

SPRINT – 4

Date	19/10/2022
Team ID	PNT2022TMID32597
Project Name	Personal Expense Tracker

FRONTEND AND BACKED CONNECTION :

```
from __future__ import print_function
from datetime import datetime
from flask import Flask, request, json, jsonify
from flask_json import FlaskJSON, json_response
from flask_cors import CORS
import ibm_db
from template import *

# Initializing flask app
app = Flask(__name__)
jsonObj = FlaskJSON(app)
cors = CORS(app, resources={r'*': {'origins': 'http://localhost:3000'}})

conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=125f9f61-9715-46f9-9399-
c8177b21803b.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30426;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=mpr37327;PWD=k5iRh2q3KBmMzr7Z;","","")

# Route for seeing a data
@app.route('/login')
def login():
    email = request.args.get('email')
    password = request.args.get('password')
    sql = "SELECT * FROM login where email = '{}'.format(email)"
    out = ibm_db.exec_immediate(conn, sql)
    document = ibm_db.fetch_assoc(out)
    if document == False :
        response = json_response(value=0)
    elif document['PASSWORD'] == password :
        response = json_response(value=1)
    else :
        response = json_response(value=2)
    return response

@app.route('/register', methods=['POST'])
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def register():
    if request.method == "POST":
        credentials = json.loads(request.data)
        sql = "INSERT INTO login
VALUES('{}','{}').format(credentials['email'],credentials['password'])
        out = ibm_db.exec_immediate(conn, sql)
        sql = "INSERT INTO personal_info(email,name)
VALUES('{}','{}').format(credentials['email'],credentials['name'])
        out = ibm_db.exec_immediate(conn, sql)
        response = json_response(200)
        return response

@app.route('/loadData')
def loadData():
    email = request.args.get('email')
    sql = "select sum(amount) as expense from expenses where email='{}' and
month(timestamp)=month(current_timestamp)".format(email)
    out = ibm_db.exec_immediate(conn, sql)
    document = ibm_db.fetch_assoc(out)

    totalExpense = document['EXPENSE']
    print(totalExpense)
    resultData = {
        'totalExpense' : document['EXPENSE'],
    }
    sql = "select walletlimit from personal_info where email =
'{}'.format(email)
    out = ibm_db.exec_immediate(conn, sql)
    document = ibm_db.fetch_assoc(out)

    # if resultData['totalExpense'] == None:
    #     resultData['balance'] = 0
    # else:
    #     resultData['balance'] = document['WALLETLIMIT'] - totalExpense
    sql = "select category, sum(amount) as expense from expenses where email='{}'
and month(timestamp)=month(current_timestamp) group by category".format(email)
    out = ibm_db.exec_immediate(conn, sql)
    document = ibm_db.fetch_assoc(out)
    piegraphData = []
    piegraphLabel = []
    while document != False:
        piegraphLabel.append(document["CATEGORY"])
        piegraphData.append(document["EXPENSE"])
        document = ibm_db.fetch_assoc(out)
    resultData['piegraphdata'] = piegraphData

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        resultData['piegraphlabel'] = piegraphLabel
        sql = "select dayname(cast(timestamp as date)) as day, sum(amount) as expense
from expenses,sysibm.sysdummy1 where email='{}' and
week(timestamp)=week(current_timestamp) group by cast(timestamp as
date)".format(email)
        out = ibm_db.exec_immediate(conn, sql)
        document = ibm_db.fetch_assoc(out)
        bargraphData = []
        bargraphLabel =[]
        while document != False:
            bargraphLabel.append(document['DAY'])
            bargraphData.append(document["EXPENSE"])
            document = ibm_db.fetch_assoc(out)
        resultData['bargraphdata'] = bargraphData
        resultData['bargraphlabel'] = bargraphLabel
        sql = "select sum(amount) as expense from expenses where email='{}' and
date(timestamp)=date(current_timestamp)".format(email)
        out = ibm_db.exec_immediate(conn, sql)
        document = ibm_db.fetch_assoc(out)
        resultData['dailyExpense']=document['EXPENSE']
        response = json_response(resultData=resultData)
        return response

@app.route('/addExpense', methods=['POST'])
def addExpense():
    if request.method == "POST":
        expense = json.loads(request.data)
        sql = "INSERT INTO expenses(email,category,amount,timestamp)
VALUES('{}','{}',{},{})".format(expense['email'],expense['category'],expense['a
mount'], datetime.now().strftime('%Y-%m-%d %H:%M:%S'))
        out = ibm_db.exec_immediate(conn, sql)
        response = json_response(200)
        return response

# @app.route('/limitExceed')
# def limitExceed():
#     email = request.args.get('email')
#     SendDynamic()
#     return json_response(200)

@app.route('/personalData')
def personalData():
    email = request.args.get('email')
    sql = "select * from personal_info where email='{}'".format(email)
    out = ibm_db.exec_immediate(conn, sql)

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document = ibm_db.fetch_assoc(out)
resultData = {
    'name' : document['NAME'],
    'email' : email,
    'walletlimit':document['WALLETLIMIT'],
    'gender': document['GENDER'],
    'location': document['LOCATION'],
    'phone' : document['PHONE'],

}

sql = "select * from login where email='{}'".format(email)
out = ibm_db.exec_immediate(conn, sql)
document = ibm_db.fetch_assoc(out)
resultData['password'] = document['PASSWORD']
response = json_response(resultData=resultData)
return response

@app.route('/updateProfile',methods=['POST'])
def updateProfile():
    if request.method == "POST":
        credentials = json.loads(request.data)
        sql = "UPDATE login SET password='{}' where
email='{}'".format(credentials['password'],credentials['email'])
        out = ibm_db.exec_immediate(conn, sql)
        print("Cred:",credentials)
        sql = "UPDATE personal_info SET name='{}', walletlimit={}, gender='{}',
location='{}', phone='{}' where email='{}'
".format(credentials['name'],credentials['walletlimit'],credentials['gender'],cre
dentials['location'],credentials['phone'], credentials['email'])
        out = ibm_db.exec_immediate(conn, sql)
        response = json_response(200)
        return response
    print("hai out")

# Running app
if __name__ == '__main__':
    app.run(debug=True)

