Date	2November 2022
Team ID	PNT2022TMID02538
Project Name	Inventory Management System For Retailer

app.py
creating flak application

```
from flask import Flask, render_template, url_for, redirect
from flask_sqlalchemy import SQLAlchemy
from flask_login import UserMixin, login_user, LoginManager, login_required, logout_user,
current_user
from flask_wtf import FlaskForm
from wtforms import StringField, PasswordField, SubmitField
from wtforms.validators import InputRequired, Length, ValidationError
from flask_bcrypt import Bcrypt
from flask import Flask, render_template, redirect, url_for, session
from flask_sqlalchemy import SQLAlchemy
from flask_migrate import Migrate, MigrateCommand
from flask_script import Manager
from flask_uploads import UploadSet, configure_uploads, IMAGES
from flask_wtf import FlaskForm
from wtforms import StringField, IntegerField, TextAreaField, HiddenField, SelectField
from flask_wtf.file import FileField, FileAllowed
from flask_mail import Mail, Message
import random
import smtplib
app = Flask(__name__)
db = SQLAlchemy(app)
@login_manager.user_loader
def load_user(user_id):
    __bind_key__='two'
    return User.query.get(int(user_id))


class User(db.Model, UserMixin):
    __bind_key__='two'
    id = db.Column(db.Integer, primary_key=True)
    username = db.Column(db.String(40), nullable=False, unique=True)
    password = db.Column(db.String(80), nullable=False)


class RegisterForm(FlaskForm):
    __bind_key__='two'
    username = StringField(validators=[
            InputRequired(), Length(min=4, max=40)], render_kw={"placeholder": "Username"})

    password = PasswordField(validators=[
            InputRequired(), Length(min=8, max=20)], render_kw={"placeholder": "Password"})
```

```python
    submit = SubmitField('Register')

    def validate_username(self, username):
        __bind_key__='two'
        existing_user_username = User.query.filter_by(
            username=username.data).first()
        if existing_user_username:
            raise ValidationError(
                'That username already exists. Please choose a different one.')


class LoginForm(FlaskForm):
    __bind_key__='two'
    username = StringField(validators=[
                InputRequired(), Length(min=4, max=40)], render_kw={"placeholder": "Username"})

    password = PasswordField(validators=[
                    InputRequired(), Length(min=8, max=20)], render_kw={"placeholder": "Password"})

    submit = SubmitField('Login')


@app.route('/')
def home():
    return render_template('home.html')


@app.route('/login', methods=['GET', 'POST'])
def login():

    form = LoginForm()
    if form.validate_on_submit():
        user = User.query.filter_by(username=form.username.data).first()
        if user:
            if bcrypt.check_password_hash(user.password, form.password.data):
                login_user(user)
                return redirect(url_for('index'))
    return render_template('login.html', form=form)

'''
@app.route('/dashboard', methods=['GET', 'POST'])
@login_required
def dashboard():
    return render_template('dashboard.html')


@app.route('/logout', methods=['GET', 'POST'])
@login_required
def logout():
    logout_user()
    return redirect(url_for('login'))
'''

@ app.route('/register', methods=['GET', 'POST'])
```

```python
def register():
    __bind_key__='two'
    form = RegisterForm()

    if form.validate_on_submit():
        hashed_password = bcrypt.generate_password_hash(form.password.data)
        new_user = User(username=form.username.data, password=hashed_password)
        db.session.add(new_user)
        db.session.commit()
        return redirect(url_for('login'))

    return render_template('register.html', form=form)


if __name__ == "__main__":
    app.run(debug=True)
```

TEMPLATES:

base. html

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIaxVXM"
crossorigin="anonymous"></script>


<!-- <link rel="stylesheet" href="{{url_for('static', filename='css/style.css')}}"> -->
{% block head%}{% endblock %}

  </head>
  <body>


    <div class="container mt-5">
      {% block body %} {% endblock %}
    </div>
  </body>
</html>
```

index.html- Dashboard page

```html
<!DOCTYPE html>
<html lang="en">

<head>
 <meta charset="UTF-8">
 <meta http-equiv="X-UA-Compatible" content="IE=edge">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Sidebar Menu</title>
 <link href='https://unpkg.com/boxicons@2.0.9/css/boxicons.min.css' rel='stylesheet'>
 <link rel="stylesheet" href="static/css/style.css">
</head>

