Project Development Phase Delivery of Sprint-2

Date	6November 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 import Flask, render template, redirect, url for, session
from flask sqlalchemy import SQLAlchemy
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
import random
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 kev ='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"})
 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.guery.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'])
  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
<!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">
    <title>{% block title %}{% endblock %}</title>
    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="{{ url_for('static', filename='bs/css/flatly.min.css') }}" />
    <link rel="stylesheet" href="{{ url_for('static', filename='css/styles.css') }}" />
 </head>
 <body>
   {% if admin %}
   <nav class="navbar navbar-default navbar-fixed-top" role="navigation">
      <div class="container-fluid">
       <!-- Brand and toggle get grouped for better mobile display -->
       <div class="navbar-header">
         <button type="button" class="navbar-toggle" data-toggle="collapse" data-target=".navbar-ex1-
collapse">
           <span class="sr-only">Toggle navigation</span>
           <span class="icon-bar"></span>
           <span class="icon-bar"></span>
           <span class="icon-bar"></span>
         </button>
         <a class="navbar-brand" href="{{ url_for('index') }}">Trendy Fashion Store</a>
       </div>
       <!-- Collect the nav links, forms, and other content for toggling -->
       <div class="collapse navbar-collapse navbar-ex1-collapse">
         ul class="nav navbar-nav">
           class="active">
             <a href="{{ url_for('admin') }}"><i class="glyphicon glyphicon-dashboard"></i> Admin
Dashboard</a>
           <a href="{{ url_for('add') }}"><i class="glyphicon glyphicon-plus-sign"></i> Add
Product</a>
           >
             <a href="{{ url for('index') }}"><i class="glyphicon glyphicon-chevron-left"></i> Back To
Front</a>
```

```
</div><!-- /.navbar-collapse -->
     </div>
    </nav>
   {% else %}
    <nav class="navbar navbar-default navbar-fixed-top" role="navigation">
      <div class="container-fluid">
       <!-- Brand and toggle get grouped for better mobile display -->
       <div class="navbar-header">
         <button type="button" class="navbar-toggle" data-toggle="collapse" data-target=".navbar-ex1-</p>
collapse">
           <span class="sr-only">Toggle navigation</span>
           <span class="icon-bar"></span>
           <span class="icon-bar"></span>
           <span class="icon-bar"></span>
         </button>
         <a class="navbar-brand" href="{{ url for('index') }}">Trendy Fashion Store</a>
       </div>
       <!-- Collect the nav links, forms, and other content for toggling -->
       <div class="collapse navbar-collapse">
         ul class="nav navbar-nav navbar-right">
           class="active">
             <a href="{{ url_for('cart') }}">
               <i class="glyphicon glyphicon-shopping-cart"></i> Cart
           </div><!-- /.navbar-collapse -->
     </div>
    </nav>
   {% endif %}
    <div class="container" id="page">
   {% block body %}{% endblock %}
     <footer>
       <div class="row pad">
         <div class="col-lg-12 text-center">
           Copyright © 2017 <strong>Trendy Fashion Store</strong>
         </div>
       </div>
      </footer>
   </div>
    <!-- iQuery -->
    <script src="{{ url_for('static', filename='bs/js/jquery.min.js') }}"></script>
    <!-- Bootstrap JavaScript -->
    <script src="{{ url_for('static', filename='bs/js/bootstrap.min.js') }}"></script>
 </body>
</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">
 <link rel="stylesheet" href="{{ url_for('static', filename='css/homestyles.css') }}" />
 <title>Home</title>
</head>
<body>
<div class="login">
  <form id="login" method="" action="">
    <center><a href="{{ url_for('login') }}">Login Page</a><br></center>
    <center><a href="{{ url_for('register') }}">Register Page</a>
    <br><br>>
  </form>
<script>
 window.watsonAssistantChatOptions = {
    integrationID: "1e1722cd-90ae-4848-9eb2-e559c5ab71c8", // The ID of this integration.
    region: "jp-tok", // The region your integration is hosted in.
    serviceInstanceID: "0738c83e-02d9-4636-8b32-0908a70361e3", // The ID of your service
instance.
    onLoad: function (instance) { instance.render(); }
 setTimeout(function () {
    const t = document.createElement('script');
    t.src = "https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
    document.head.appendChild(t);
 });
</script>
</body>
</html>
  signin.html -sigin page
<!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">
 <link rel="stylesheet" href="{{ url_for('static', filename='css/loginstyles.css') }}" />
 <title>Login</title>
</head>
```

