NALAIYA THIRAN REPORT
(IBM)

ON

SMART FASHION RECOMMENDER APPLICATION

Submitted by

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NOV - 2022

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ABSTRACT

On e-commerce platforms, where numerouschoices are available, an efficient recommendation system is requiredto sort, order, and efficiently convey relevant product content or information to users. Fashion applications have seen tremendous growth and are now one of the most used programs in the e-commerce field. The needs of people are continuously evolving,creating room for innovation among the applications. We are implementing such a chat bot, which is fed with the knowledge of the application's algorithm and helpsthe user completely from finding their needs to processing the payment and initiating delivery. It works as anfilter search that can bring the user what they want with the help of pictorial and named representation.

1. INTRODUCTION

1.1 Project Overview:

A recommendation system is a system that is programmed to predict future preferable items from a large set of collections. A recommendation system works either by using user preferences or by using the itemsmost preferred by all users. The main challenge in building a fashion recommendation system is that it is a very dynamic industry. It changes very often when it comes to seasons, festivals, pandemic conditions like Covid19 and many more. Recommendation generation is to generate recommendations, our proposed approach uses Sklearn Nearest neighbours Oh Yeah. This allows us to find the nearest neighbours for the given input image. The similarity measure used in this Projectis the Cosine Similarity measure.The top 5 recommendations are extracted from the databaseand their images are displayed.

1.2. Purpose:

Recommender system has the ability to predict whether a particular user would prefer an item or not based on the user's profile. Recommender systems are beneficial to both service providers and users .They reduce transaction costs of findingand selecting items in an online shoppingenvironment. Recommender Systems are often used to solve different complex

problems in this scenario, such as social fashion-based recommendations (outfits inspired by influencers), product recommendations, or size and fit recommendations.

The main objective of this application is to provide better interactivity with the user and to reduce navigating pages to find appropriate products. This can be done with a new innovative solution through which user can directly do his/her online shopping based on their choice without any search. It can be doneby using the chatbot. These attributes are then fed to a similarity model to retrievethe most closest similarproducts as recommendation.

2. LITERATURE SURVEY

2.1 EXISTING PROBLEM

In E-commerce websites, users need to search for products and navigate across screens to view the product, add them to the cart, and order products. The user searches for the requiredproduct but in return it might leads to the suggestion of irrelevant products. The process of time consumption is quite tediousand there is a lack of data analyticscapability in the existingsystem.

(1) Fashion Recommendation Systems, Models And Methods

SamitChakraborty,Md.Saiful Hoque:2021

Recommendation system (RS) has also been defined as an e-commerce tool, which helps consumers search based on knowledge that is related to a consumer's choices and preferences. There are severalAlgorithmic Models used in Fashion Recommendation Systems. The study of algorithmic models revealed that researchers achievedbetter recommendation accuracywhen combining multiplealgorithms and techniques together rather than using a single algorithm-based baseline model.

(2) Design and Implementation of Clothing
Fashion StyleRecommendation Systemusing
Deep Learning

-Muhammad KHALID , Mao KEMING and Tariq HUSSAIN : 2021

The present paper presents the development of a system that recognizes fashion similar images. This can be accomplished by implementing an already existing CNN model with transfer learning for cloth image recognition using different libraries. For this purpose,a plan is created for collecting data and for developing the steps needed for preprocessing and cleaning up the data. Account featureslike patterns, machine,fabric, style etc are taken. After extensive preprocessing and cleaning of data in a dataset, the model of stacked CNN to predict the features specific to these attributes is constructed and to train the models

with the dataset to generate accurate predictions regarding almost all forms of images

(3) Image-based fashion recommender systems

- Shaghayegh Shirkhani : 2021

Focusing on image-based fashion recommender systems, a four main tasks are identified in fashion recommender systems, bringing their characteristics to the fore, including cloth-item retrievals, Complementary item recommendation, Outfit recommendation, and Capsule wardrobes. The studies which have been conducted in each category also have been introduced. In addition, the evolvement trajectory of image-based fashion recommender systems are provided , which consists of three main eras, in addition to considerations of the most recent advancements in computer vision and deep learning-based methods.Finally, the DL-based fashion recommender systems based on employing one single neural network or deep hybrid neural networks with highlighting the methods they used and the input are categorized.

2.2. Reference

i. Barnard, M. Fashion as Communication, 2nd ed.; Routledge: London, UK, 2008.
ii. Chakraborty, S.; Hoque, S.M.A.;Kabir, S.M.F. Predicting fashion trend using runway images: Application of logistic regressionin trend

forecasting. Int. J. Fash. Des. Technol.Educ. 2020, 13, 376–386, doi:10.1080/17543266.2020.1829096.

iii. Karmaker Santu, S.K.; Sondhi, P.; Zhai, C. On application of learning to rank for e-commerce search. In Proceedings of the 40th International ACM SIGIR Conference on Research and Development in Information Retrieval, Shinjuku Tokyo Japan, 7–11 August 2017; pp. 475–484, doi:10.1145/3077136.3080838.

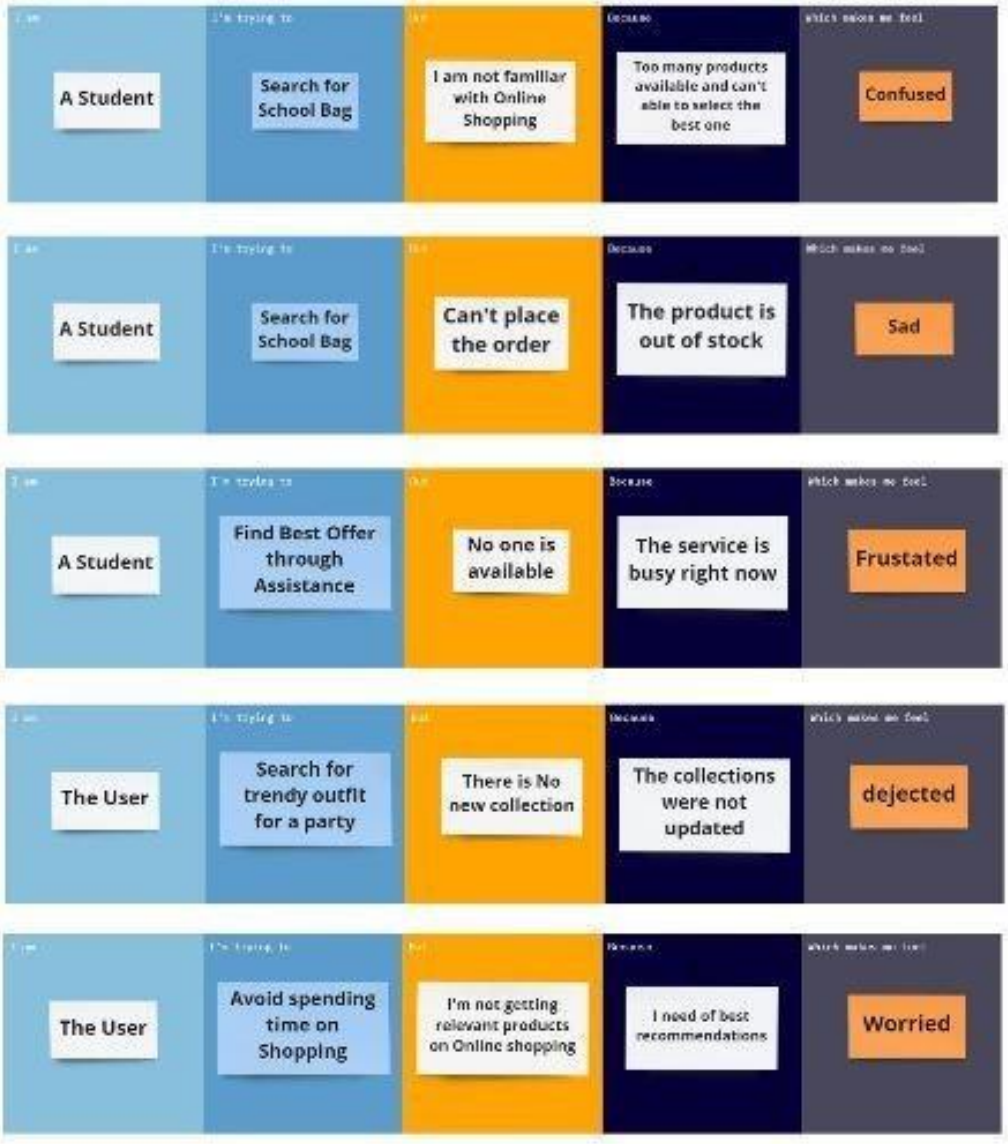
iv. Garude, D.; Khopkar, A.; Dhake, M.; Laghane, S.; Maktum, T. Skin- tone and occasionoriented outfit recommendation system.SSRN Electron. J. 2019, doi:10.2139/ssrn.3368058.

v. Kang, W.-C.; Fang, C.; Wang, Z.; McAuley, J. Visually-aware fashion recommendation and design with generative image models. In Proceedings of the 2017 IEEE International Conference on Data Mining (ICDM), New Orleans, LA, USA, 18–21 November2017; pp. 207–216, doi:10.1109/ICDM.2017.30.

vi. Sachdeva, H.; Pandey, S. Interactive Systems for Fashion Clothing Recommendation. In Emerging Technology in Modelling and Graphics; Mandal, J.K., Bhattacharya, D., Eds.; Springer: Singapore,

2020; Volume937, pp. 287–294,doi:10.1007/978-981-13-7403-6_27.

