Assignment -2

Assignment Date	20 September 2022
Student Name	Sharmila s
Student Roll Number	822719106036
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"
  />
  k
   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-
KJ3o2DKtlkvYlK3UENzmM7KCkRr/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+76PVCmYI"
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>
{% for note in user.notes %}
 {{ note.data }}
  <button type="button" class="close" onClick="deleteNote({{ note.id }})">
  <span aria-hidden="true">&times;</span>
  </button>
{% endfor %}
<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>
           type="text"
  <input
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>
           type="password"
  <input
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)
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')
```

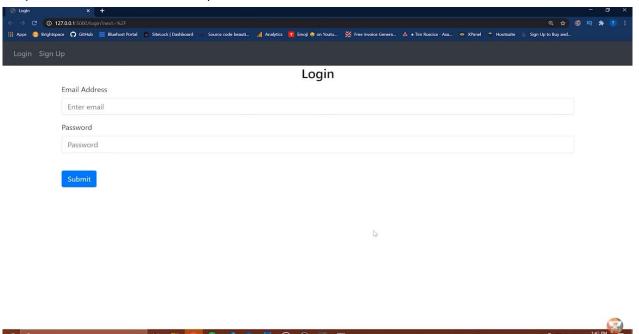
first_name = request.form.get('firstName')

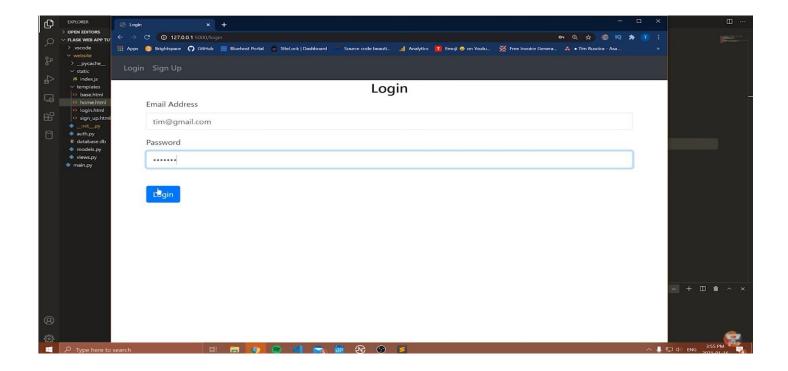
```
password1 = request.form.get('password1')
password2 = request.form.get('password2')
    user = User.query.filter_by(email=email).first()
if user:
      flash('Email already exists.', category='error')
elif len(email) < 4:
      flash('Email must be greater than 3 characters.', category='error')
elif 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():
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





After that website redirect you to notes :