```
<body>
<h2>Login Page</h2><br>
<div class="login">
  <form id="login" method="POST" action="">
  {{ form.hidden_tag() }}
    <label><b>User Name
      </b>
    </label>
    {{ form.username }}
    <br><br><
    <label><b>Password
      </b>
    </label>
    {{ form.password }}
    <br><br><
    <center>{{ form.submit }}</center>
    <br><br><
  </form>
<script>
  window.watsonAssistantChatOptions = {
   integrationID: "1e1722cd-90ae-4848-9eb2-e559c5ab71c8", // The ID of this integration.
   region: "jp-tok", // The region your integration is hosted in.
   serviceInstanceID: "0738c83e-02d9-4636-8b32-0908a70361e3", // The ID of your service instance.
   onLoad: function (instance) { instance.render(); }
 };
  setTimeout(function () {
    const t = document.createElement('script');
    t.src = "https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
    document.head.appendChild(t);
 });
</script>
</body>
</html>
  signup.html-Registration page
<!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">
  <link rel="stylesheet" href="{{ url_for('static', filename='css/loginstyles.css') }}" />
  <title>Register</title>
</head>
<body>
<h2>Register Page</h2><br>
```

```
<div class="login">
  <form id="login" method="POST" action="">
    {{ form.hidden_tag() }}
    <label><b>User Name
      </b>
    </label>
    {{ form.username }}
    <br><br><
    <label><b>Password
      </b>
    </label>
    {{ form.password }}
    <br><br><
    <center>{{ form.submit }}</center>
    <br><br><
  </form>
<script>
  window.watsonAssistantChatOptions = {
    integrationID: "1e1722cd-90ae-4848-9eb2-e559c5ab71c8", // The ID of this integration.
    region: "jp-tok", // The region your integration is hosted in.
   serviceInstanceID: "0738c83e-02d9-4636-8b32-0908a70361e3", // The ID of your service instance.
   onLoad: function (instance) { instance.render(); }
 };
  setTimeout(function () {
   const t = document.createElement('script');
    t.src = "https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
    document.head.appendChild(t);
 });
</script>
</body>
</html>
Cart.html
{% extends "base.html" %}
{% block title %}Cart | Trendy Fashion Store{% endblock %}
{% block body %}
<div class="row">
       <div class="col-lg-8">
               <h3 class="bold">
                      <i class="glyphicon glyphicon-shopping-cart"></i> Your Shopping Cart
               </h3>
               <div class="panel panel-primary">
                      <div class="panel-body">
                             {% for product in products %}
                             <div class="row">
                                     <div class="col-lg-4">
                                            <div class="col-xs-12 col-sm-12 col-md-12 col-lg-12">
                                                    <div class="thumbnail thumbnail-q">
```

