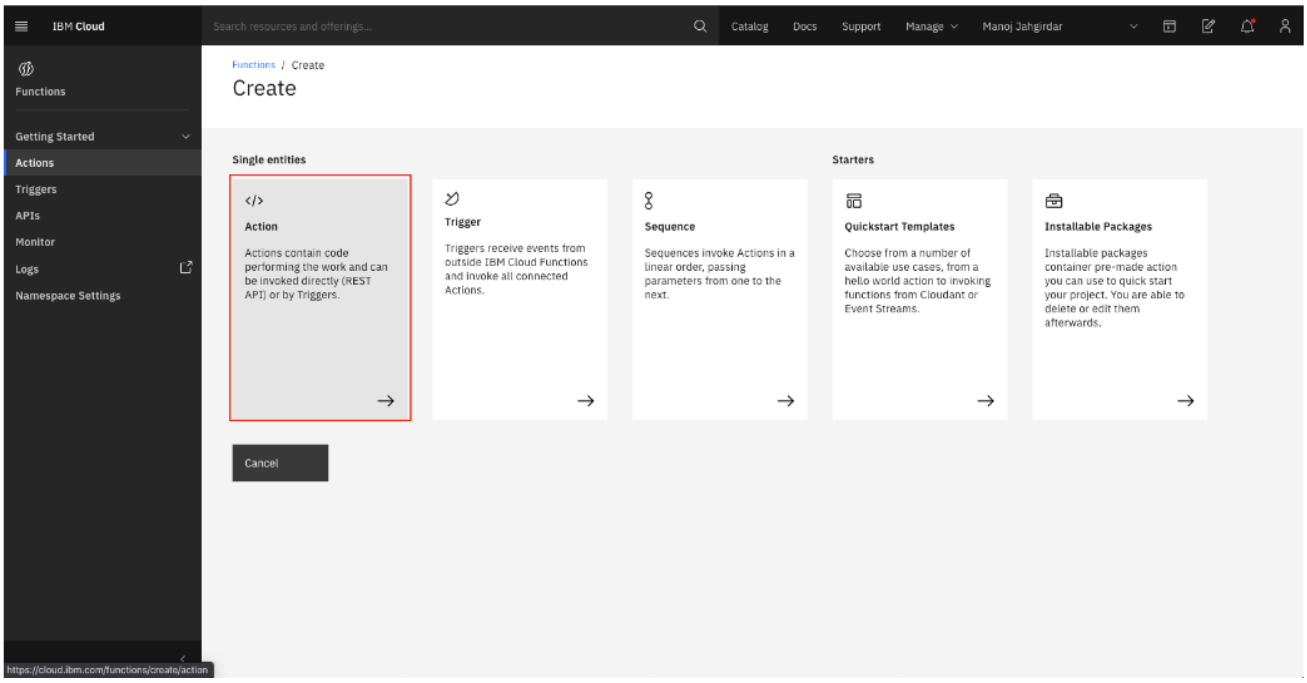


- In Cloud Actions page, click on **Create** to get started.

