Assignment -2

Assignment Date	23 November 2022
Student Name	Sandhiya P
Student Roll Number	813019205012
Maximum Marks	2 Marks

Question-1:

1. Create a Flask App
2. Add the Home page, About Page
3. Add the Bootstrap
4. Add the Sign in page and App the Signup Page + database connectivity

Solution:

INDEX.js

index.js

```
function deleteNote(noteId) {
fetch("/delete-note", {
method: "POST",
   body: JSON.stringify({ noteId: noteId }),
 }).then((_res) => {
   window.location.href = "/";
 });
}
```

base.html

```
<!DOCTYPE html>
<html>
 <head>
   <meta charset="utf-8" />
   <meta name="viewport" content="width=device-width, initial-scale=1" />
   <link
     rel="stylesheet"
     href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
     integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
crossorigin="anonymous"
   />
   <link
     rel="stylesheet"
```

```
    href="https://stackpath.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css"
crossorigin="anonymous"
  />

  <title>{% block title %}Home{% endblock %}</title>
 </head>
 <body>
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
   <button
    class="navbar-toggler"
type="button"       data-
toggle="collapse"       data-
target="#navbar"
   >
    <span class="navbar-toggler-icon"></span>
   </button>
   <div class="collapse navbar-collapse" id="navbar">
    <div class="navbar-nav">
     {% if user.is_authenticated %}
     <a class="nav-item nav-link" id="home" href="/">Home</a>
     <a class="nav-item nav-link" id="logout" href="/logout">Logout</a>
     {% else %}
     <a class="nav-item nav-link" id="login" href="/login">Login</a>
     <a class="nav-item nav-link" id="signUp" href="/sign-up">Sign Up</a>
{% endif %}
    </div>
   </div>
  </nav>

  {% with messages = get_flashed_messages(with_categories=true) %} {% if
messages %} {% for category, message in messages %} {% if category ==
  'error' %}
  <div class="alert alert-danger alter-dismissable fade show" role="alert">
   {{ message }}
   <button type="button" class="close" data-dismiss="alert">
    <span aria-hidden="true">&times;</span>
   </button>
  </div>
  {% else %}
  <div class="alert alert-success alter-dismissable fade show" role="alert">
   {{ message }}
   <button type="button" class="close" data-dismiss="alert">
    <span aria-hidden="true">&times;</span>
   </button>
  </div>
  {% endif %} {% endfor %} {% endif %} {% endwith %}

  <div class="container">{% block content %} {% endblock %}</div>
  <script
   src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-
KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"
```

```
  ></script>
  <script
    src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
    integrity="sha384-ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"
  ></script>
  <script
    src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"
integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl"
crossorigin="anonymous"
  ></script>

  <script
    type="text/javascript"
    src="{{ url_for('static', filename='index.js') }}"
  ></script>
 </body>
</html>
```

*****home.hml*****

```
{% extends "base.html" %} {% block title %}Home{% endblock %} {% block content
%}
<h1 align="center">Notes</h1>
<ul class="list-group list-group-flush" id="notes">
 {% for note in user.notes %}
 <li class="list-group-item">
  {{ note.data }}
  <button type="button" class="close" onClick="deleteNote({{ note.id }})">
   <span aria-hidden="true">&times;</span>
  </button>
 </li>
 {% endfor %}
</ul>
<form method="POST">
 <textarea name="note" id="note" class="form-control"></textarea>
<br />
 <div align="center">
  <button type="submit" class="btn btn-primary">Add Note</button>
</div>
</form>
{% endblock %}
```

*****login.html*****

```
{% extends "base.html" %} {% block title %}Login{% endblock %} {% block content
%}
<form method="POST">
 <h3 align="center">Login</h3>
 <div class="form-group">
  <label for="email">Email Address</label>
```

```
   <input
type="email"
class="form-control"
     id="email"
name="email"
     placeholder="Enter email"
   />
 </div>
 <div class="form-group">
   <label for="password">Password</label>
   <input
type="password"
class="form-control"
id="password"
name="password"
placeholder="Enter
password"
   />
 </div>
 <br />
 <button type="submit" class="btn btn-primary">Login</button>
</form>
{% endblock %}
```

*****sign_up.html*****

```
{% extends "base.html" %} {% block title %}Sign Up{% endblock %} {% block
content %}
<form method="POST">
  <h3 align="center">Sign Up</h3>
  <div class="form-group">
    <label for="email">Email Address</label>
    <input      type="email"
class="form-control"
id="email"      name="email"
placeholder="Enter email"
    />
  </div>
  <div class="form-group">
    <label for="firstName">First Name</label>
    <input      type="text"
class="form-control"
id="firstName"
name="firstName"
placeholder="Enter first name"
    />
  </div>
  <div class="form-group">
    <label for="password1">Password</label>
    <input
type="password"
class="form-control"
```

```
id="password1"
name="password1"
     placeholder="Enter password"
   />
 </div>
 <div class="form-group">
   <label for="password2">Password (Confirm)</label>
   <input      type="password"
class="form-control"
id="password2"
name="password2"
placeholder="Confirm password"
   />
 </div>
 <br />
 <button type="submit" class="btn btn-primary">Submit</button>
</form>
{% endblock %}
```

*****_init_.py*****

```
from flask import Flask
from flask_sqlalchemy import SQLAlchemy from
os import path
from flask_login import LoginManager

db = SQLAlchemy() DB_NAME
= "database.db"


def create_app():
   app = Flask(__name__)
   app.config['SECRET_KEY'] = 'hjshjhdjah kjshkjdhjs'
   app.config['SQLALCHEMY_DATABASE_URI'] = f'sqlite:///{DB_NAME}'
db.init_app(app)

   from .views import views
   from .auth import auth

   app.register_blueprint(views, url_prefix='/')
   app.register_blueprint(auth, url_prefix='/')

   from .models import User, Note

   create_database(app)

   login_manager = LoginManager()
login_manager.login_view = 'auth.login'
login_manager.init_app(app)

   @login_manager.user_loader
def load_user(id):
```

```
    return User.query.get(int(id))

  return app


def create_database(app):    if not
path.exists('website/' + DB_NAME):
    db.create_all(app=app)
    print('Created Database!')
```

*****auth.py*****

```
from flask import Blueprint, render_template, request, flash, redirect, url_for from
.models import User
from werkzeug.security import generate_password_hash, check_password_hash
from . import db
from flask_login import login_user, login_required, logout_user, current_user


auth = Blueprint('auth', __name__)


@auth.route('/login', methods=['GET', 'POST'])
def login():    if request.method == 'POST':
    email = request.form.get('email')
    password = request.form.get('password')

    user = User.query.filter_by(email=email).first()      if
user:          if check_password_hash(user.password,
password):              flash('Logged in successfully!',
category='success')              login_user(user,
remember=True)             return
redirect(url_for('views.home'))          else:
            flash('Incorrect password, try again.', category='error')
else:
        flash('Email does not exist.', category='error')

  return render_template("login.html", user=current_user)


@auth.route('/logout')
@login_required def
logout():
logout_user()
  return redirect(url_for('auth.login'))


@auth.route('/sign-up', methods=['GET', 'POST']) def
sign_up():
  if request.method == 'POST':
    email = request.form.get('email')
first_name = request.form.get('firstName')
```

```
password1 = request.form.get('password1')
password2 = request.form.get('password2')

      user = User.query.filter_by(email=email).first()
if user:
        flash('Email already exists.', category='error')
elif len(email) < 4:
        flash('Email must be greater than 3 characters.', category='error')
elif len(first_name) < 2:
        flash('First name must be greater than 1 character.', category='error')
elif password1 != password2:
        flash('Passwords don\'t match.', category='error')       elif
len(password1) < 7:          flash('Password must be at least 7
characters.', category='error')       else:
        new_user = User(email=email, first_name=first_name, password=generate_password_hash(
password1, method='sha256'))          db.session.add(new_user)
        db.session.commit()
login_user(new_user,                  remember=True)
flash('Account created!', category='success')
        return redirect(url_for('views.home'))

   return render_template("sign_up.html", user=current_user)
```

*****models.py*****

```
afrom . import db from flask_login
import UserMixin
from sqlalchemy.sql import func


class Note(db.Model):    id = db.Column(db.Integer, primary_key=True)
data = db.Column(db.String(10000))    date =
db.Column(db.DateTime(timezone=True), default=func.now())
user_id = db.Column(db.Integer, db.ForeignKey('user.id'))


class User(db.Model, UserMixin):    id =
db.Column(db.Integer, primary_key=True)    email
= db.Column(db.String(150), unique=True)
password = db.Column(db.String(150))
first_name = db.Column(db.String(150))
   notes = db.relationship('Note')
```

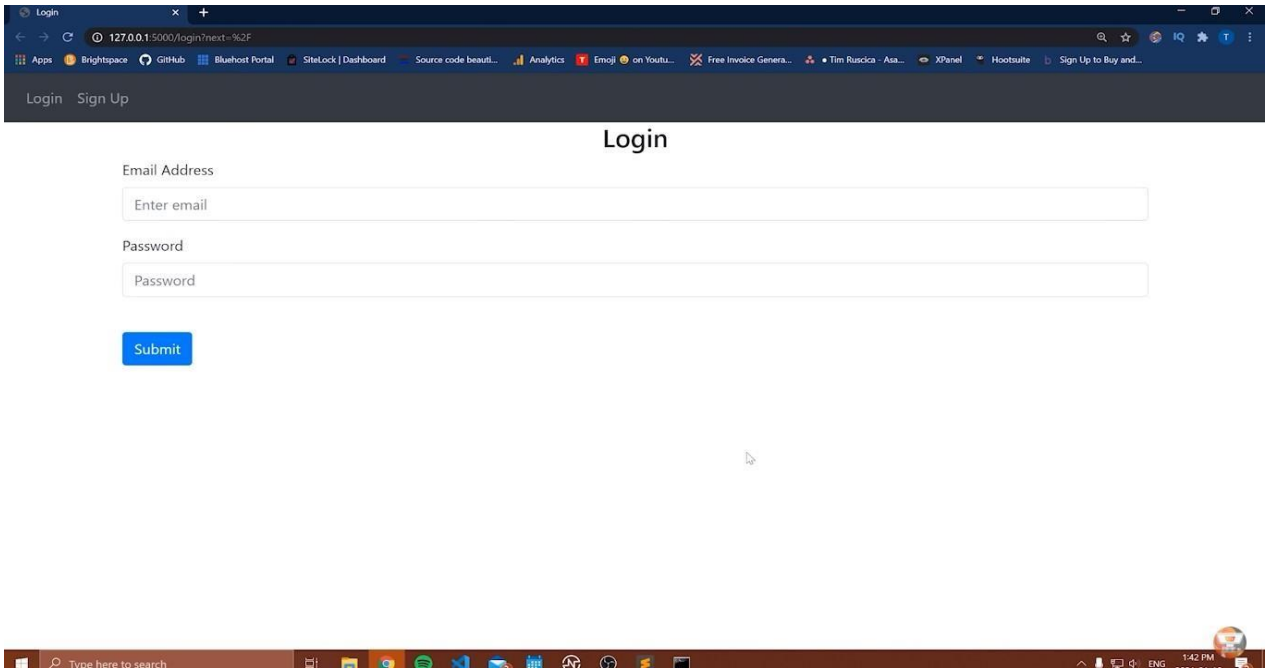
*****views.py*****

```
from flask import Blueprint, render_template, request, flash, jsonify
from flask_login import login_required, current_user from .models
import Note from . import db
import json

views = Blueprint('views', __name__)
```

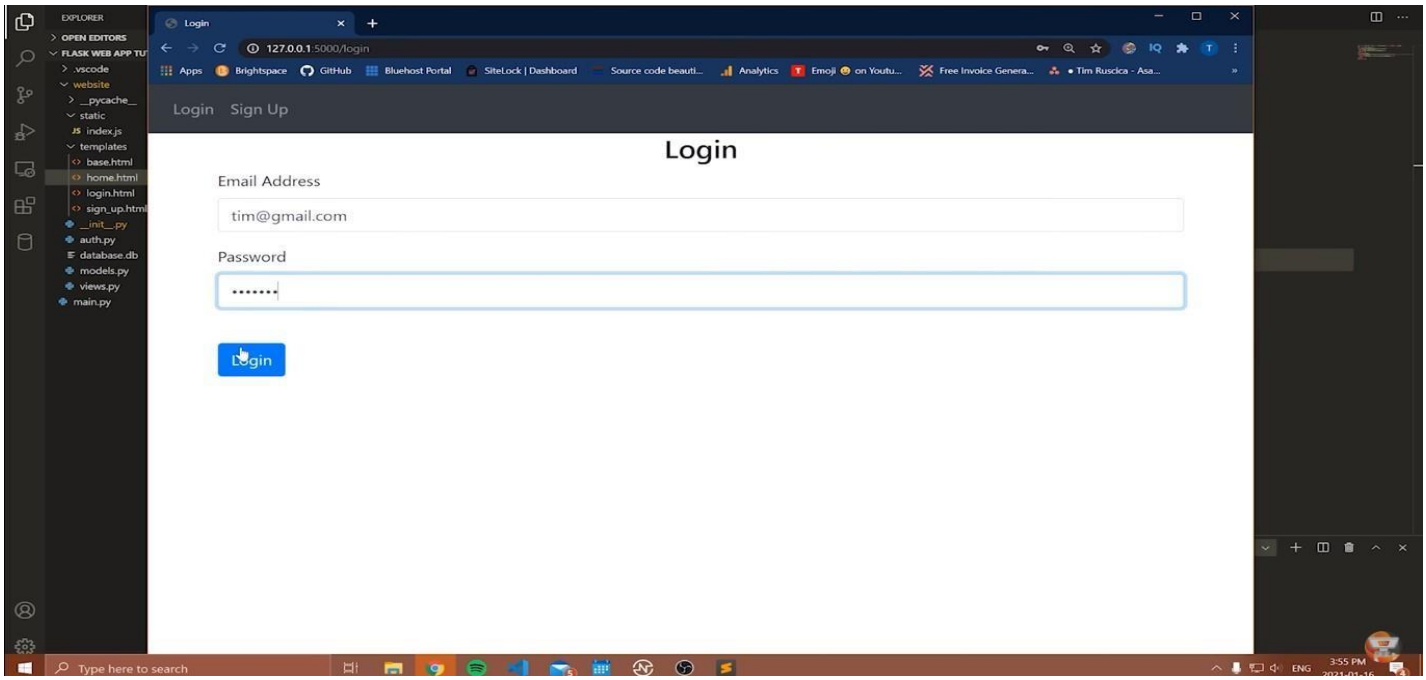
```
@views.route('/', methods=['GET', 'POST'])
@login_required def home():       if
request.method == 'POST':       note
= request.form.get('note')

      if len(note) < 1:          flash('Note is too
short!', category='error')       else:
          new_note = Note(data=note, user_id=current_user.id)
db.session.add(new_note)          db.session.commit()
          flash('Note added!', category='success')

   return render_template("home.html", user=current_user)
@views.route('/delete-note', methods=['POST']) def delete_note():     note =
json.loads(request.data)     noteId = note['noteId']     note = Note.query.get(noteId)
if note:       if note.user_id == current_user.id:
          db.session.delete(note)
          db.session.commit()

   return jsonify({})
```

OUTPUT SCREENSHOTS

Step 1 : enter our email address and password



STEP 2 : *After enter that click "Login"*



After that website redirect you to notes :