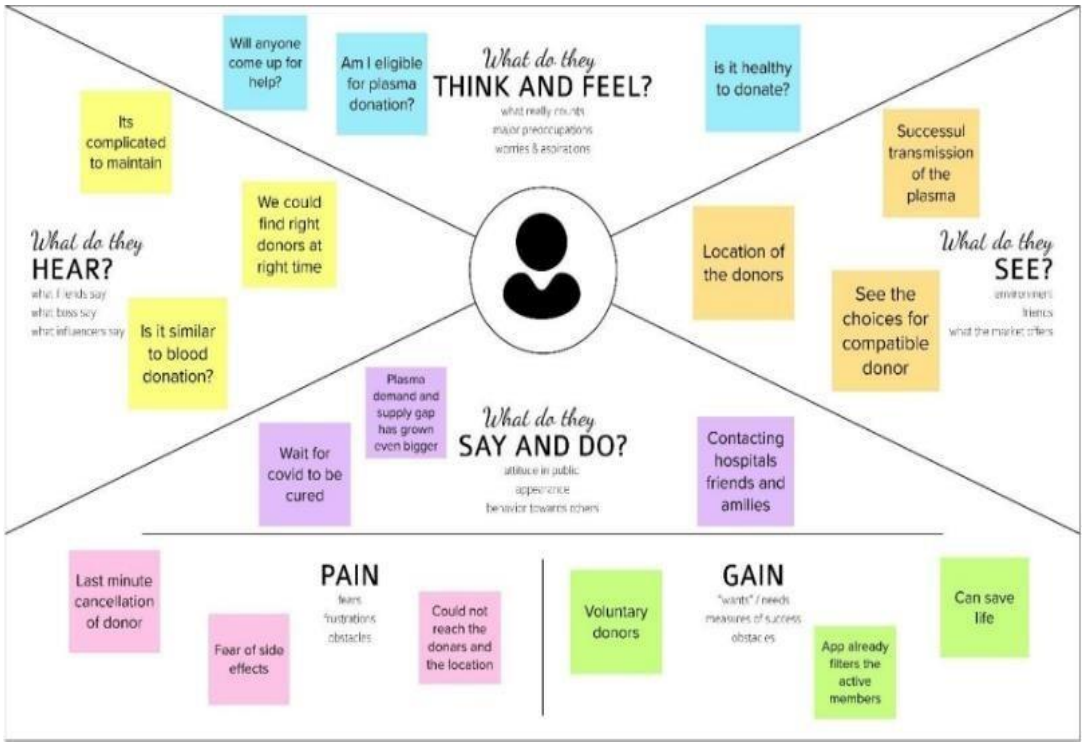
2.3. Problem Statement Definition:



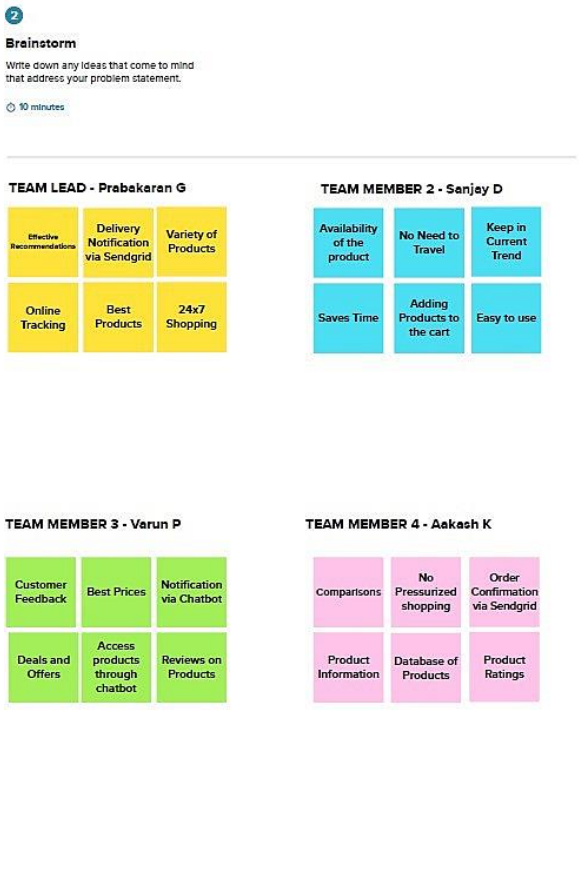
3. IDEATION & PROPOSED SOLUTION

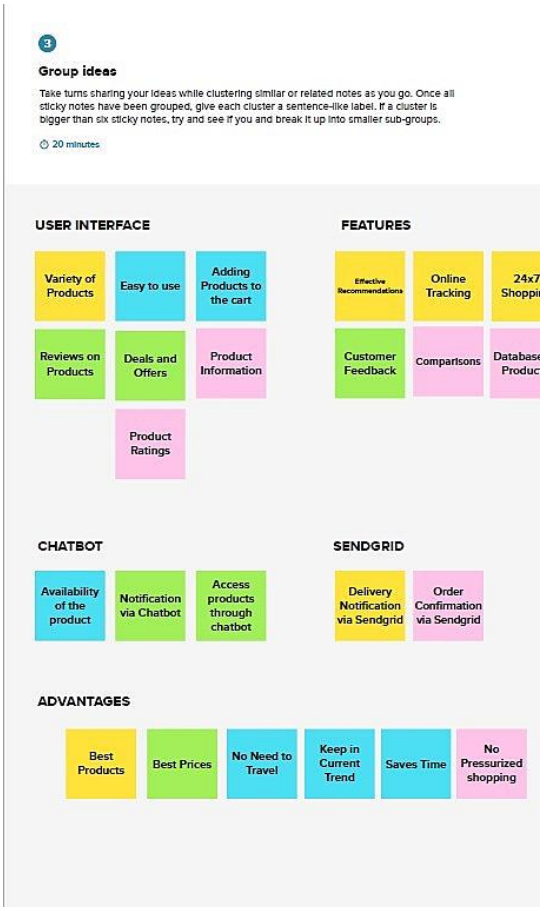
3.1. Empathy Map Canvas:

An empathy map is a simple,easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.It is a useful tool to helps teams better understand their users.Creating an effective solutionrequires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective alongwith his or her goals and challenges.