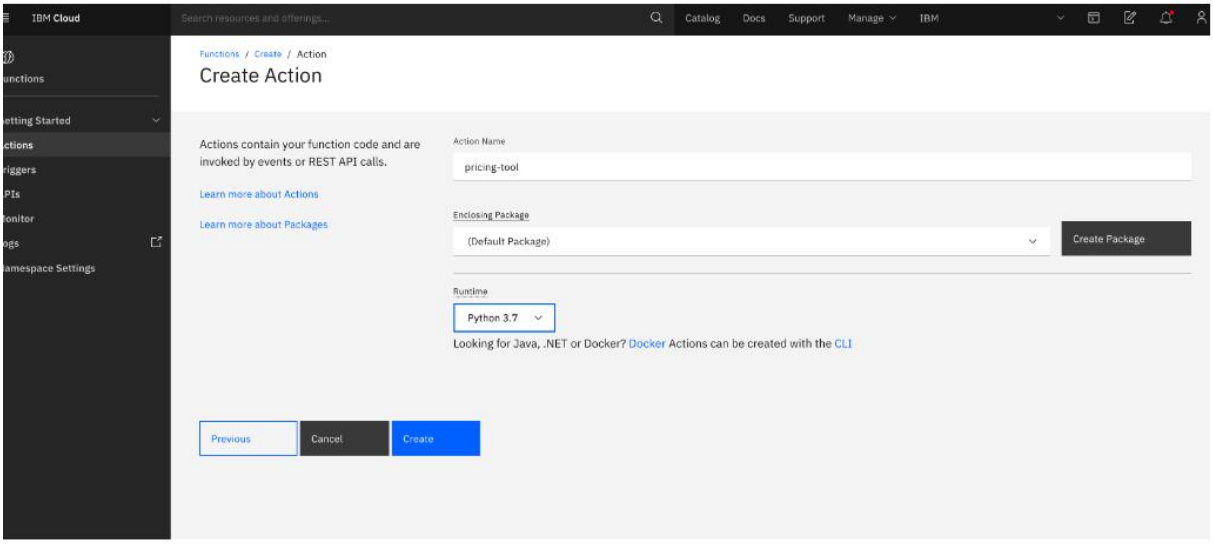
- **STEP-6: In Cloud Actions page, click on Create to get started.**



- **STEP-7: A Single entities list with Actions, Triger, Sequence, Quickstart Templates and Installable Packages will be presented. Select the Action to proceed.**

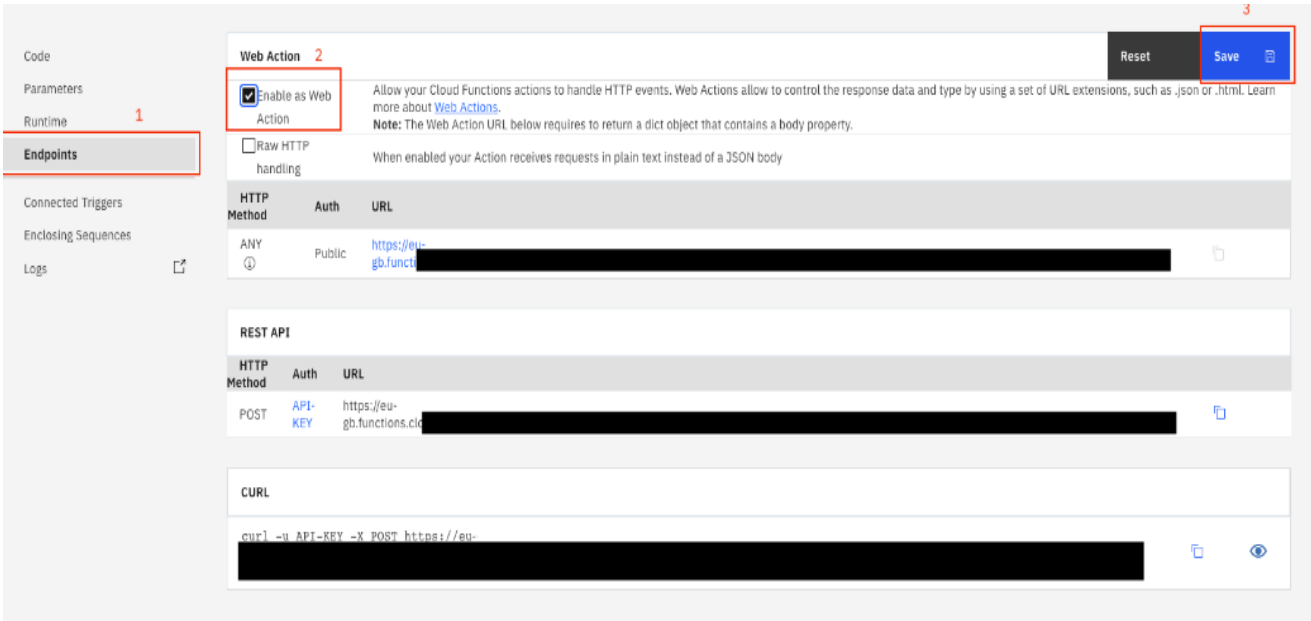


- **STEP-8: Enter a name for the action, you can either create a custom package or leave it as default package and lastly select the Runtime as Python 3.7 and click on Create.**



STEP-9: An IDE with Hello World code written in python will be presented, replace everything from the IDE with the code present in the file pricing-tool.py.

STEP-10: Once the Cloud Function is code ready, you need to expose an API so that the Backend server can interact with the written code. Click on Endpoints and Enable as Web Action and finally click on Save button as shown.



STEP-11: 5. Run the application

- **Add the Web Action URL copied in Step 4 and paste it on line number 47 in static/javascript/script.js**

var url = "Enter the cloud functions url here";

- **Replace the ENDPOINT-URL on line number 18 in app.py with the endpoint copied in step 2.**
- **Place the ssl4mongodb file downloaded in step 2 inside static/ssl/ directory.**

- **Now you can run the code in your local machine in one of the two ways mentioned below.**

With Docker Installed

- **change directory to repo parent folder :**

$ cd analyze_ecommerce_websites_and_recommend_optimal_price/

- **Build the Dockerfile as follows :**

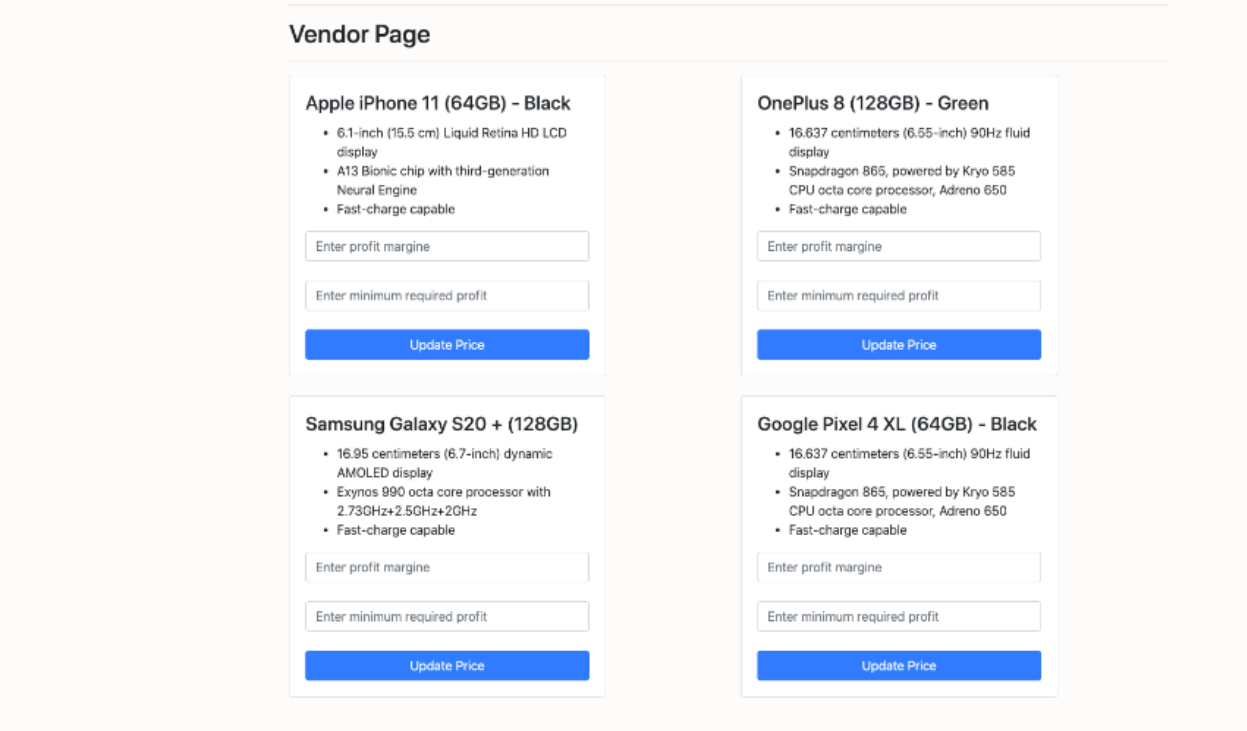
$ docker image build -t recommend_optimal_price .

- **once the dockerfile is built run the dockerfile as follows :**

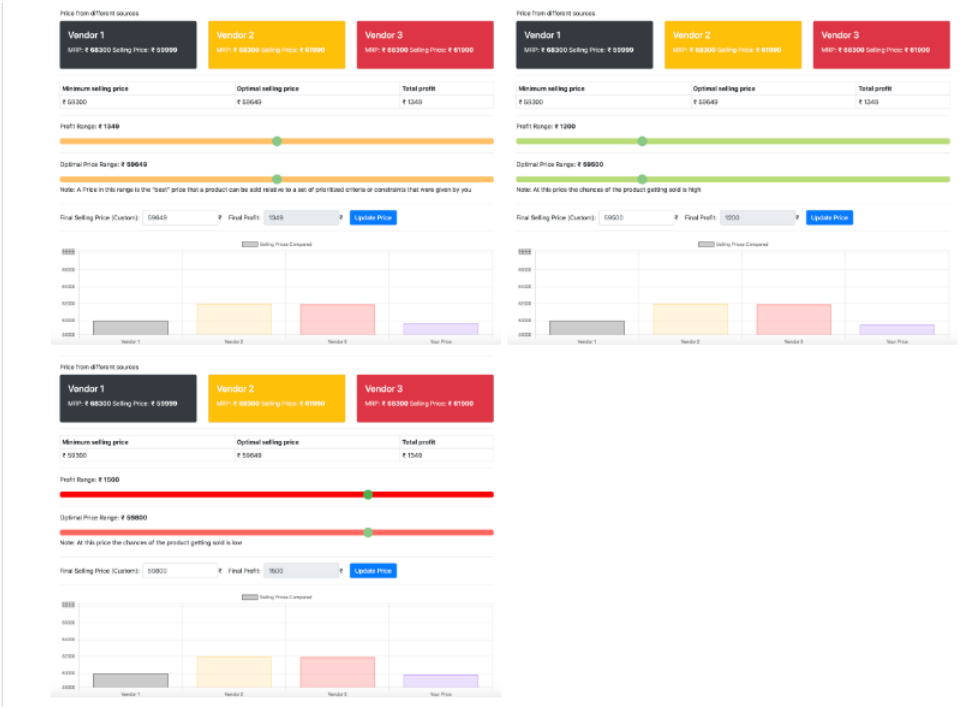
$ docker run -p 8080:8080 recommend_optimal_price

- **The Application will be available on http://localhost:8080**

STEP-12: Analyze the results



- **STEP-13: Application gets the prices of the competitors who are selling this product online. Based on the data given, the application compares the prices of the competitors and returns an optimal selling price which could improve user's chances of selling the product and at the same time maintain the desired profits.**



STEP-14: Product page

Product Page

Apple iPhone 11 (64GB) - Black

- 6.1-inch (15.5 cm) Liquid Retina HD LCD display
- Water and dust resistant (2 meters for up to 30 minutes, IP68)
- Dual-camera system with 12MP Ultra Wide and Wide cameras; Night mode, Portrait mode, and 4K video up to 60fps
- 12MP TrueDepth front camera with Portrait mode, 4K video, and Slo-Mo
- Face ID for secure authentication and Apple Pay
- A13 Bionic chip with third-generation Neural Engine
- Fast-charge capable

MRP: ~~₹ 68300~~

₹ 59540

Buy