```

DOCKER :

```
FROM node:16.6.2-alpine as build-step

WORKDIR /app
ENV PATH /app/node_modules/.bin:$PATH
COPY package.json ./
COPY package-lock.json ./
COPY nginx.conf ./
COPY ./src ./src
COPY ./public ./public
RUN npm install

# RUN npm run build

# FROM nginx:1.17.10-alpine
# COPY --from=build-step /app/build/ /usr/share/nginx/html
# COPY --from=build-step /app/nginx.conf /etc/nginx/conf.d/default.conf

EXPOSE 3000

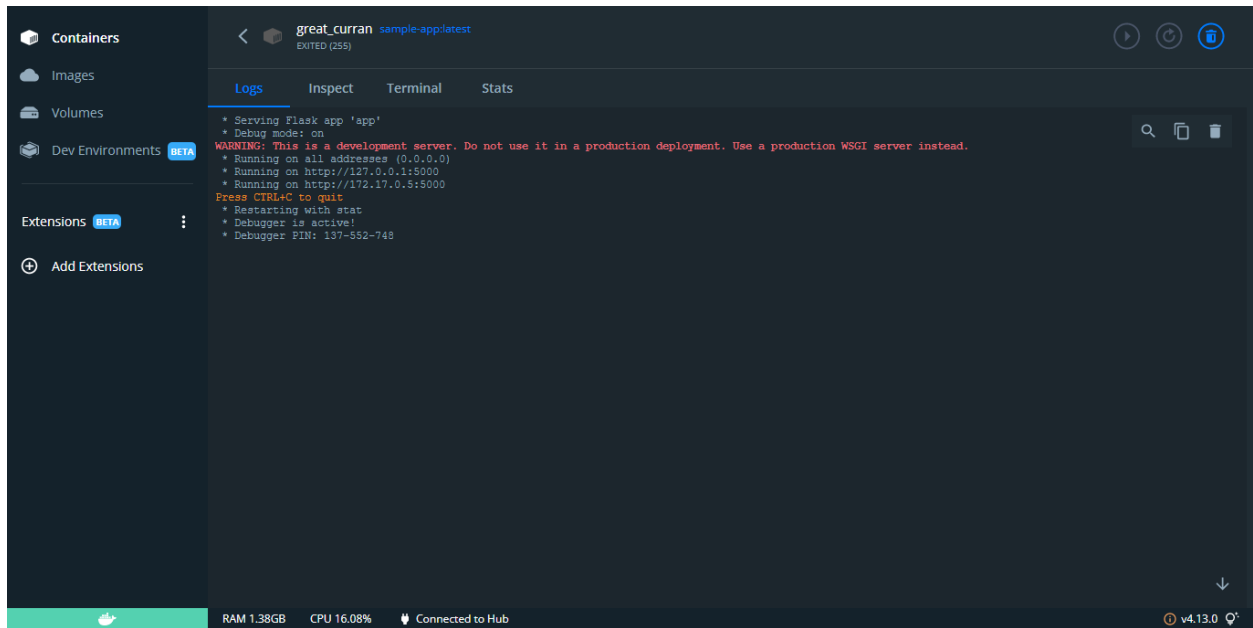
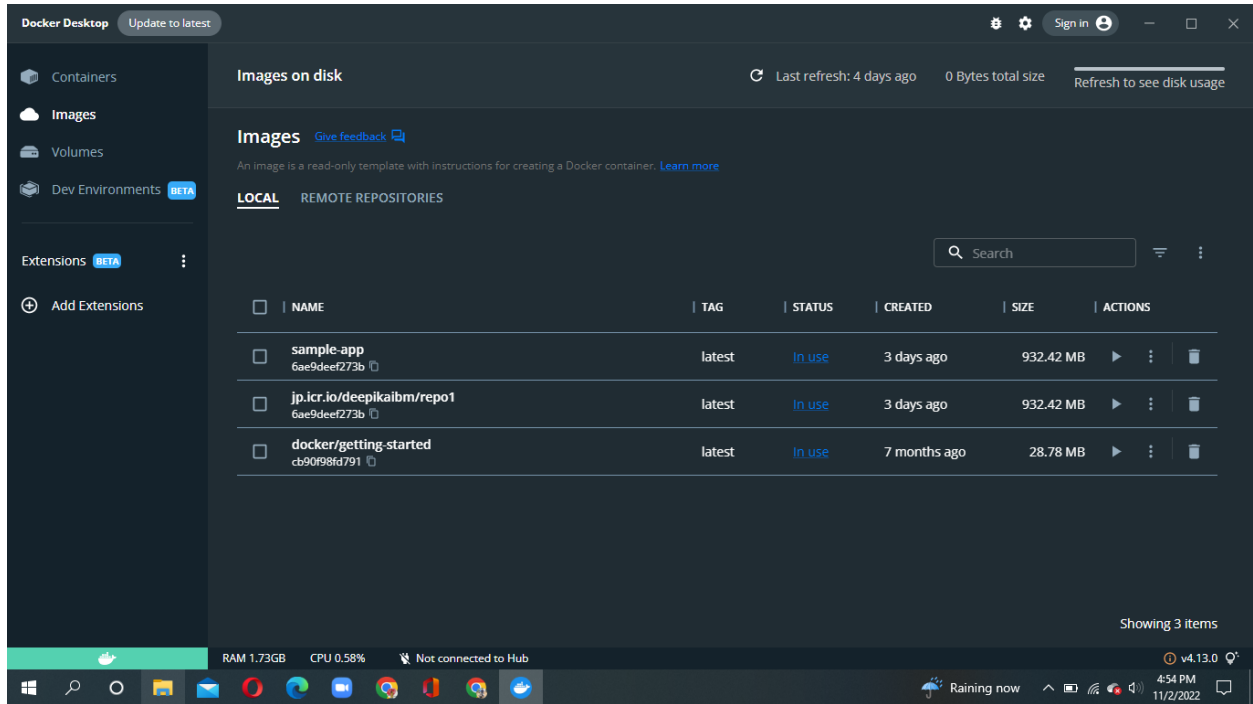
CMD ["npm", "start"]
```

DOCKER SCREENSHOTS :

The screenshot shows the Docker Desktop interface. On the left is a sidebar with navigation options: Containers (selected), Images, Volumes, Dev Environments (with a BETA badge), Extensions (with a BETA badge), and Add Extensions. The main panel is titled 'Containers' and includes a 'Give feedback' link. Below the title is a description: 'A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. [Learn more](#)'. There is a toggle for 'Only show running containers' (which is turned on) and a search bar. A table lists three running containers:

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	priceless_johnson 90e8ca7344bd	sample-app:latest	Running		1 minute ago	Stop, Restart, Delete
<input type="checkbox"/>	recurring_feistel d20feb6aa6d5	sample-app:latest	Running		1 minute ago	Stop, Restart, Delete
<input type="checkbox"/>	elegant_bassi 0ae5532bbc03	docker/getting-started:latest	Running	80:80	1 minute ago	Stop, Restart, Delete

At the bottom right, it says 'Showing 3 items'. The bottom status bar shows 'RAM 2.64GB', 'CPU 0.60%', 'Connected to Hub', and 'v4.13.0'.



```
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\rithid> cd C:\folders\4th year\WALAYA THIRAI\flask_with_form_and_docker-main

C:\folders\4th year\WALAYA THIRAI\flask_with_form_and_docker-main> docker build -t sample-app .
[*] Building 61.7s (11/11) FINISHED
-> [internal] load build definition from Dockerfile
0.1s
-> -- transferring Dockerfile: 179B
0.0s
-> [internal] load .dockerignore
0.0s
-> -- transferring context: 2B
0.0s
-> [internal] load metadata for docker.io/library/python:3.10.6
4.5s
-> [auth] library/python:pull token for registry-1.docker.io
0.0s
-> [1/5] FROM docker.io/library/python:3.10.6@sha256:745ef6f67edaac9a8422b8c62d8bc35a69be0779a28d196771b01eaa01852
46.3s
-> -- resolve docker.io/library/python:3.10.6@sha256:745ef6f67edaac9a8422b8c62d8bc35a69be0779a28d196771b01eaa01852
0.0s
-> -- sha256:1b71565c2d8f6365c5b6d1d1fbc16a673d01f1b043b6c6179588428f90a6da2e 55.01MB / 55.01MB
19.8s
-> -- sha256:f4bc7528c685210129e8d67b7362a7702e761daa585ab85546aa1508830657d6 10.80MB / 10.80MB
1.4s
-> -- sha256:745ef6f67edaac9a8422b8c62d8bc35a69be0779a28d196771b01eaa01852 2.35MB / 2.35MB
0.0s
-> -- sha256:8d1f943eaa73a3ce05d5f5c992ae79588366040670017dbf9c56d073ac11fca 2.22MB / 2.22MB
0.0s
-> -- sha256:22e6d33080a0223601f168d4777fba5c6b1b712c480be74118095700dbcefa 8.53MB / 8.53MB
0.0s
-> -- sha256:3e9a413e5e7ade17f72137657f805c7e1700921f8704aa9260908b1b1f6d 5.10MB / 5.10MB
3.9s
-> -- sha256:53a072f9cd16fc8eb93b182b20e758c11cc0ef68abe404f1843c080c1901a 54.50MB / 54.50MB
10.8s
-> -- sha256:08b083117533b718374f1701ef933dd2afab613c7908c6553bebe2a150e64da 106.79MB / 106.79MB
35.5s
-> -- sha256:08b0256dd5476fc7c302256ebddc6f495ae8fbdd22ba18dbcb7581e24dc 6.29MB / 6.29MB
12.7s
-> -- sha256:c71af657499a6c4d5cf1d148304af0b3c0a6204f0057ea22f6c6b10789a5 20.04MB / 20.04MB
16.9s
-> -- sha256:804a10b3c704553a09c05fc012fbaee1c07048f636570f435e0a2255113a460 234B / 234B
20.3s
-> -- sha256:4334b27e8293d1d4dc1c3550093aae88f21001a7c85a31c6da6c6dc48fbcedc 1.80MB / 1.80MB
23.2s
-> -- extracting sha256:1b71565c2d8f6365c5b6d1d1fbc16a673d01f1b043b6c6179588428f90a6da2e
2.9s
-> -- extracting sha256:3e9a413e5e7ade17f72137657f805c7e1700921f8704aa9260908b1b1f6d
0.2s
-> -- extracting sha256:f4bc7528c685210129e8d67b7362a7702e761daa585ab85546aa1508830657d6
0.3s
-> -- extracting sha256:08b083117533b718374f1701ef933dd2afab613c7908c6553bebe2a150e64da
4.3s
-> -- extracting sha256:08b0256dd5476fc7c302256ebddc6f495ae8fbdd22ba18dbcb7581e24dc
8.0s
-> -- extracting sha256:c71af657499a6c4d5cf1d148304af0b3c0a6204f0057ea22f6c6b10789a5
1.1s
-> -- extracting sha256:804a10b3c704553a09c05fc012fbaee1c07048f636570f435e0a2255113a460
0.0s
-> -- extracting sha256:4334b27e8293d1d4dc1c3550093aae88f21001a7c85a31c6da6c6dc48fbcedc
0.2s
-> [internal] load build context
0.0s
-> -- transferring context: 8.54kB
0.0s
-> [2/5] WORKDIR /app
3.4s
-> [3/5] COPY requirements.txt ./
0.0s
-> [4/5] RUN pip install -r requirements.txt
4.0s
-> [5/5] CMD ...
0.1s
-> exporting to image
0.3s
-> exporting layers
0.2s
-> -- writing image sha256:908a84571c69ad78dbcbcb1d0f05272a7b81840049e56175ba27362728e30
0.0s
-> -- naming to docker.io/library/sample-app
0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

C:\folders\4th year\WALAYA THIRAI\flask_with_form_and_docker-main>
```