Assignment -2

Assignment Date	16 November 2022
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Student Roll Number	723619106011
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,</pre>
  initial-scale=1" />
  <link rel="stylesheet"</pre>
        href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
             integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9Muh
   Of23Q9Ifjh" crossorigin="anonymous"
            />
  <link rel="stylesheet"</pre>
   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"> {{
   <button type="button" class="close" data-dismiss="alert"> <span</pre>
    aria-hidden="true">×</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</pre>
    aria-hidden="true">×</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"</pre>
   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"</p>
  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"</pre>
 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">×</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>
  <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
  арр
def create_database(app):
           if not path.exists('website/' + DB_NAME):
```

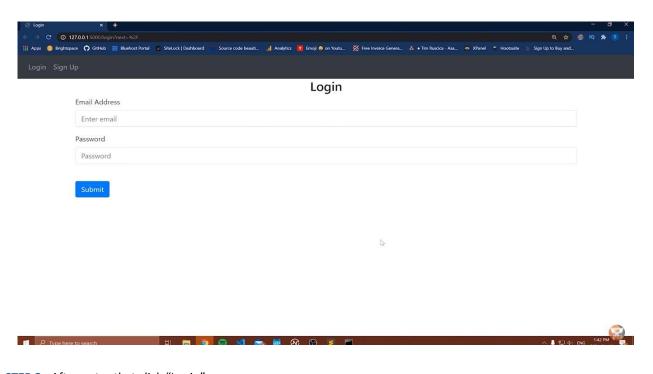
```
print('Created Database!')
                    ***auth.py***
         from flask import Blueprint, render_template, request, flash, redirect, url_for from
         .models import User
         from werkzeug.security import generate password hash, check password hash
         from . import db
         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')
```

db.create_all(app=app)

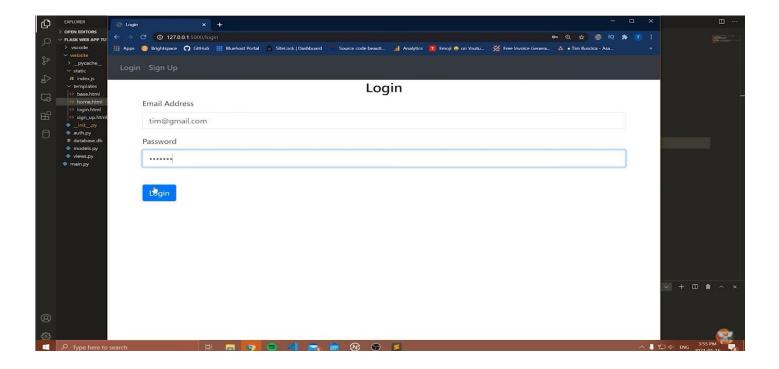
```
elif len(first_name) < 2:
                          flash('First name must be greater than 1 character.',
                category='error')
                        elif password1 != password2:
                          flash('Passwords don\'t match.', category='error')
             elif len(password1) < 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):
           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.pv***
         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')
```

OUTPUT SCREENSHOTS

Step 1: enter our email address and password



STEP 2 : After enter that click "Login"



After that website redirect you to notes :

