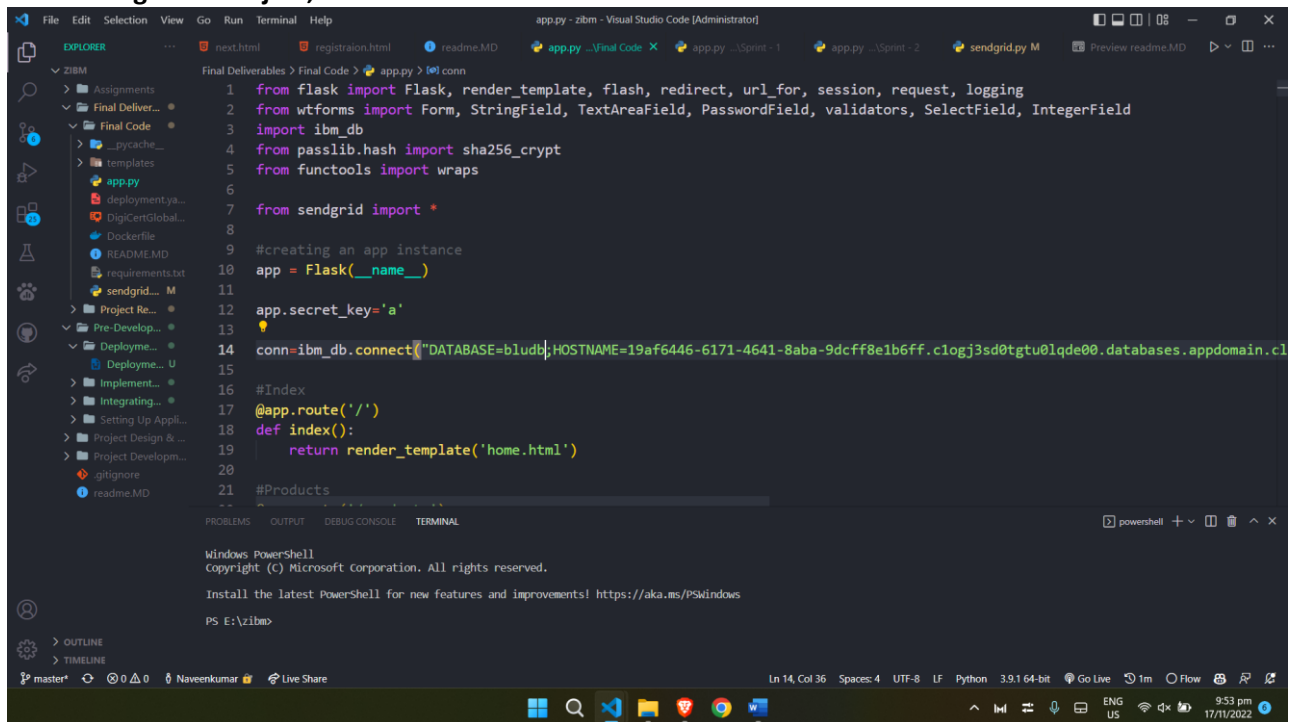


Pre-Development Phase Setting up Application Environment

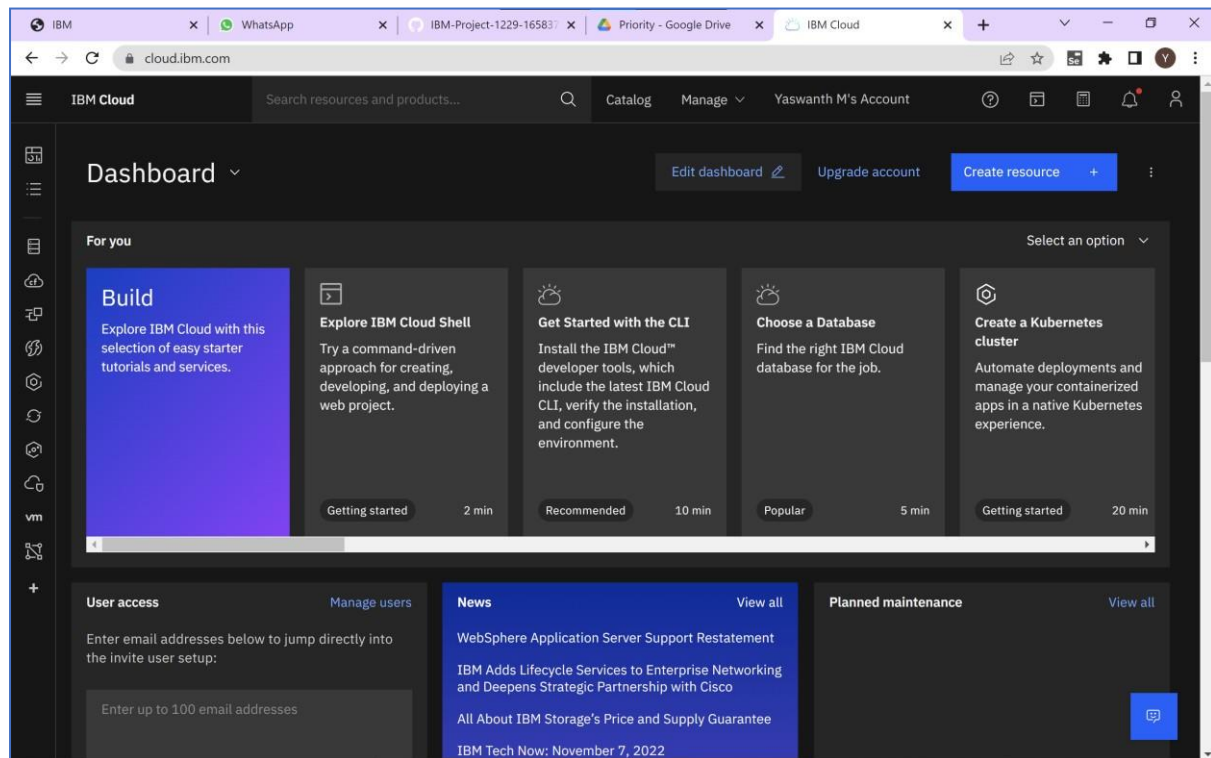
| | |
|--------------|---|
| Date | 14.11.2022 |
| Team ID | PNT2022TMID52681 |
| Project Name | Inventory Management System for Retailers |

Creating Flask Project,



```
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=19af6446-6171-4641-8aba-9dcff8e1b6ff.clogj3sd0tgtu0lqde00.databases.appdomain.c1
15
16 #Index
17 @app.route('/')
18 def index():
19     return render_template('home.html')
20
21 #Products
```

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:
  IBMCLD_COLOR=false           Do not colorize output
  IBMCLD_VERSION_CHECK=false   Do not check latest version for update
  IBMCLD_HTTP_TIMEOUT=5        A time limit for HTTP requests
```

Docker CLI Installation,

```
Command Prompt

C:\Users\yaswa>docker

Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:
  -c, --config string      Location of client config files (default
                           "C:\Users\yaswa\.docker")
  --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 --tlsv1verify
  --tlscacert string       Trust certs signed only by this CA (default
                           "C:\Users\yaswa\.docker\ca.pem")
  --tlscert string         Path to TLS certificate file (default
                           "C:\Users\yaswa\.docker\cert.pem")
  --tlskey string          Path to TLS key file (default
                           "C:\Users\yaswa\.docker\key.pem")
  --tlsv1verify            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,