3.2. Ideation & Brainstorming:



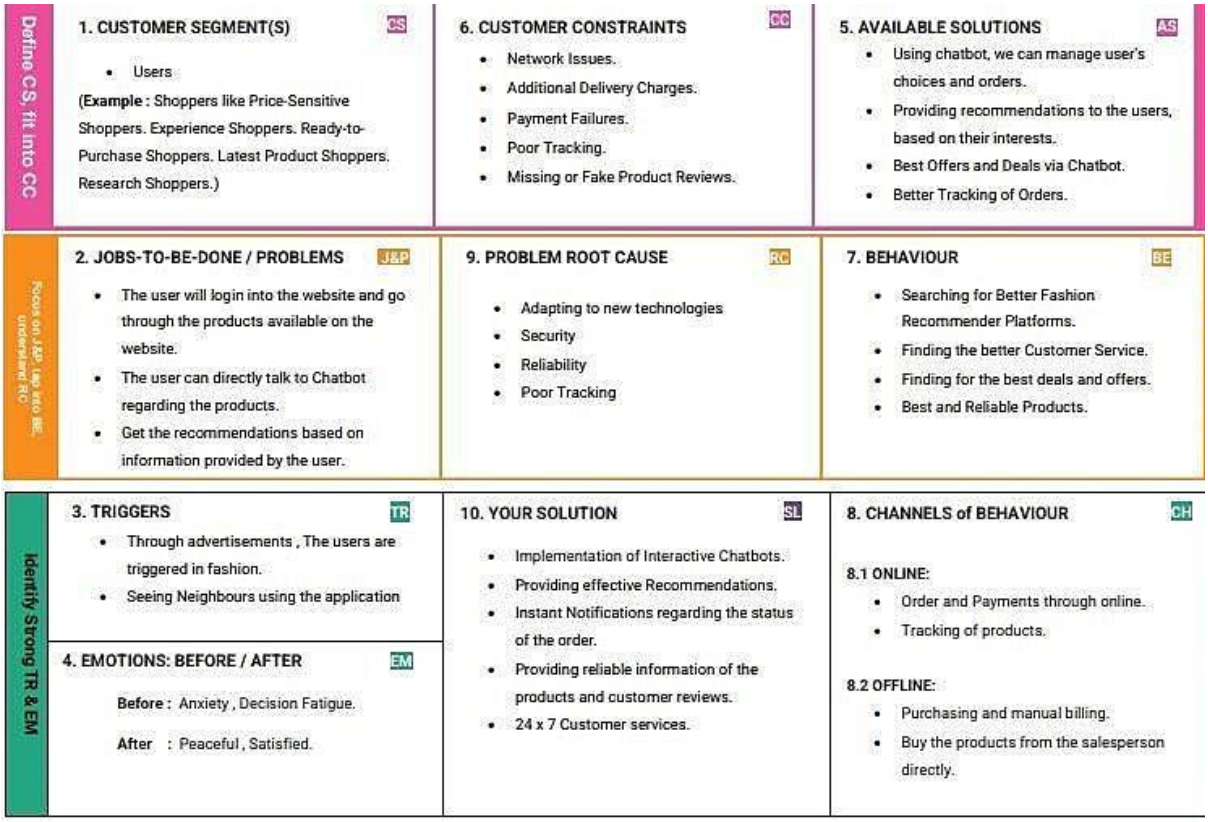


3.3. Proposed Solution:

S.NO.	Parameter	Description
1.	Problem Statement (Problemto besolved)	In E-commerce websites, users need to search for products and navigate acrossscreens to viewthe products. It may also leads to irrelevant product suggestions.
2.	Idea/Solutiondescription	The smart fashionrecommender application leverages the use of a chat bot to interact with the users,gather information abouttheir preferences, and recommend suitable products to the users
3.	Novelty/Uniqueness	The Usersgive preferences to the ChatBot which helpsto find theirrequired products.
4.	SocialImpact/ CustomerSatisfacti on	The user-friendly interface make the usersto find their products quicklywhich saves time as wellas money.

5.	BusinessModel(RevenueModel)	The chat bot recommends the products best suited for the customer. The customer buysthe product and generates revenue but the use of the application is free of cost.
6.	Scalabilityofthe Solution	The scalability can be increased by increasing the number of products and also accuracy of the product suggestions.

3.4. Problem SolutionFit:



4. REQUIREMENT ANALYSIS

4.1. Functional Requirements:

i. Sign up as user
ii. Confirmation mail received by user afterregistered
iii. Login of admin
iv. Change personal,contact details by donor himself
v. Change personal,contact details by admin
vi. Access Chat Bot by User
vii. Send plasma request details

4.2 Non-Functional Requirement:

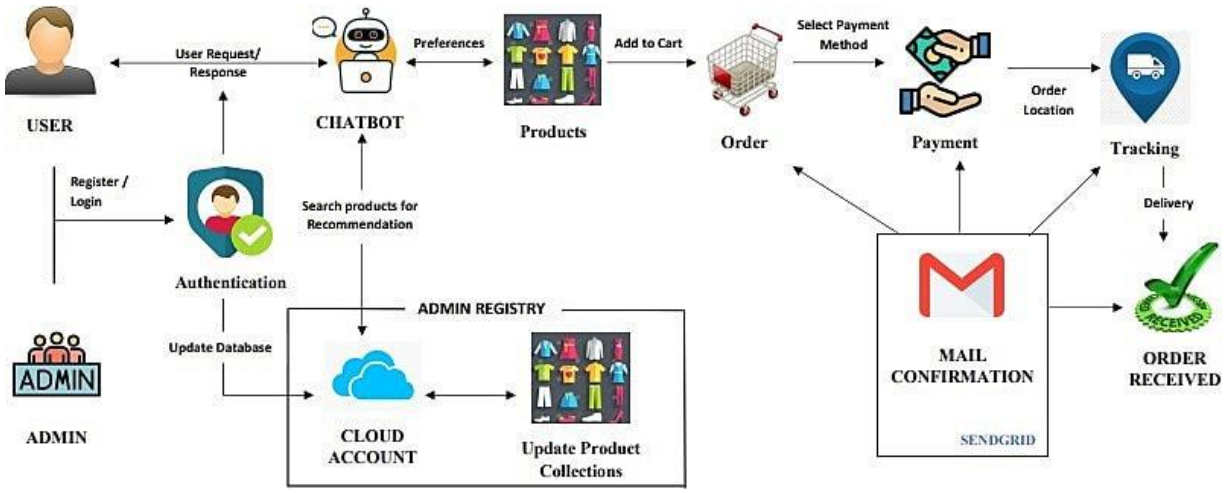
1. **Performance:** Application should be designed and developed in such a way thatit should not utilize too many resources.
2. **Usability:** Usability defines how well the application meets the requirements of the user and consumer by being intuitive, easy to localize and globalize, providing good access for disabled users, and resulting in a good overall user experience.
3. **Secure:** Login system should be safe and secure.

5. PROJECT DESIGN

5.1 Data Flow Diagram & User Stories:

5.1 Data Flow Diagram:

A Data Flow Diagram(DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirements graphically. It shows how data enters and leaves the system, what changes the information and where data is stored.

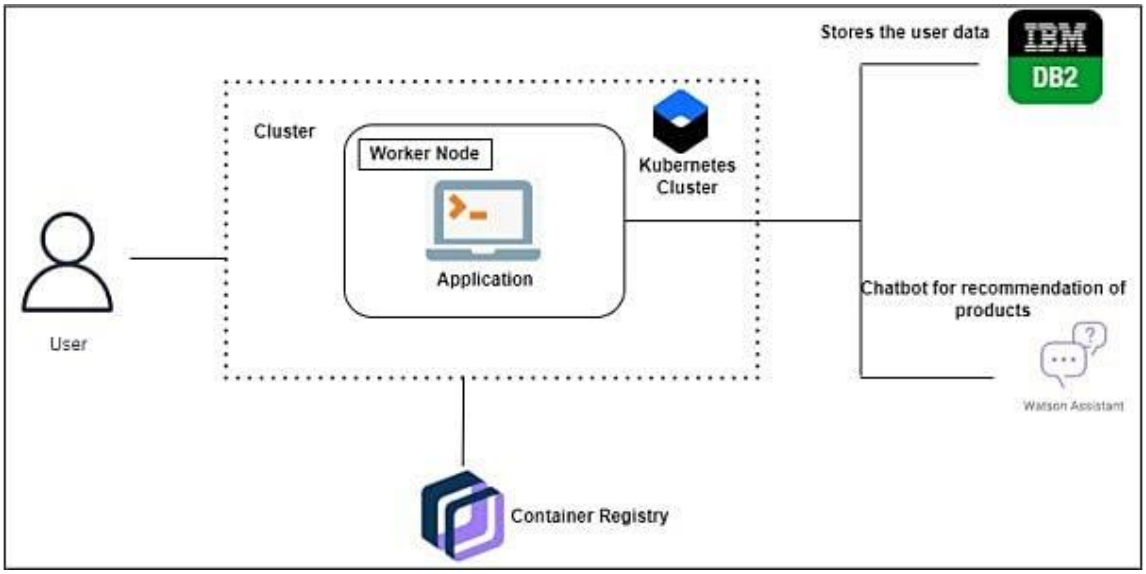


5.3 USER STORIES:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile/Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail	I can see the Dashboard	Medium	Sprint-1
	Login	USN-4	As a user, I can log into the application by entering email & password	I can see the Dashboard	High	Sprint-1
	Dashboard	USN-5	As a user, I can see the available products in the dashboard.	I can order the products	Medium	Sprint-2
		USN-6	As a user, I can access the Chatbot	I can interact with the Chatbot	High	Sprint-2
	Chatbot	USN-7	As a user, I provide my preferences to the Chatbot	I can order the products that I need	High	Sprint-3
	Notifications	USN-8	As a user, I can receive notifications about the status of the order.	I can access the status through email or app	High	Sprint-4
Administrator	Login	USN-1	As an admin, I can log into the administrator login portal.	I can access the admin cloud.	High	Sprint-1
	Cloud	USN-2	As an admin, I can update the products in the Cloud database.	I can manage the Cloud services	High	Sprint-2
	Order Status	USN-3	As an admin, I can confirm the order placement	I can manage the order confirmation	High	Sprint-3
		USN-4	As an admin, I can update the status of the order	I can manage the order status	High	Sprint-3
	Mail	USN-5	As an admin, I can update the status through email to the users	I can send mail to users	High	Sprint-4

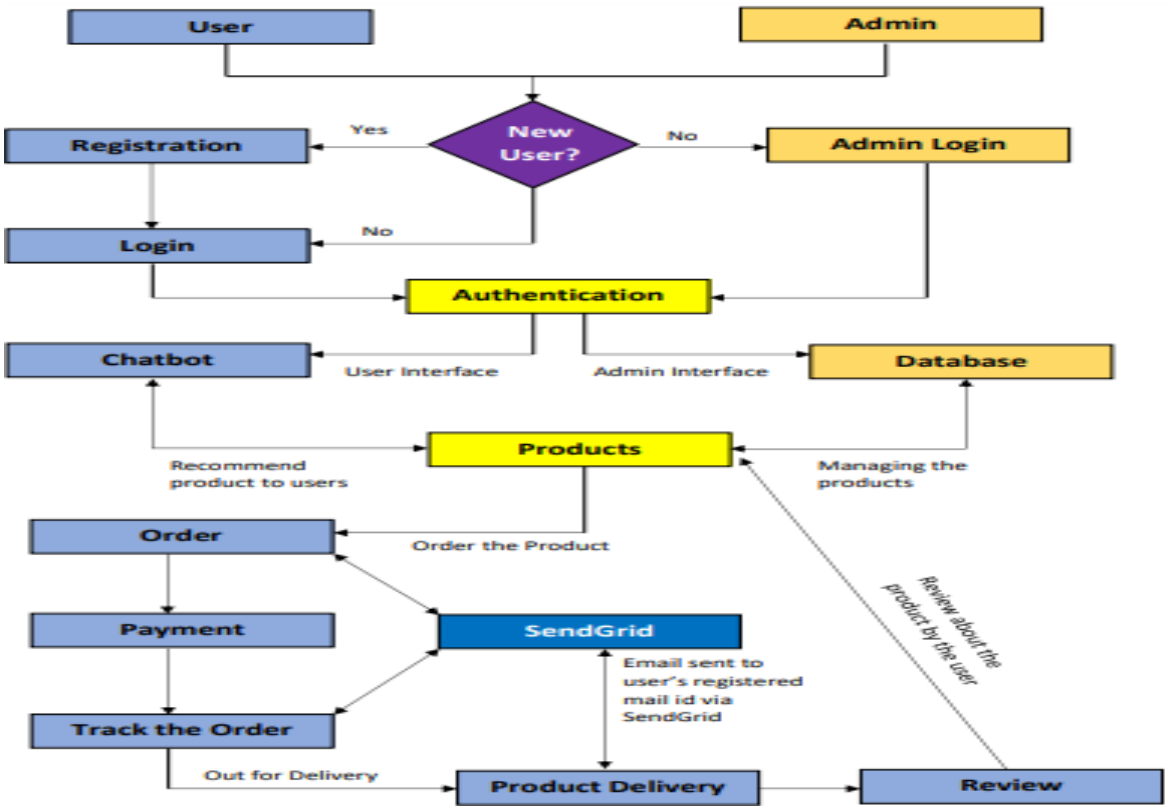
5.2 Solutions & Technical Architecture

Solution Architecture



Technical Architecture:

The Deliverable shall includethe architectural diagramas below



6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation:

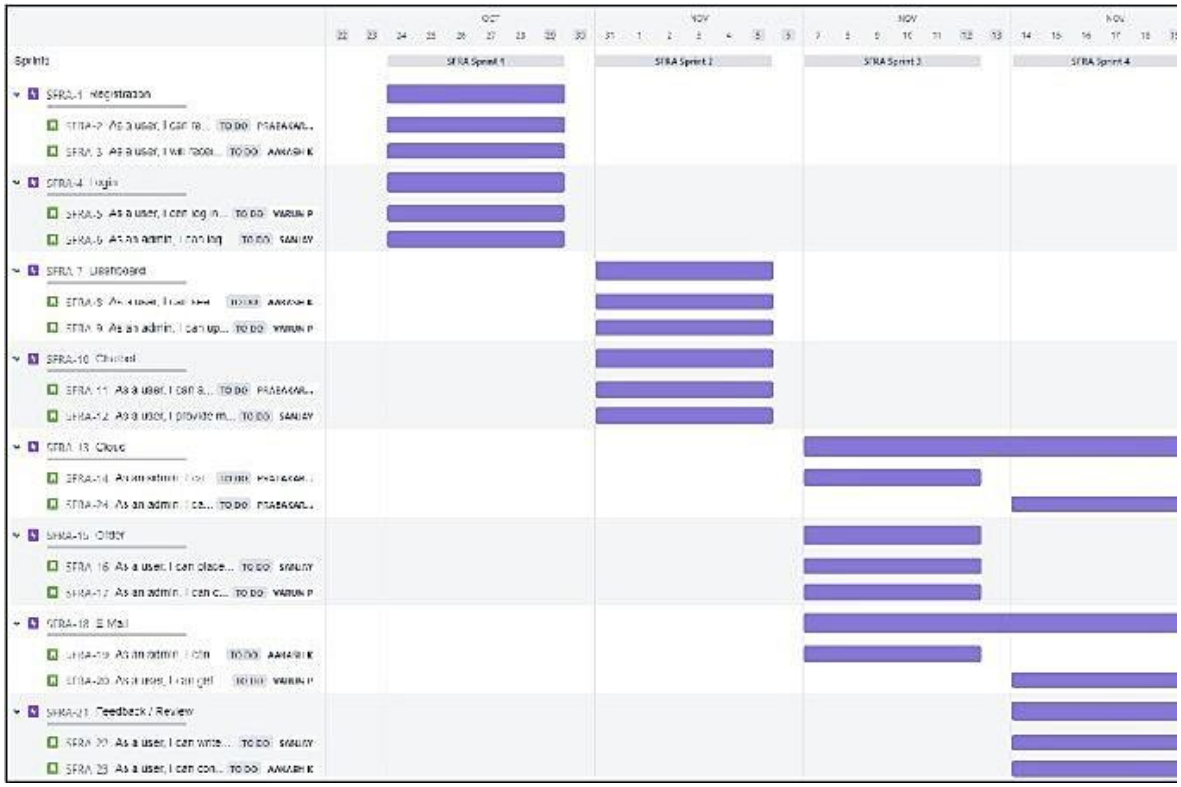
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	5	High	Prabakaran G
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Aakash K
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password	5	High	Varun P
Sprint-1		USN-4	As an admin, I can log into the admin portal	5	High	Sanjay D
Sprint-2	Dashboard	USN-5	As a user, I can see the available products in the dashboard	4	Medium	Aakash K
Sprint-2		USN-6	As an admin, I can update the product details and manage reviews of the product	5	High	Varun P
Sprint-2	Chatbot	USN-7	As a user, I can access the Chatbot	7	High	Prabakaran G
Sprint-2		USN-8	As a user, I provide my preferences to the Chatbot	4	High	Sanjay D

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Cloud	USN-9	As an admin, I can update the products in the Cloud database.	6	High	Prabakaran G
Sprint-3	Order	USN-10	As a user, I can place the order and make payment.	5	High	Sanjay D
Sprint-3		USN-11	As an admin, I can confirm and update the status of the order	5	High	Varun P
Sprint-3	E-Mail	USN-12	As an admin, I can update the status through email to the users	4	Medium	Aakash K
Sprint-4	E-Mail	USN-13	As a user, I can get confirmation mail after receiving the product	5	High	Varun P
Sprint-4	Feedback / Review	USN-14	As a user, I can write feedback about the product	4	Medium	Sanjay D
Sprint-4		USN-15	As a user, I can contact with the Chatbot if the product received is not satisfied and can also request to return product	5	Medium	Aakash K
Sprint-4	Cloud	USN-16	As an admin, I can manage the user requests and feedbacks about the product and can update in the database	6	High	Prabakaran G

6.2 Sprint Delivery Schedule:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

6.3 Reports from Jira Software:



7. CODING & SOLUTIONING

7.1. Login:

```
#Login process
@app.route('/login')def
login():
  return render_template('login.html')

@app.route('/checkrec',methods = ['POST', 'GET'])
def checkrec():
  msg = ' '
  if request.method == 'POST':
    email = request.form['email']
    password = request.form['password']
    sql = "SELECT * FROM users WHERE Email =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_both(stmt)
    accounts=account
    if (account):
      if(password == accounts['PASSWORD']):
        msg = 'Logged in successfully !'
        return render_template('index.html',msg=msg)
      else :
        msg='Wrong Credentials'
  return  render_template('login.html',msg=msg)
```

7.2. Adding and Removing Products by Admin:

```
#Adding products by Admin
@app.route('/addproduct',methods=['POST','GET'])
def addproduct():
  if request.method == 'POST':
    image = request.form['image']
    productname = request.form['productname']
    cost = request.form['cost']
    category = request.form['category']
    insert_sql = "INSERT INTO pro VALUES(?,?,?,?)"
    stmt = ibm_db.prepare(conn, insert_sql)
    ibm_db.bind_param(stmt, 1, image)
    ibm_db.bind_param(stmt, 2, productname)
    ibm_db.bind_param(stmt, 3, cost)
```

```
    ibm_db.bind_param(stmt, 4, category)
    ibm_db.execute(stmt)
    return redirect('/adminhome')

#Deleting products by Admin
@app.route('/delete/<productname>')
def delete(productname):
  sql = f"SELECT * FROM pro WHERE productname='{escape(productname)}'"
  stmt = ibm_db.exec_immediate(conn, sql)
  product = ibm_db.fetch_row(stmt)
  if product:
    sql = f"DELETE FROM pro WHERE productname='{escape(productname)}'"
    print(sql)
    stmt = ibm_db.exec_immediate(conn, sql)
    products = []
    sql = "SELECT * FROM pro"
    stmt = ibm_db.exec_immediate(conn, sql)
    dictionary = ibm_db.fetch_both(stmt)
    while dictionary != False:
      products.append(dictionary)
      dictionary = ibm_db.fetch_both(stmt)
    if products:
      return redirect("/adminhome")
```

7.3 User Product Page:

```
#User Products Page
@app.route('/shop')
def shop():
  products = []
  sql = "SELECT * FROM pro "
  stmt = ibm_db.exec_immediate(conn, sql)
  dictionary = ibm_db.fetch_both(stmt)
  while dictionary != False:
    products.append(dictionary)
    dictionary = ibm_db.fetch_both(stmt)
  if products:
    return render_template('product.html',products=products)
#User products page based on user preference
@app.route('/filter',methods = ['POST', 'GET'])
def filter():
  if request.method == 'POST':
    search = request.form['search']
```

```
    if search=="Shirt" or search=="shirt":
      products = []
      sql = "SELECT * FROM pro where category='Shirt'"
      stmt = ibm_db.exec_immediate(conn, sql)
      dictionary = ibm_db.fetch_both(stmt)
      while dictionary != False:
        products.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)
      if products:
        return render_template('product.html',products=products)
    elif search=="Hoodie" or search=="hoodie":
      products = []
      sql = "SELECT * FROM pro where category='Hoodie'"stmt
      = ibm_db.exec_immediate(conn, sql)
      dictionary= ibm_db.fetch_both(stmt)
while dictionary != False:
products.append(dictionary) dictionary=
ibm_db.fetch_both(stmt)
        if products:
          return
      render_template('product.html',products=products)elif
      search=="Saree" or search=="saree":
        products = []
        sql = "SELECT * FROM pro where
        category='Saree'"stmt =
        ibm_db.exec_immediate(conn, sql) dictionary
        = ibm_db.fetch_both(stmt)
        while dictionary != False:
          products.append(dictionary)
          dictionary =
          ibm_db.fetch_both(stmt)
        if products:
          return
      render_template('product.html',products=products)elif
      search=="Chudi" or search=="chudi":
        products = []
        sql = "SELECT * FROM pro where
        category='Chudi'"stmt =
        ibm_db.exec_immediate(conn, sql) dictionary
        = ibm_db.fetch_both(stmt)
        while dictionary != False:
          products.append(dictionary)
          dictionary =
          ibm_db.fetch_both(stmt)
        if products:
```

```
            return
render_template('product.html',products=products)return
redirect('/shop')
```

8. TESTING

8.1 Test Cases:

A test case has components that describe input, action and an expected response, in order to determine if a featureof an application is workingcorrectly. A test case is a set of instructions on “HOW” to validate a particular test objective/target, which when followedwill tell us if the expected behaviorof the system is satisfied or not.

Characteristics of a good test case:

1. Accurate: Exacts the purpose.
2. Economical: No unnecessary steps or words.
3. Traceable: Capable of being tracedto requirements.
4. Repeatable: Can be used to performthe test over and over.
5. Reusable: Can be reused if necessary.

8.2 USER ACCEPTANCE TEST:

Purpose of Document:

Thepurpose of this document is to brieflyexplain the test coverage and openissues of the Smart Fashion Application project at the time of the release to User Acceptance Testing(UAT).

Defect Analysis :

This report shows the number of resolved or closed bugs at each severity level,andhow they were resolved.

Resolution	Severity1	Severity2	Severity3	Severity4	Subtotal
ByDesign	8	4	2	3	17
Duplicate	1	0	2	1	4
External	2	3	0	1	6
Fixed	10	2	5	18	35
NotReproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	3	2	1	6
Totals	21	12	13	25	71

Test Case Analysis:

This reportshows the numberof test cases that have passed, failed,and untested

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	8	0	0	8

Client Application	50	0	0	50
Security	2	0	0	2
Outsource Shipping	3	0	0	3
Exception Reporting	10	0	0	10
Final ReportOutput	6	0	0	6
Version Control	3	0	0	3

9. RESULT

9.1 PERFORMANCE METRICS:

NFT - Risk Assessment									
S.No	Project Name	Scope/ feature	Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Volume Changes	Risk Score	Justification
1	Smart Fashion Recommender Application	New	Low	No Changes	Moderate	Unable to Signup/register new user	> 5 to 10%	ORANGE	Customer may be provided incorrect details
2	Smart Fashion Recommender Application	Existing	No Changes	No Changes	Low	Couldn't change existing details	< 5%	GREEN	Given wrong details about the customer
3	Smart Fashion Recommender Application	New	Moderate	No Changes	Moderate	Unable to modify user	< 10%	ORANGE	Duplication of user arised
4	Smart Fashion Recommender Application	New	Low	No Changes	No Changes	Unable to update products stock	< 5%	GREEN	Wrong product details given

NFT - Detailed Test Plan				
S.No	Project Overview	NFT Test approach	Assumptions/Dependencies/Risks	Approvals/SignOff
1	Smart Fashion Recommender Application	Incorrect username	Not registered	Login Unsuccessful
2	Smart Fashion Recommender Application	Repeating same details	User updation	Login successful
3	Smart Fashion Recommender Application	Incorrect user details	Login validation	Login Unsuccessful
4	Smart Fashion Recommender Application	No product updations	Database updation	Product details should be given

End Of Test Report								
S.No	Project Overview	NFT Test approach	NFR - Met	Test Outcome	GO/NO-GO decision	Recommendations	Identified Defects (Detected/Closed/Open)	Approvals/SignOff
1	User	New User	Yes	Registration successful	GO	Validation login details	Closed	Success
2	Products	Checking Updation	Yes	Updation incomplete	GO	None	Closed	Success
3	Admin Page	Manage products	Yes	Product update incomplete	NO-GO	Update product details	Open	Success

10. ADVANTAGES & DISADVANTAGES

Advantages:

i. Effective Recommendations are provided
ii. Best Offers and Deals
iii. Comparisons
iv. No pressure shoppings
v. More varieties
vi. Notifications via chatbot
vii. Customer Feedback

Disadvantages:

viii. It requires an active internetconnection

11. CONCLUSION

The smart fashion recommender system uses a chat bot as a primary mechanism to interact with users, collect user interest and recommend productsperiodically. A chat bot is designed to improve user experience by interacting with users. Users need not navigate between multiple pages to find an appropriate product. The system is designed to minimize the efforts taken by customers to search for the required product.

12. FUTURE SCOPE

The future scope of the chat bot include adding products to the cart, displaying cart items, order history, and payment through the chat bot. It makesthe interface more easier for user to look up for the products which will also saves time and money. The Security would be enhanced in order to secure the user details and the user details should be used only for recommendations and not for other violated activities.

13. APPENDIX

BACKEND:

app.py:

```
from flask import *
#import re
imprt ibm_db import sendgridimport os
from sendgrid.helpers.mail import *#SendGrid Integration
sg = sendgrid.SendGridAPIClient(api_key='*****API KEY*****')
#ibm_db connection
conn = ibm_db.connect("DATABASE=bludb; HOSTNAME=3883e7e4-
18f5-4afe-be8c-
fa31c41761d2.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;
PORT=31498; SECURITY=SSL;
SSLServerCertificate=DigiCertGlobalRootCA.crt; UID=ltv80221;
PWD=8fS5XCKIWaGcUCUW",",")
app = Flask(_name_)@app.route('/')
def hello_world():

  return redirect('/login')
```

```
  #return render_template('index.html')

#Registration process @app.route('/register')def register():
    return render_template('register.html')

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

  if request.method == 'POST':

    username = request.form['username']email = request.form['email']
    password = request.form['password']
    sql = "SELECT * FROM users WHERE email =?"stmt =
    ibm_db.prepare(conn, sql) ibm_db.bind_param(stmt,1,email)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)if account:
      msg = 'Accountalready exists !'

    elif not username or not password or not email:msg = 'Please fill
      the Missing Details!'

    else:

      insert_sql = "INSERT INTO users VALUES (?,?,?)"prep_stmt =
      ibm_db.prepare(conn, insert_sql)
      ibm_db.bind_param(prep_stmt,1, username)
      ibm_db.bind_param(prep_stmt, 2, email)

      ibm_db.bind_param(prep_stmt, 3, password)
      ibm_db.execute(prep_stmt)
      msg = 'Account created successfully '


      from_email = Email("praba3043@gmail.com")  # sendgrid
      registered mail
id


      to_email = To(email)
```

```
    subject = "Thank You For Registration"

    content = Content("text/plain", "Welcome to our S-Mart App")mail
    =Mail(from_email, to_email, subject,content)
    response =
    sg.client.mail.send.post(request_body=mail.get())
    print(response.status_code)
    print(response.body) print(response.headers)
    return render_template('login.html',msg=msg)

  return render_template('register.html',msg=msg)
#Login process @app.route('/login')def login():
  return render_template('login.html')

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

  if request.method == 'POST':

    email = request.form['email'] password=
    request.form['password']
    sql = "SELECT * FROM users WHERE Email =?"stmt =
    ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_both(stmt)accounts=account
    if (account):

      if(password == accounts['PASSWORD']):msg =
        'Logged in successfully !'

        return render_template('index.html',msg=msg)else :
        msg='Wrong Credentials'

  return  render_template('login.html',msg=msg)
```

```
#Admin Login process @app.route('/adminlogin')def
adminlogin():
  return render_template('adminlogin.html')
@app.route('/checkrecadmin',methods = ['POST', 'GET'])
def checkrecadmin():
  msg = ' '

  if request.method == 'POST':

    adminemail = request.form['adminemail']
    adminpassword = request.form['adminpassword']
    sql = "SELECT * FROM admin WHERE adminemail =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,adminemail)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_both(stmt)accounts=account
    if (account):

      if(adminpassword == accounts['ADMINPASSWORD']):
        msg = 'Logged in successfully !'
        return redirect('/adminhome')else :
        msg='Wrong Credentials'

  return  render_template('adminlogin.html',msg=msg)
#Admin Dashboard @app.route('/adminhome')def
adminhome():
  products = []

  sql = "SELECT * FROM pro "

  stmt = ibm_db.exec_immediate(conn, sql)dictionary =
  ibm_db.fetch_both(stmt) while dictionary != False:
  products.append(dictionary)
    dictionary = ibm_db.fetch_both(stmt)if products:
    return
    render_template('adminhome.html',products=products
    )
```

```
#Adding products by Admin

@app.route('/addproduct',methods=['POST','GET'])def
addproduct():
  if request.method == 'POST':

    image = request.form['image']

    productname = request.form['productname']cost =
    request.form['cost']
    category = request.form['category']

    insert_sql = "INSERT INTO pro VALUES (?,?,?,?)"stmt =
    ibm_db.prepare(conn,
    insert_sql)ibm_db.bind_param(stmt, 1, image)
    ibm_db.bind_param(stmt, 2, productname)

    ibm_db.bind_param(stmt, 3, cost)

    ibm_db.bind_param(stmt, 4, category)
    ibm_db.execute(stmt)
    return redirect('/adminhome')

#Deleting products by Admin
@app.route('/delete/<productname>')def
delete(productname):
  sql = f"SELECT * FROM pro WHERE
productname='{escape(productname)}'"
  stmt = ibm_db.exec_immediate(conn, sql)

  product = ibm_db.fetch_row(stmt)if product:
    sql = f"DELETE FROM pro WHERE
productname='{escape(productname)}'"print(sql)
    stmt = ibm_db.exec_immediate(conn, sql)products = []
    sql = "SELECT * FROM pro"
```

```
    stmt = ibm_db.exec_immediate(conn, sql)dictionary =
    ibm_db.fetch_both(stmt) while dictionary != False:
    products.append(dictionary)
      dictionary = ibm_db.fetch_both(stmt)if products:
      return redirect("/adminhome")

#Order Confirmation Page @app.route('/ordertracking')
def ordertracking():
  return render_template('ordertracking.html')

@app.route('/proceed')def proceed():
  from_email = Email("praba3043@gmail.com") #sendgrid
  registered mail idto_email = To(email)
  subject = "Your Payment is Successful"

  content = Content("text/plain", "Thank You For
Purchasing our Product. Yourorder is placed and We will
soon let you know about your order status. Stay
Connected!")
  mail = Mail(from_email, to_email,subject, content)
  response =
  sg.client.mail.send.post(request_body=mail.get())
  print(response.status_code)
  print(response.body) print(response.headers)
  return redirect('/ordertracking')
#Payment page @app.route('/payment')def payment():
    return render_template('payment.html')

#About Page @app.route('/about')
def about():

    return render_template('about.html')#Help Page
@app.route('/help')def help():
    return render_template('help.html')#User ProductsPage
@app.route('/shop')
def shop():

  products = []
```

```
  sql = "SELECT * FROM pro "

  stmt = ibm_db.exec_immediate(conn, sql)dictionary =
  ibm_db.fetch_both(stmt) while dictionary != False:
  products.append(dictionary)
    dictionary = ibm_db.fetch_both(stmt)if products:
    return render_template('product.html',products=products)

#User products page based on user preference @app.route('/filter',methods
= ['POST', 'GET'])def filter():

  if request.method == 'POST':

    search = request.form['search']

    if search=="Shirt" or search=="shirt":

      products = []

      sql = "SELECT * FROM pro where category='Shirt'"stmt =
      ibm_db.exec_immediate(conn, sql)
      dictionary = ibm_db.fetch_both(stmt) while dictionary != False:
      products.append(dictionary) dictionary =
      ibm_db.fetch_both(stmt) if products:
        return render_template('product.html',products=products)
    elifsearch=="Hoodie" or search=="hoodie":
      products = []

      sql = "SELECT * FROM pro where category='Hoodie'"stmt =
      ibm_db.exec_immediate(conn, sql)
      dictionary = ibm_db.fetch_both(stmt) while dictionary != False:
      products.append(dictionary) dictionary =
      ibm_db.fetch_both(stmt) if products:
        return render_template('product.html',products=products)

    elif search=="Saree" or search=="saree":
```

```
        products = []

        sql = "SELECT * FROM pro where
        category='Saree'"stmt =
        ibm_db.exec_immediate(conn, sql)
        dictionary = ibm_db.fetch_both(stmt) while dictionary != False:
        products.append(dictionary) dictionary = ibm_db.fetch_both(stmt)
        if products:
          return render_template('product.html',products=products)
      elifsearch=="Chudi" or search=="chudi":
        products = []

        sql = "SELECT * FROM pro where category='Chudi'"stmt =
        ibm_db.exec_immediate(conn, sql)
        dictionary = ibm_db.fetch_both(stmt) while dictionary != False:
        products.append(dictionary) dictionary = ibm_db.fetch_both(stmt)
        if products:
          return render_template('product.html',products=products)return
    redirect('/shop')

  if_name_== '_main_':app.run(debug=True)
```

FRONTEND:
home.html:

```
  <!DOCTYPE html>

  <html lang="en">

    <head>

      <meta charset="utf-8">

      <title>S-Mart | Home Page</title>

      <!-- SEO Meta Tags-->
```

```
    <meta name="description" content="Cartzilla -
Bootstrap E-commerceTemplate">

    <meta name="keywords" content="bootstrap, shop, e-
commerce, market, modern, responsive, business, mobile,
bootstrap, html5, css3, js, gallery, slider,touch, creative,clean">
    <meta name="author" content="Createx Studio">

    <!-- Viewport-->

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <!-- Favicon and Touch Icons-->

    <link rel="apple-touch-icon" sizes="180x180"
href="https://cartzilla.createx.studio/apple-
touch-icon.png">
    <link rel="icon" type="image/png"
sizes="32x32"
href="https://cartzilla.createx.studio/favicon
-32x32.png">
    <link rel="icon" type="image/png"
sizes="16x16"
href="https://cartzilla.createx.studio/favicon
-16x16.png">
    <link rel="manifest" href="site.webmanifest">

    <link rel="mask-icon" color="#fe6a6a"
href="https://cartzilla.createx.studio/safari-
pinned-tab.svg">
    <meta name="msapplication-TileColor" content="#ffffff">

    <meta name="theme-color"content="#ffffff">

    <!-- Vendor Styles including: Font Icons, Plugins,etc.-->
```

```
    <link rel="stylesheet" media="screen"
href="https://cartzilla.createx.studio/vendor/simplebar/dist/simplebar.mi
n.css"/>
    <link rel="stylesheet" media="screen"
href="https://cartzilla.createx.studio/vendor/tiny-
slider/dist/tiny-slider.css"/>

    <link rel="stylesheet" media="screen"
href="https://cartzilla.createx.studio/vendor/drift-
zoom/dist/drift- basic.min.css"/>
    <!-- Main Theme Styles + Bootstrap-->

    <link rel="stylesheet" media="screen"
href="https://cartzilla.createx.studio/css/theme.min.css">
    <!-- Google Tag Manager-->
    <script>
      (function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.
      start':new
      Date().getTime(),event:'gtm.js'});var
f=d.getElementsByTagName(s)[0],
      j=d.createElement(s),dl=l!='dataLayer'?'&l='+l:'';j.async=true;j.src=
'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentN
ode.insertBefor e(j,f);
      })(window,document,'script','dataLayer','GTM-WKV3GT5');

    </script>

  </head>

  <!-- Body-->

  <body class="handheld-toolbar-enabled">

    <!-- Google Tag Manager(noscript)-->
```

```
  <noscript>

    <iframe
src="//www.googletagmanager.com/ns.html?id=GTM-
WKV3GT5"height="0" width="0" style="display: none; visibility:
hidden;"></iframe>
  </noscript>



  <main class="page-wrapper">

    <!-- Navbar 3 Level (Light)-->

    <header class="shadow-sm">

      <!-- Topbar-->

      <div class="topbar topbar-dark bg-dark">

        <div class="container">

          <div class="topbar-text dropdown d-md-none"><a
class="topbar-linkdropdown-toggle" href="#" data-bs-
toggle="dropdown">Useful links</a>
            <ul class="dropdown-menu">

              <li><a class="dropdown-item"
href="tel:00331697720"><i class="ci-support text-muted me-
2"></i>(00) 33 169 7720</a></li>
              <li><a class="dropdown-item"
href="/ordertracking"><i class="ci-location text-muted me-
2"></i>Order tracking</a></li>
            </ul>

          </div>
```

```
        <div class="topbar-text text-nowrap d-none d-md-
inline-block"><i class="ci-support"></i><span class="text-
muted me-1">Support</span><aclass="topbar-link"
href="tel:00331697720">(00) 33 169 7720</a></div>

        <div class="tns-carousel tns-controls-static d-noned-md-block">

          <div class="tns-carousel-inner" data-carousel-
options="{&amp;quot;mode&amp;quot;: &amp;quot;gallery&amp;quot;,
&amp;quot;nav&amp;quot;:false}">
            <div class="topbar-text">Free shipping for order over ₹300</div>

            <div class="topbar-text">We return money within7 days</div>

            <div class="topbar-text">Friendly 24/7 customer support</div>

          </div>

        </div>

        <div class="ms-3 text-nowrap"><a class="topbar-link
me-4 d-none d-md-inline-block" href="/ordertracking"><i
class="ci-location"></i>Order tracking</a>

          <div class="topbar-text dropdown disable-autohide"><a
class="topbar-link dropdown-toggle" href="#" data-bs-
toggle="dropdown"><img class="me- 2"
src="https://cartzilla.createx.studio/img/flags/en.png"
width="20" alt="English">ENGLISH / ₹</a>

            <ul class="dropdown-menu dropdown-menu-end">
<li class="dropdown-item">

              <select class="form-select form-select-sm">

                <option value="usd">₹ RUP</option>
```

```
                <option value="eur">€ EUR</option>

                <option value="ukp">$ USD</option>

              </select>

            </li>

            <li><a class="dropdown-item pb-1" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/fr.png"
width="20" alt="Français">Français</a></li>

            <li><a class="dropdown-item pb-1" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/de.png"
width="20" alt="Deutsch">Deutsch</a></li>

            <li><a class="dropdown-item" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/it.png"
width="20" alt="Italiano">Italiano</a></li>

          </ul>

      <!-- Remove "navbar-sticky" class to make navigation bar
scrollable withthe page.-->

      <div class="navbar-sticky bg-light">

        <div class="navbar navbar-expand-lg navbar-light">

          <div class="container">

            <a class="navbar-brand d-none d-sm-block flex-shrink-0" href="/">

  <img src="https://cartzilla.createx.studio/favicon-
                    32x32.png"></a>

            <a class="navbar-brand d-none d-sm-block flex-shrink-0" href="/">
```

```
            S-Mart

          </a>
          <div class="input-group d-none d-lg-flex mx-4">

            <input class="form-control rounded-end pe-5"
type="text" placeholder="Search for products"><a
href="/shop"><i class="ci-search position-absolute top-50
end-0 translate-middle-y text-muted fs-base me-
3"></i></a>

          </div>


<a class="navbar-tool ms-1 ms-lg-0me-n1 me-lg-2" href="/login">

            <div class="navbar-tool-icon-box"><i class="navbar-
tool-icon ci-user"></i></div>

            <div class="navbar-tool-text ms-
n3"><small>Hello, Signin</small>My
Account</div></a>

          <div class="navbar-tool dropdown ms-3"><a
class="navbar-tool- icon-box bg-secondary dropdown-toggle"
href="/shop"><i class="navbar-tool-iconci-cart"></i></a><a
class="navbar-tool-text" href="/shop"></a>

        <div class="navbar navbar-expand-lg navbar-light
navbar-stuck-menumt-n2 pt-0 pb-2">

          <div class="container">

            <div class="collapse navbar-collapse" id="navbarCollapse">

              <!-- Search-->

              <div class="input-group d-lg-none my-3"><i
class="ci-search position-absolute top-50 start-0 translate-
middle-y text-muted fs-base ms-3"></i>
```

```
            <input class="form-control rounded-
start" type="text"placeholder="Search for
products">

          </div>

          <!-- Primary menu-->

          <ul class="navbar-nav">

            <a class="nav-link dropdown-toggle"
href="/" data-bs-toggle="dropdown">Home</a>

            <a class="nav-link dropdown-toggle" href="/shop">Shop</a>


            <a class="nav-link dropdown-toggle" href="/about"
            >AboutUs</a>

            <a class="nav-link dropdown-toggle" href="/help" >Help</a>

                        </ul> </div>

        </div>

       </div>

     </div>

   </header>

   <!-- Hero slider-->

   <section class="tns-carousel tns-controls-lg">

     <div class="tns-carousel-inner" data-carousel-
options="{&amp;quot;mode&amp;quot;: &amp;quot;gallery&amp;quot;,
&amp;quot;responsive&amp;quot;:
```

```
{&quot;0&quot;:{&quot;nav&quot;:true, &quot;controls&quot;:
false},&quot;992&quot;:{&quot;nav&quot;:false,
&quot;controls&quot;:true}}}">

        <!-- Item-->

        <div class="px-lg-5" style="background-color: #eba170;">

          <div class="d-lg-flex justify-content-between align-
items-center ps-lg-4"><img class="d-block order-lg-2 me-lg-n5
flex-shrink-0"
src="https://cartzilla.createx.studio/img/home/hero-
slider/03.jpg" alt="Men Accessories">

            <div class="position-relative mx-auto me-lg-n5 py-5
px-4 mb-lg-5order-lg-1" style="max-width: 42rem;z-index:
10;">

              <div class="pb-lg-5 mb-lg-5 text-center text-lg-start text-lg-
              nowrap">

                <h3 class="h2 text-light fw-light pb-1 from-
top">Complete yourlook with</h3>

                <h2 class="text-light display-5 from-top delay-
1">New Men'sAccessories</h2>

                <p class="fs-lg text-light pb-3 from-top delay-
2">Shirts &amp;amp;Hoodies &amp;amp; much more...</p>

                <div class="d-table scale-up delay-4 mx-auto mx-lg-
0"><a class="btn btn-primary" href="/shop">Shop Now<i
class="ci-arrow-right ms-2me-n1"></i></a></div>

              </div>

            </div>

          </div>

        </div>
        <!-- Item-->
```

```
        <div class="px-lg-5" style="background-color: #f5b1b0;">

          <div class="d-lg-flex justify-content-between align-items-
center ps-lg-4"><img class="d-block order-lg-2 me-lg-n5 flex-
shrink-0" src="https://cartzilla.createx.studio/img/home/hero-
slider/02.jpg" alt="WomenSportswear">

            <div class="position-relative mx-auto me-lg-n5 py-5
px-4 mb-lg-5order-lg-1" style="max-width: 42rem;z-index:
10;">

              <div class="pb-lg-5 mb-lg-5 text-center text-lg-start text-lg-
              nowrap">

                <h3 class="h2 text-light fw-lightpb-1 from-bottom">Hurry up!
Limited time offer.</h3>

                <h2 class="text-light display-5 from-bottom
delay-1">WomenSportswear Sale</h2>

                <p class="fs-lg text-light pb-3 from-bottom delay-
2">Hoodie, Saree,Chudi &amp;amp; much more...</p>

                <div class="d-table scale-up delay-4 mx-auto mx-lg-
0"><a class="btn btn-primary" href="/shop">Shop Now<i
class="ci-arrow-right ms-2me-n1"></i></a></div>

              </div>

            </div>

          </div>

        </div>

      </section>
```

```
    <!-- Popular categories-->

    <section class="container position-relative pt-3 pt-lg-0
pb-5 mt-lg-n10"style="z-index: 10;">
      <div class="row">

        <div class="col-xl-8 col-lg-9">

          <div class="card border-0 shadow-lg">

            <div class="card-body px-3 pt-grid-gutter pb-0">

              <div class="row g-0 ps-1">

                <div class="col-sm-4 px-2 mb-grid-gutter"><a
class="d-block text-center text-decoration-none me-1"
href="/shop"><img class="d-block roundedmb-3"
src="https://cartzilla.createx.studio/img/home/categories/cat-
sm01.jpg" alt="Men">
                  <h3 class="fs-base pt-1 mb-0">Men</h3></a></div>

                <div class="col-sm-4 px-2 mb-grid-gutter"><a
class="d-block text-center text-decoration-none me-1"
href="/shop"><img class="d-block roundedmb-3"
src="https://cartzilla.createx.studio/img/home/categories/cat-
sm02.jpg" alt="Women">
                  <h3 class="fs-base pt-1 mb-0">Women</h3></a></div>

                <div class="col-sm-4 px-2 mb-grid-gutter"><a
class="d-block text-center text-decoration-none me-1"
href="/shop"><img class="d-block roundedmb-3"
src="https://cartzilla.createx.studio/img/home/categories/cat-
sm03.jpg" alt="Kids">
                  <h3 class="fs-base pt-1 mb-0">Kids</h3></a></div>

              </div>
```

```
          </div>
        </div>
      </div>
    </div>
  </section>
</main>

<!--Chatbot Implementation-->

<script>
  window.watsonAssistantChat
  Options = {
    integrationID: "e2b26d6f-222c-455d-9e44-
4cdc4b7060d5", // The ID ofthis integration.
    region: "jp-tok", // The region your integration is hosted in.
    serviceInstanceID: "20d9c474-83b0-4cfb-a93f-
05fc4b4f799e", // The ID ofyour 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>
    <!-- Back To Top Button--><a class="btn-scroll-top"
href="#top" data-scroll><span class="btn-scroll-top-tooltip
text-muted fs-sm me- 2">Top</span><i class="btn-scroll-
top-icon ci-arrow-up">        </i></a>
    <!-- Vendor scrits: js libraries and plugins-->
    <script
src="https://cartzilla.createx.studio/vendor/bootstrap/dist/js/bo
otstrap.bundle.mi n.js"></script>
    <script
src="https://cartzilla.createx.studio/vendor/simplebar/dist/simp
lebar.min.js"></s cript>
    <scriptsrc="https://cartzilla.createx.studio/vendor/tiny-
slider/dist/min/tiny-slider.js"></script>
    <scriptsrc="https://cartzilla.createx.studio/vendor/smooth-
scroll/dist/smooth-scroll.polyfills.min.js"></script>
    <script
src="https://cartzilla.createx.studio/vendor/
drift-zoom/dist/Drift.min.js"></script>
    <!-- Main theme script-->
    <script src="https://cartzilla.createx.studio/js/theme.min.js"></script>
  </body>
</html>
```