```
<img src="{{ product['image'] }}" alt="">
                                              </div>
                                       </div>
                                 </div>
                                <div class="col-lg-4">
                                       <h3 class="bold">{{ product['name'] }}</h3>
                                       ${{ product['price'] / 100 }}
                                       <br />
                                       >
                                              <a href="{{ url_for('remove_from_cart',
index=product['index']) }}">
                                              <button type="button" class="btn btn-danger btn-
xs">
                                                    <i class="glyphicon glyphicon-trash"></i>
                                              </button></a>
                                       </div>
                                 <div class="col-lg-2">
                                       <h3>Quantity</h3>
                                       >
                                             {{ product['quantity'] }}
                                       </div>
                                <div class="col-lg-2">
                                       <h3>Total</h3>
                                       >
                                              <strong>&dollar;{{ product['total'] /
100 }}</strong>
                                       </div>
                          </div>
                          {% endfor %}
                   </div>
             </div>
      </div>
      <div class="col-lg-4">
             <h3 class="bold">
                   <i class="glyphicon glyphicon-th-list"></i> Cart Summary
             </h3>
             <div class="panel panel-primary">
                   <div class="panel-body">
                          Current Cart Value
                   </div>
                   {{ quantity_total }} Items <strong class="pull-
right">${{ grand_total / 100 }}</strong>
                                >
                                       24hr Shipping <strong class="pull-
right">$10</strong>
                                Total <strong class="pull-
```

```
right">${{ grand_total_plus_shipping / 100 }}</strong>
                             <div class="panel-footer">
                             <a href="{{ url_for('checkout') }}" class="btn btn-primary btn-sm">
                                    Checkout <i class="glyphicon glyphicon-chevron-right"></i>
                             </a>
                             <a href="{{ url_for('index') }}" class="btn btn-link btn-sm pull-right">
                                     <i class="glyphicon glyphicon-chevron-left"></i> Continue
Shopping
                             </a>
                     </div>
              </div>
       </div>
</div>
{% endblock %}
Checkout.html
{% extends "base.html" %}
{% block title %}Checkout | Trendy Fashion Store{% endblock %}
{% block body %}
<div class="row">
       <div class="col-lg-8">
              <h3 class="bold">
                      <i class="glyphicon glyphicon-pencil"></i> Shipping Information
              </h3>
              <div class="panel panel-primary">
                      <form method="POST" action="{{ url_for('checkout') }}">
                      <div class="panel-body">
                             <div class="row">
                                     <div class="col-lg-12">
                                            <h4 class="bold">Personal Information</h4>
                                     </div>
                                    {{ form.csrf_token }}
                                     <div class="col-lg-6">
                                            <div class="form-group">
                                                   <label>Firstname</label>
                                                   {{ form.first_name(class='form-control') }}
                                            </div>
                                            <div class="form-group">
                                                   <label>Lastname</label>
                                                   {{ form.last_name(class='form-control') }}
                                            </div>
                                     </div>
                                     <div class="col-lg-6">
                                            <div class="form-group">
                                                   <label>Phone Number</label>
                                                   {{ form.phone_number(class='form-control') }}
                                            </div>
                                            <div class="form-group">
                                                   <label>Email</label>
                                                   {{ form.email(class='form-control') }}
                                            </div>
                                     </div>
```

```
</div>
                      <div class="row">
                              <div class="col-lg-12">
                                     <h4 class="bold">Address</h4>
                              </div>
                              <div class="col-lg-6">
                                     <div class="form-group">
                                             <label>Address</label>
                                             {{ form.address(class='form-control') }}
                                     </div>
                                     <div class="form-group">
                                             <label>City</label>
                                             {{ form.city(class='form-control') }}
                                     </div>
                              </div>
                              <div class="col-lg-6">
                                     <div class="form-group">
                                             <label>State</label>
                                             {{ form.state(class='form-control') }}
                                     </div>
                                     <div class="form-group">
                                             <label>Country</label>
                                             {{ form.country(class='form-control') }}
                                     </div>
                              </div>
                      </div>
                      <div class="row">
                              <div class="col-lg-12">
                                     <h4 class="bold">Payment</h4>
                              </div>
                              <div class="col-lg-6">
                                     <div class="form-group">
                                             <label>Payment Option</label>
                                             {{ form.payment_type(class='form-control') }}
                                     </div>
                              </div>
                      </div>
               </div>
               <div class="panel-footer">
                      <button type="submit" class="btn btn-primary btn-sm">
                              Submit My Order
                      </button>
               </div>
               </form>
       </div>
</div>
<div class="col-lg-4">
       <h3 class="bold">
               <i class="glyphicon glyphicon-th-list"></i> Cart Details
       </h3>
       <div class="panel panel-primary">
               <div class="panel-body">
                      Current Cart Value
```