<body>

<nav>

  <div class="search">
   <i class='bx bx-search'></i>
   <input type="text" class="hide" placeholder="Quick Search ...">
  </div>

  <div class="sidebar-links">
   <ul>
    <div class="active-tab"></div>
    <li class="tooltip-element" data-tooltip="0">
     <a href="#" class="active" data-active="0">
      <div class="icon">
       <i class='bx bx-tachometer'></i>
       <i class='bx bxs-tachometer'></i>
      </div>
      <span class="link hide">Dashboard</span>
     </a>
    </li>
    <li class="tooltip-element" data-tooltip="1">
     <a href="#" data-active="1">
      <div class="icon">
       <i class='bx bx-folder'></i>
       <i class='bx bxs-folder'></i>
      </div>
      <span class="link hide">Products</span>
     </a>
    </li>
    <li class="tooltip-element" data-tooltip="2">
     <a href="#" data-active="2">
      <div class="icon">
       <i class='bx bx-message-square-detail'></i>
       <i class='bx bxs-message-square-detail'></i>
      </div>
      <span class="link hide">Add items</span>
     </a>
```
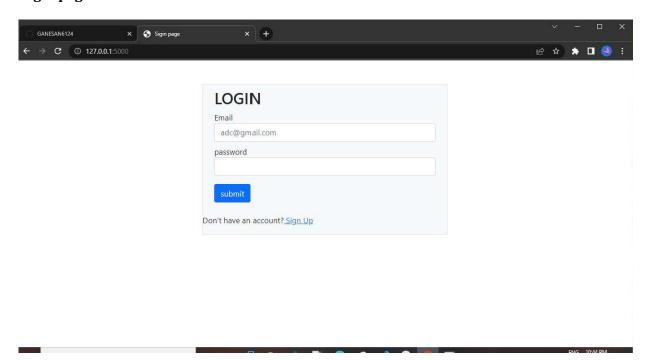
```html
      </li>
      <li class="tooltip-element" data-tooltip="3">
       <a href="#" data-active="3">
        <div class="icon">
         <i class='bx bx-bar-chart-square'></i>
         <i class='bx bxs-bar-chart-square'></i>
        </div>
        <span class="link hide">Remove items</span>
       </a>
      </li>
      <div class="tooltip">
       <span class="show">Dashboard</span>
       <span>Projects</span>
       <span>Messages</span>
       <span>Analytics</span>
      </div>

      <li class="tooltip-element" data-tooltip="1">
       <a href="#" data-active="5">
        <div class="icon">
         <i class='bx bx-help-circle'></i>
         <i class='bx bxs-help-circle'></i>
        </div>
        <span class="link hide">Help</span>
       </a>
      </li>
      <li class="tooltip-element" data-tooltip="2">
       <a href="#" data-active="6">
        <div class="icon">
         <i class='bx bx-cog'></i>
         <i class='bx bxs-cog'></i>
        </div>
        <span class="link hide">Settings</span>
       </a>
      </li>
      <div class="tooltip">
       <span class="show">Tasks</span>
       <span>Help</span>
       <span>Settings</span>
      </div>
     </ul>
    </div>

    <div class="sidebar-footer">
     <a href="#" class="account tooltip-element" data-tooltip="0">
      <i class='bx bx-user'></i>
     </a>
     <div class="admin-user tooltip-element" data-tooltip="1">
      <div class="admin-profile hide">
       <img src="./img/face-1.png" alt="">
       <div class="admin-info">
        <h3>Ganesh</h3>
        <h5>user</h5>
       </div>
```
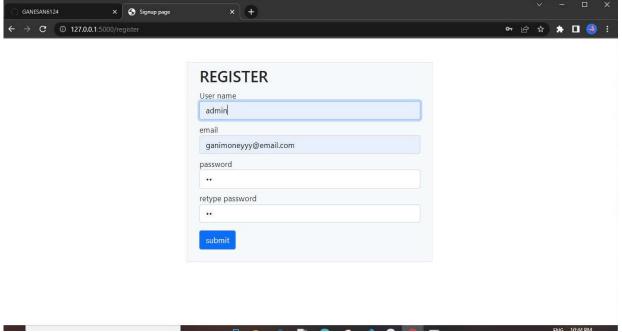
```
        </div>
        <a href="#" class="log-out">
          <i class='bx bx-log-out'></i>
        </a>
      </div>
      <div class="tooltip">
        <span class="show">Ganesh</span>
        <span>Logout</span>
      </div>
    </div>
  </nav>
  <main>
   <h1>My Dashboard</h1>
    </main>
  <script src="static/js/app.js"></script>

