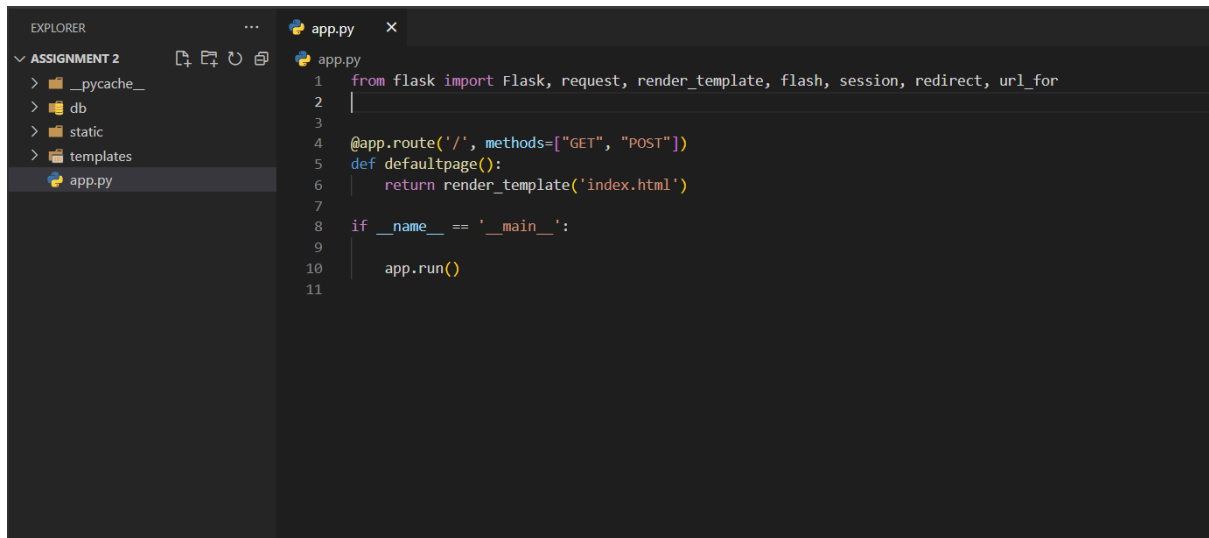


Setting up Application Environment

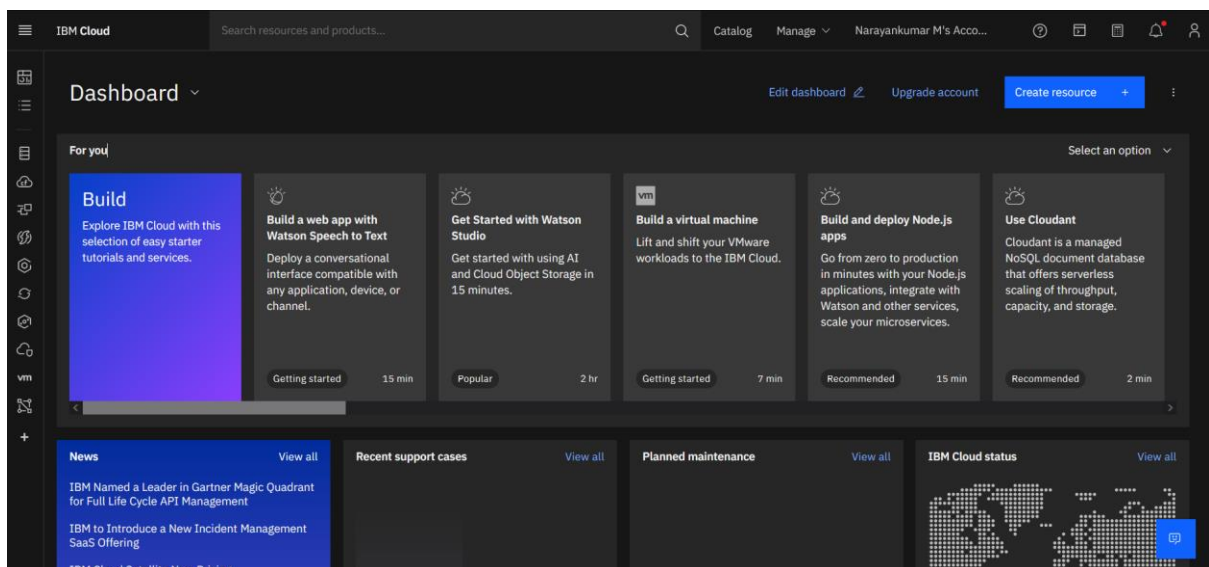
1) Create Flask Project



```
EXPLORER
  ASSIGNMENT 2
    > __pycache__
    > db
    > static
    > templates
    app.py

app.py
1  from flask import Flask, request, render_template, flash, session, redirect, url_for
2  |
3  |
4  @app.route('/', methods=["GET", "POST"])
5  def defaultpage():
6  |     return render_template('index.html')
7  |
8  if __name__ == '__main__':
9  |
10 |     app.run()
11 |
```

2) Create IBM Cloud Account



3) Install IBM Cloud CLI

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

USAGE:
  [environment variables] ibmcloud [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
  ob            Manage logging and monitoring configurations for IBM Cloud Kubernetes Service clusters.
  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 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
  IBMCLD_API_KEY=api_key_value API Key used for login
  IBMCLD_CR_VPC_URL=url_value  The custom server URL to use when obtaining an instance identity token and IAM token as a VPC VSI compute resource
```

4) Docker CLI Installation

```
C:\Users\Naren>docker

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:
  --config string      Location of client config files (default
                        "C:\Users\Naren\.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\Naren\.docker\ca.pem")
  --tlscert string      Path to TLS certificate file (default
                        "C:\Users\Naren\.docker\cert.pem")
  --tlskey string       Path to TLS key file (default
                        "C:\Users\Naren\.docker\key.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., v0.8.2)
  compose*           Docker Compose (Docker Inc., v2.7.0)
  config             Manage Docker configs
  container          Manage containers
  context            Manage contexts
  extension*         Manages Docker extensions (Docker Inc., v0.2.8)
  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., v0.17.0)
  secret             Manage Docker secrets
```

5) Create an Account in SendGrid

The screenshot displays the Twilio SendGrid dashboard for a user named Shai Prashanth K. The left sidebar contains navigation links for Dashboard, Email API, Marketing, Design Library, Stats, Activity, Suppressions, Settings, and Twilio SMS. The main content area is titled 'Welcome, Shai!' and includes a message: 'To get up and running quickly, please follow the steps outlined below.' A prominent blue banner reads 'Send your first emails with Twilio SendGrid'. Below this, the 'Create a sender identity' section explains that a sender identity is needed before sending emails and offers two methods: 'Create a Single Sender' (highlighted with a blue button) and 'Authenticate a domain instead'. An illustration shows an email header with 'Your Business' as the sender and 'jane.doe@your_business.com' as the email address. At the bottom, a 'Send your first email' section contains a warning: 'Please create a sender identity before sending your first email.' The bottom of the dashboard shows a 'REPUTATION' bar at 100% and a URL: https://app.sendgrid.com/onlinesender_auth/ondocs/home.