```
</div>
                 class="list-group-item">
                            >
                                  {{ quantity_total }} Items <strong class="pull-
right">${{ grand_total / 100 }}</strong>
                            >
                                  24hr Shipping <strong class="pull-
right">$10</strong>
                            class="list-group-item">
                            Total <strong class="pull-
right">${{ grand_total_plus_shipping / 100 }}</strong>
                      </div>
           <div class="panel panel-primary">
                 <div class="panel-heading">
                      <h3 class="panel-title">Benefits</h3>
                 </div>
                 <div class="panel-body">
                      Some of the benefits of shopping with us include:
                 </div>
                 Buyer Protection
                      Next Day Delivery
                      Flexible Payment Options
                      7day Money Back Guarantee
                 </div>
     </div>
</div>
{% endblock %}
Product.html
{% extends "base.html" %}
{% block title %}View Product | Trendy Fashion Store{% endblock %}
{% block body %}
<div class="row">
     <div class="col-lg-12">
           >
                      <a href="{{ url_for('index') }}">Home</a>
                 View Product
           </div>
</div>
<div class="row pad">
     <div class="col-lg-5">
           <div class="col-xs-12 col-sm-12 col-md-12 col-lg-12">
                 <div class="thumbnail">
```

```
<img src="{{ product.image }}" alt="">
                     </div>
              </div>
       </div>
       <div class="col-lg-7">
              <div class="panel panel-primary">
                     <div class="panel-heading">
                             <h3 class="panel-title">Product Details</h3>
                     </div>
                      <div class="panel-body">
                             <h3>{{ product.name }} &nbsp;
                                    {% if product.stock > 0 %}
                                    <small>(In Stock)</small>
                                    {% else %}
                                    <small>(Out of Stock)</small>
                                    {% endif %}
                             </h3>
                             <h4>&dollar;{{ product.price / 100 }}</h4>
                             {{ product.description }}
                             <hr />
                             <form action="{{ url_for('add_to_cart') }}" method="POST">
                             {% if product.stock > 0 %}
                             <div class="row">
                                    <div class="col-lg-4">
                                            <div class="row">
                                                   <div class="col-lg-12">
                                                          Quantity
                                                   </div>
                                                   <div class="col-lg-12">
                                                          {{ form.csrf_token }}
                                                          {{ form.quantity(class='form-control',
type='number', min=1, max=product.stock, step=1, value=1) }}
                                                          {{ form.id(value=product.id) }}
                                                   </div>
                                           </div>
                                    </div>
                             </div>
                             {% endif %}
                     </div>
                     <div class="panel-footer">
                             {% if product.stock > 0 %}
                             <button type="submit" class="btn btn-primary">
                                    <i class="glyphicon glyphicon-shopping-cart"></i> Add To Cart
                             </button>
                             {% endif %}
                     </div>
                      </form>
              </div>
              <div role="tabpanel">
                     <!-- Nav tabs -->
                     ul class="nav nav-tabs" role="tablist">
```

```
<a href="#description" aria-controls="description" role="tab" data-
toggle="tab">Product Description</a>
                             role="presentation">
                                    <a href="#shipping" aria-controls="shipping" role="tab" data-
toggle="tab">Shipping Details</a>
                     <!-- Tab panes -->
                     <div class="tab-content">
                             <div role="tabpanel" class="tab-pane active" id="description">
                                    <h3>Product Description</h3>
                                    {{ product.description }}
                             </div>
                             <div role="tabpanel" class="tab-pane" id="shipping">
                                    <h3>Shipping Details</h3>
                                    $10 Flat Rate
                             </div>
                     </div>
              </div>
       </div>
</div>
{% endblock %}
```

Output: Login page:

