

## Assignment -2

Assignment Date	08 November 2022
Student Name	Suba K
Student Roll Number	723619104032
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\*\*\*

```
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+Hhvx8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9Muh  
Of23Q9Ifjh" 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 alert-dismissible 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 alert-dismissible 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/JQGiRRSQQxSfFWpi1MquVdAy
  jUar5+76PVCmYI" crossorigin="anonymous"
  ></script>

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

```

\*\*\*home.html\*\*\*

```

{% 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))

    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\*\*\*

```

from . 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')

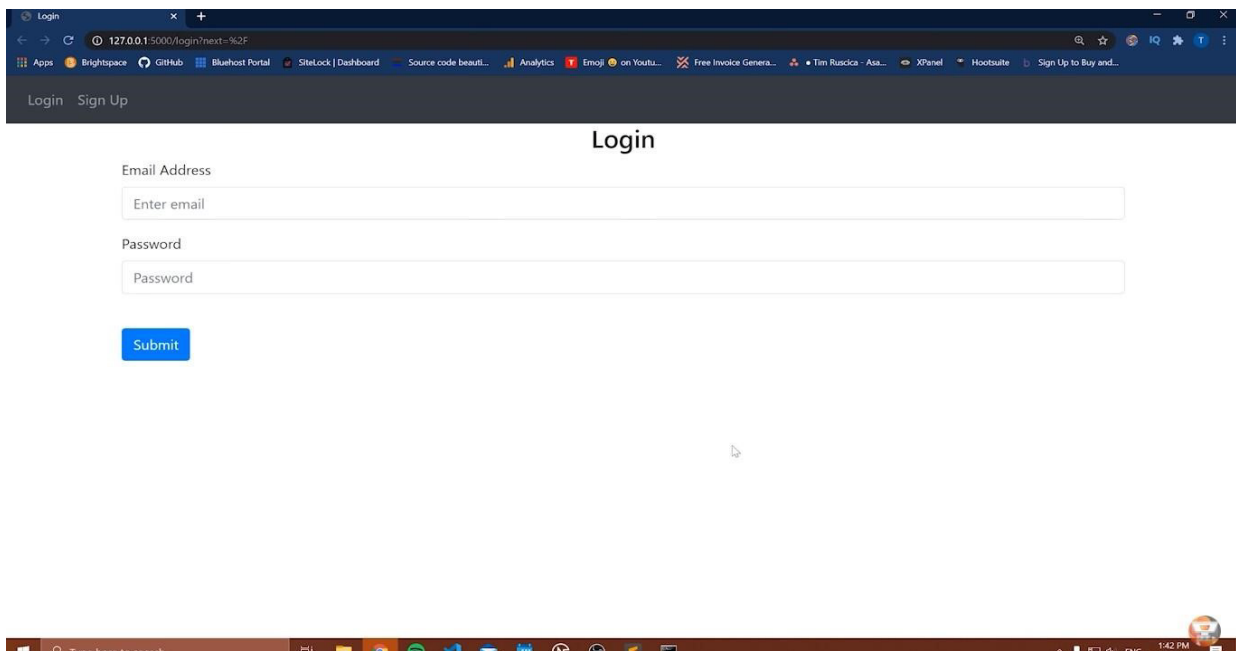
    return render_template("home.html", user=current_user)
    @views.route('/delete-note', methods=['POST']) def delete_note(): note =
    json.loads(request.data) noteld = note['noteld'] note = Note.query.get(noteld) if
        note:
            if note.user_id == current_user.id:
                db.session.delete(note)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

    return jsonify({})

```

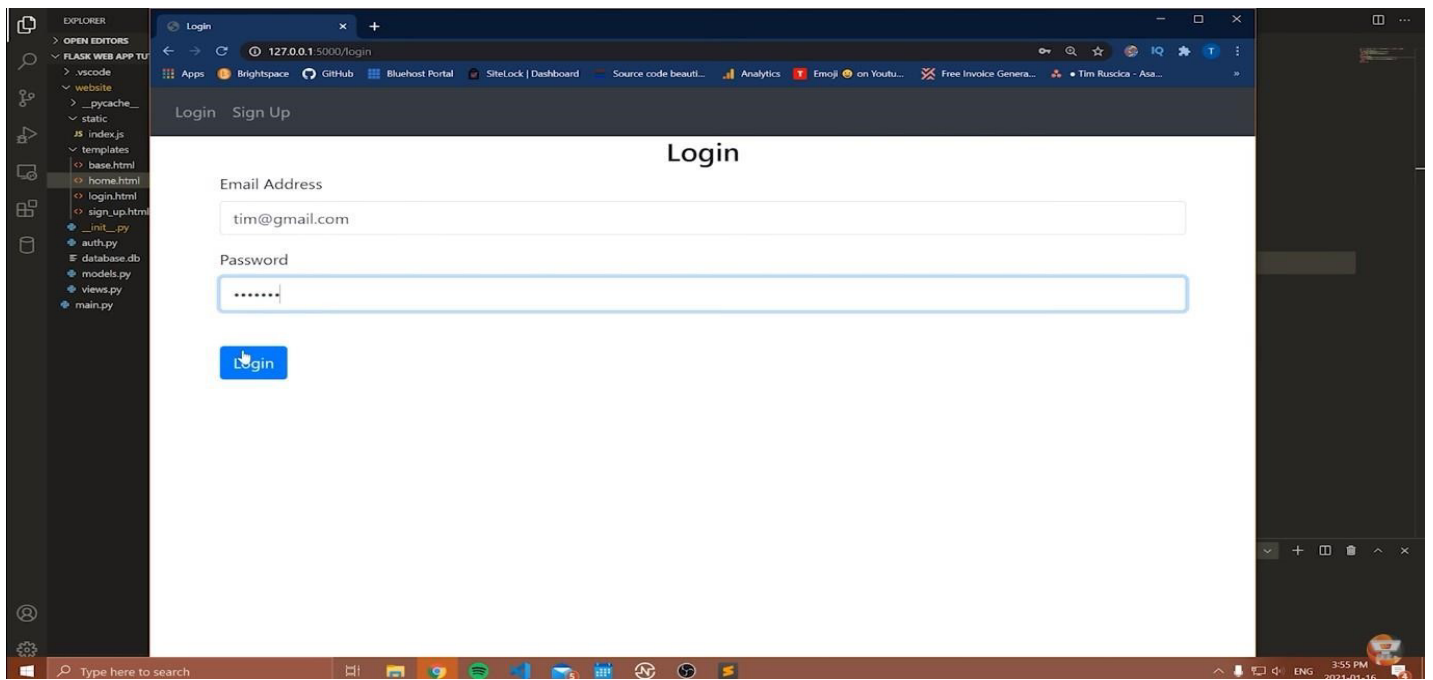
## OUTPUT SCREENSHOTS

**Step 1 :** enter our email address and password



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





After that website redirect you to notes :