</body></html>
```

signin.html –sigin page

```
{% extends 'base.html '%}
{% block head %}
<title>Sigin page</title>
{% endblock%}

{%block body%}

<main class="container">
  <div class="mx-auto mt-5 border bg-light" style="width:500px;">
  <h2 class='mx-4 mt-2'>LOGIN</h2>
  <form action="{{url_for('login') }}" method="post">
    <div class="mx-4 mt-2 text-danger">{{ msg }}</div>
    <div class="my-2 mx-4">
      <label for="username">username</label>
      <input type="text" class="form-control" placeholder="adc@gmail.com" name="username"
required />
    </div>
    <div class="my-2 mx-4">
      <label for="password_1">password</label>
      <input type="password" class="form-control"  name="password_1" required />
    </div>
    <input type="submit" value="submit" class="btn btn-primary my-4 mt-2 mx-4"/>

  </form>
  <p>Don't have an account?<a href="{{ url_for('accessbackend') }}"> Sign
Up</a></div></main></p>

</main>
{% endblock%}
```

signup.html-Registration page

```
{% extends 'base.html '%}
{% block head %}
```

```html
<title>Signup page</title>
{% endblock%}

{%block body%}<main class="container">
  <div class="mx-auto mt-5 border bg-light" style="width: 500px;">
  <h2 class="mx-4 mt-2">REGISTER FORM</h2>
  <div class="mx-4 mt-2 text-danger">{{ meg }}</div>
  <form action="{{url_for('accessbackend') }}" method="post">


<div class="my-2 mx-4">
      <label for="username">User name</label>
      <input type="text" class="form-control" placeholder="Ram" name="username" required/>
    </div>
    <div class="my-2 mx-4">
      <label for="email">email</label>
      <input type="text" class="form-control" placeholder="abc@gmail.com" name="email"
required/>
    </div>
    <div class="my-2 mx-4">
      <label for="password">password</label>
      <input type="password" class="form-control" placeholder="password" name="password"
required/>
    </div>
    <div class="my-2 mx-4">
      <label for="retype">retype password</label>
      <input type="password" class="form-control" placeholder="password" name="retype"
required/>
    </div>

    <input type="submit" value="submit" class="btn btn-primary my-4 my-2 mt-2 mx-4" />
    <div class="note mt-3 text-center"> <!--Register form -->
      <p> already have an account ? please <a href="/signin">signin! </a> </p>

      </div>
  </form>

  </div>
</main>
{% endblock%}
```
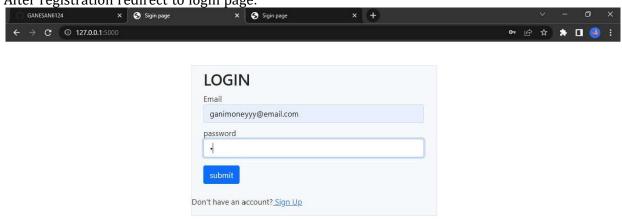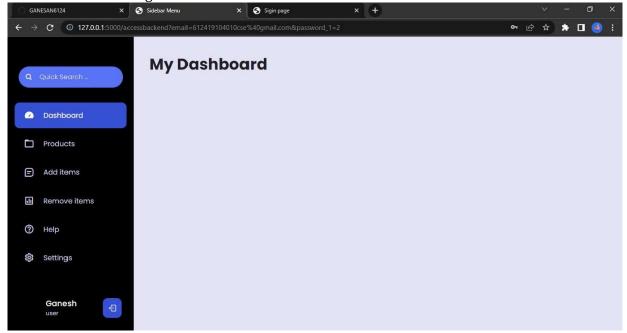
Output:
Login page

Registraion page:

After registration redirect to login page:

After the successful login redirect to the dashboard:

Email comfirmation: