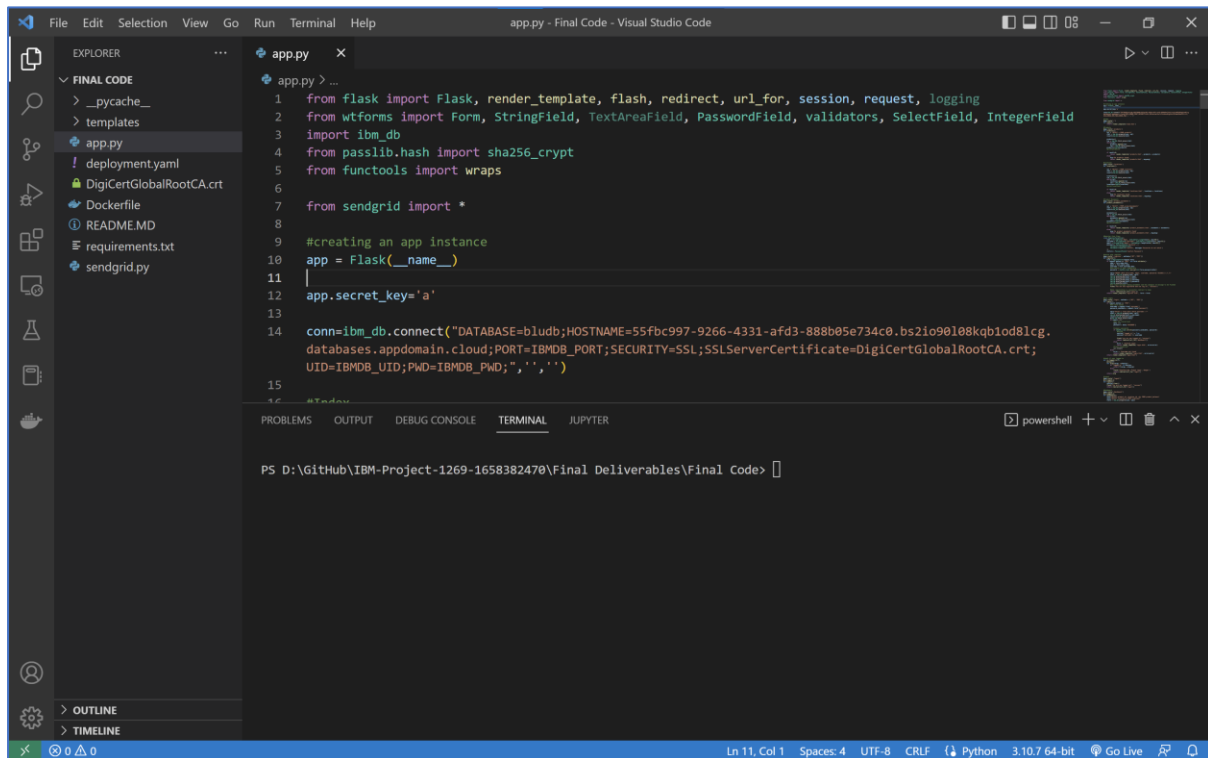


Pre-Development Phase

Setting up Application Environment

Date	14.11.2022
Team ID	PNT2022TMID13093
Project Name	Inventory Management System for Retailers

Creating Flask Project,

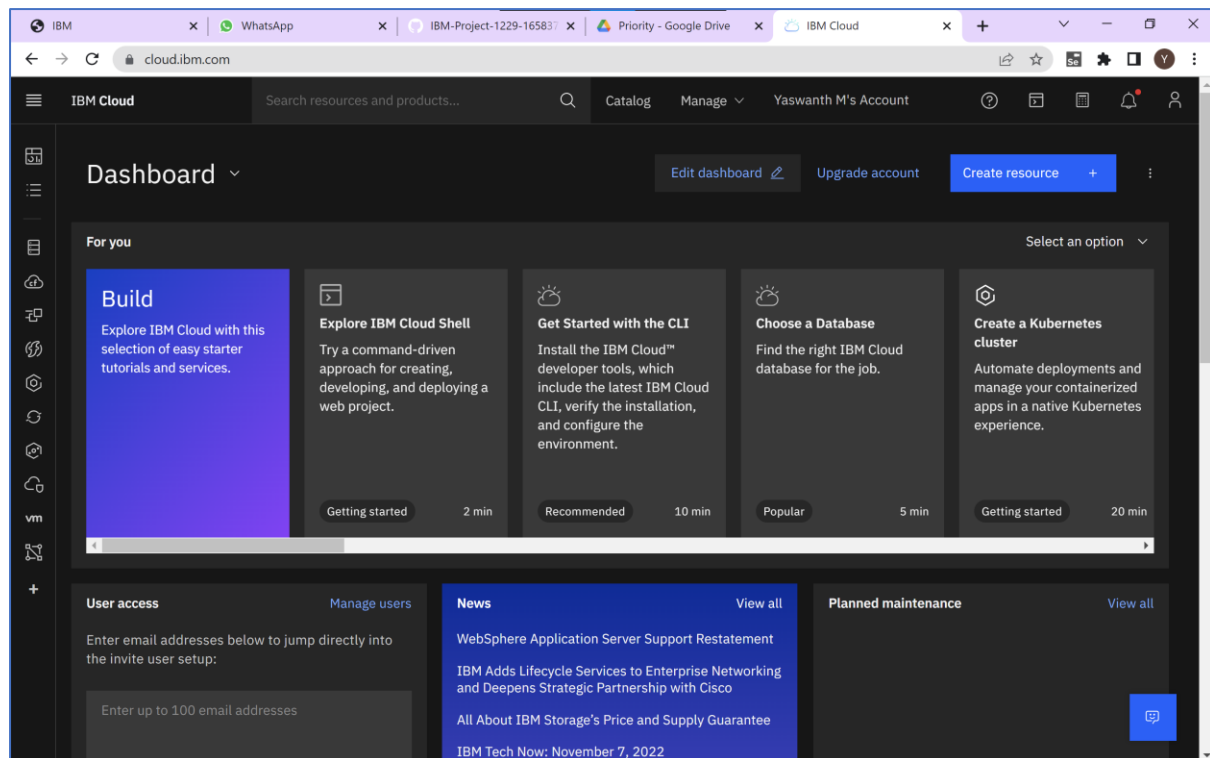


The screenshot displays the Visual Studio Code interface with a Python file named `app.py` open. The code imports various libraries including `Flask`, `wtforms`, `ibm_db`, `passlib`, `functools`, and `sendgrid`. It then creates a Flask application instance, sets a secret key, and connects to an IBM DB database using `ibm_db.connect`. The terminal window at the bottom shows the command prompt for PowerShell, indicating the current directory is `D:\GitHub\IBM-Project-1269-1658382470\Final Deliverables\Final Code`.

```
1 from flask import Flask, render_template, flash, redirect, url_for, session, request, logging
2 from wtforms import Form, StringField, TextAreaField, PasswordField, validators, SelectField, IntegerField
3 import ibm_db
4 from passlib.hash import sha256_crypt
5 from functools import wraps
6
7 from sendgrid import *
8
9 #creating an app instance
10 app = Flask(__name__)
11 |
12 app.secret_key='a'
13
14 conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=55fbc997-9266-4331-afd3-888b05e734c0.bs21c90108kqb1od8lcg.
databases.appdomain.cloud;PORT=IBMDB_PORT;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;
UID=IBMDB_UID;PWD=IBMDB_PWD;",'', '')
15
```

PS D:\GitHub\IBM-Project-1269-1658382470\Final Deliverables\Final Code>

Creation of IBM Cloud Account,



Install IBM Cloud CLI,

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

C:\Users\yaswa>pip install ibm_db
Requirement already satisfied: ibm_db in c:\users\yaswa\appdata\local\programs\python\python310\lib\site-packages (3.1.3)

[notice] A new release of pip available: 22.3 -> 22.3.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\yaswa>ibmcloud.exe
NAME:
  ibmcloud.exe - A command line tool to interact with IBM Cloud
  Find more information at: https://ibm.biz/cli-docs

USAGE:
  [environment variables] ibmcloud.exe [global options] command [arguments...] [command options]

VERSION:
  2.12.1+b8488a1-2022-10-31T15:08:10+00:00

COMMANDS:
  account      Manage accounts, users, orgs and spaces
  api          Set or view target API endpoint
  billing      Retrieve usage and billing information
  catalog      Manage catalog
  cf           Run Cloud Foundry CLI with IBM Cloud CLI context
  config       Write default values to the config
  cr           Manage IBM Cloud Container Registry content and configuration.
  dev         Create, develop, deploy, and monitor applications
  enterprise   Manage enterprise, account groups and accounts.
  iam         Manage identities and access to resources
  ks, cs, oc   Manage Kubernetes and OpenShift clusters in IBM Cloud. Aliases include 'ibmcloud oc'.
  login       Log user in
  logout      Log user out
  plugin       Manage plug-ins and plug-in repositories
  regions      List all the regions
  resource     Manage resource groups and resources
  resources    List all resources
  sat         Manage IBM Cloud Satellite clusters.
  sl          Manage Classic infrastructure services
  target      Set or view the targeted region, account, resource group, org or space
  update      Update CLI to the latest version
  version      Print the version
  help, h     Show help

Enter 'ibmcloud.exe help [command]' for more information about a command.

ENVIRONMENT VARIABLES:
  IBM_CLOUD_COLOR=false          Do not colorize output
  IBM_CLOUD_VERSION_CHECK=false  Do not check latest version for update
  IBM_CLOUD_HTTP_TIMEOUT=5       A time limit for HTTP requests
```

Docker CLI Installation,

```
Command Prompt

C:\Users\yasw>docker

Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:
  --config string      Location of client config files (default
                        "C:\Users\yasw\docker")
  -c, --context string  Name of the context to use to connect to the
                        daemon (overrides DOCKER_HOST env var and
                        default context set with "docker context use")
  -D, --debug           Enable debug mode
  -H, --host list       Daemon socket(s) to connect to
  -l, --log-level string Set the logging level
                        ("debug"|"info"|"warn"|"error"|"fatal")
                        (default "info")
  --tls                Use TLS; implied by --tlsverify
  --tlscacert string    Trust certs signed only by this CA (default
                        "C:\Users\yasw\docker\ca.pem")
  --tlscert string      Path to TLS certificate file (default
                        "C:\Users\yasw\docker\tcert.pem")
  --tlskey string       Path to TLS key file (default
                        "C:\Users\yasw\docker\tkey.pem")
  --tlsverify           Use TLS and verify the remote
  -v, --version         Print version information and quit

Management Commands:
  builder              Manage builds
  buildx*             Docker Buildx (Docker Inc., v0.9.1)
  compose*            Docker Compose (Docker Inc., v2.10.2)
  config              Manage Docker configs
  container            Manage containers
  context              Manage contexts
  extension*          Manage Docker extensions (Docker Inc., v0.2.9)
  image               Manage images
  manifest             Manage Docker image manifests and manifest lists
  network             Manage networks
  node                Manage Swarm nodes
  plugin              Manage plugins
  sbom*               View the packaged-based Software Bill Of Materials (SBOM) for an image (Anchore Inc., 0.6.0)
  scan                Docker Scan (Docker Inc., v0.19.0)
  secret              Manage Docker secrets
  service             Manage services
  stack               Manage Docker stacks
  swarm              Manage Swarm
  system              Manage Docker
  trust               Manage trust on Docker images
  volume              Manage volumes

Commands:
  attach              Attach local standard input, output, and error streams to a running container
  build               Build an image from a Dockerfile
  commit              Create a new image from a container's changes
  cp                  Copy files/folders between a container and the local filesystem
  create              Create a new container
  diff                Inspect changes to files or directories on a container's filesystem
  events              Get real time events from the server
  exec                Run a command in a running container
  export              Export a container's filesystem as a tar archive
  history              Show the history of an image
  images              List images
```

Create an Account in SendGrid,