product.html:

```
<!DOCTYPE html>

<html lang="en">



<head>

  <meta charset="utf-8">

  <title>S-Mart | Products</title>

  <!-- SEO Meta Tags-->

  <meta name="description" content="Cartzilla -
Bootstrap E-commerceTemplate">
  <meta name="keywords"

    content="bootstrap, shop, e-commerce, market, modern,
responsive, business, mobile, bootstrap, html5, css3, js,
gallery, slider, touch, creative,clean">
  <meta name="author" content="Createx Studio">

  <!-- Viewport-->

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <!-- Favicon and Touch Icons-->

  <link rel="apple-touch-icon" sizes="180x180"
href="https://cartzilla.createx.studio/apple-
touch-icon.png">
  <link rel="icon" type="image/png"
sizes="32x32"
```

```
href="https://cartzilla.createx.studio/favicon
-32x32.png">

  <link rel="icon" type="image/png"
sizes="16x16"
href="https://cartzilla.createx.studio/favicon
-16x16.png">

  <link rel="manifest" href="site.webmanifest">

  <link rel="mask-icon" color="#fe6a6a"
href="https://cartzilla.createx.studio/safari-
pinned-tab.svg">

  <meta name="msapplication-TileColor" content="#ffffff">

  <meta name="theme-color" content="#ffffff">

  <!-- Vendor Styles including: Font Icons, Plugins,etc.-->

  <link rel="stylesheet" media="screen"


href="https://cartzilla.createx.studio/vendor/simplebar/dist/simplebar.m
in.css"

/>

  <link rel="stylesheet" media="screen"
    href="https://cartzilla.createx.studio/vendor/tiny-
    slider/dist/tiny-slider.css" />
  <link rel="stylesheet" media="screen"

    href="https://cartzilla.createx.studio/vendor/drift-
zoom/dist/drift- basic.min.css" />

  <!-- Main Theme Styles + Bootstrap-->

  <link rel="stylesheet" media="screen"
href="https://cartzilla.createx.studio/css/theme.min.css">
```

```
  <!-- Google Tag Manager-->

  <script>

    (function (w, d, s, l, i) {

      w[l] = w[l] || [];
        w[l].push({
        'gtm.start':
          new Date().getTime(), event: 'gtm.js'

      }); var f = d.getElementsByTagName(s)[0],

        j = d.createElement(s), dl = l != 'dataLayer' ? '&l=' + l : '';
j.async = true;j.src =

          'https://www.googletagmanager.com/gtm.j
s?id=' + i + dl;f.parentNode.insertBefore(j, f);

    })(window, document, 'script', 'dataLayer', 'GTM-WKV3GT5');

  </script>

</head>

<!-- Body-->



<body class="handheld-toolbar-enabled">

  <noscript>

    <iframe
src="//www.googletagmanager.com/ns.html?id=GTM-
WKV3GT5"height="0" width="0" style="display: none; visibility:
hidden;"></iframe>

  </noscript>
```

```
<main class="page-wrapper">


  <!-- Navbar 3 Level (Light)-->

  <header class="shadow-sm">

    <!-- Topbar-->

    <div class="topbar topbar-dark bg-dark">

      <div class="container">

        <div class="topbar-text dropdown d-md-none"><a
class="topbar-linkdropdown-toggle" href="#" data-bs-
toggle="dropdown">Useful links</a>

          <ul class="dropdown-menu">

            <li><a class="dropdown-item"
href="tel:00331697720"><i class="ci-support text-muted me-
2"></i>(00) 33 169 7720</a></li>

            <li><a class="dropdown-item"
href="/ordertracking"><i class="ci-location text-muted me-
2"></i>Order tracking</a></li>

          </ul>

        </div>

        <div class="topbar-text text-nowrap d-none d-md-
inline-block"><i class="ci-support"></i><span class="text-
muted me-1">Support</span><aclass="topbar-link"
href="tel:00331697720">(00) 33 169 7720</a></div>
```

```
        <div class="tns-carousel tns-controls-static d-noned-md-block">

          <div class="tns-carousel-inner" data-carousel-
options="{&amp;quot;mode&amp;quot;: &amp;quot;gallery&amp;quot;,
&amp;quot;nav&amp;quot;:false}">
            <div class="topbar-text">Free shipping for order over ₹300</div>

            <div class="topbar-text">We return money within7 days</div>

            <div class="topbar-text">Friendly 24/7 customer support</div>

          </div>

        </div>

        <div class="ms-3 text-nowrap"><a class="topbar-link me-4
d-none d-md-inline-block" href="/ordertracking"><i class="ci-
location"></i>Order tracking</a>

          <div class="topbar-text dropdown disable-autohide"><a
class="topbar-link dropdown-toggle" href="#" data-bs-
toggle="dropdown"><img class="me-2"
src="https://cartzilla.createx.studio/img/flags/en.png"
width="20" alt="English">ENGLISH / ₹</a>
            <ul class="dropdown-menu dropdown-menu-end">

              <li class="dropdown-item">

                <select class="form-select form-select-sm">

                  <option value="usd">₹ RUP</option>

                  <option value="eur">€ EUR</option>

                  <option value="ukp">$ USD</option>
```

```
            </select>

          </li>

          <li><a class="dropdown-item pb-1" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/fr.png"
width="20" alt="Français">Français</a></li>

          <li><a class="dropdown-item pb-1" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/de.png"
width="20" alt="Deutsch">Deutsch</a></li>

          <li><a class="dropdown-item" href="#"><img
class="me-2"
src="https://cartzilla.createx.studio/img/flags/it.png"
width="20" alt="Italiano">Italiano</a></li>

        </ul>

      </div>

    </div>

  </div>

  <!-- Remove "navbar-sticky" class to make navigation bar
scrollable withthe page.-->

  <div class="navbar-sticky bg-light">

    <div class="navbar navbar-expand-lg navbar-light">

      <div class="container">
```

```
        <a class="navbar-brand d-none d-sm-block flex-shrink-0" href="/">
<img src="https://cartzilla.createx.studio/favicon-32x32.png"></a>

        <a class="navbar-brand d-none d-sm-block flex-
          shrink-0" href="/">S-Mart
        </a>



        <div class="input-group d-none d-lg-flexmx-4">

          <input class="form-control rounded-end pe-5"
type="text" placeholder="Search for products"><a
href="/shop"><i class="ci-search

position-absolute top-50 end-0 translate-middle-y text-
muted fs-base me-3"></i></a>
        </div>

          <a class="navbar-tool ms-1 ms-lg-0me-n1 me-lg-2" href="/login">

          <div class="navbar-tool-icon-box"><i class="navbar-
tool-icon ci-user"></i></div>
          <div class="navbar-tool-text ms-
n3"><small>Hello, Signin</small>My
Account</div></a>
         <div class="navbar-tool dropdown ms-3"><a
class="navbar-tool-icon-box bg-secondary dropdown-toggle"
href="/shop"><i class="navbar-tool-icon ci-cart"></i></a><a
class="navbar-tool-text" href="/shop"></a>


          </div>

        </div>
```

```
        </div>

      </div>

      <div class="navbar navbar-expand-lg navbar-light navbar-
stuck-menu mt-n2 pt-0 pb-2">
        <div class="container">

          <div class="collapse navbar-collapse" id="navbarCollapse">

            <!-- Search-->

            <div class="input-group d-lg-none my-3"><i class="ci-
search position-absolute top-50start-0 translate-middle-y text-
muted fs-basems-3"></i>

              <input class="form-control rounded-
start" type="text"placeholder="Search for
products">

            </div>

            <!-- Primary menu-->

            <ul class="navbar-nav">

              <a class="nav-link dropdown-toggle"
href="/" data-bs-toggle="dropdown">Home</a>
              <a class="nav-link dropdown-toggle" href="/shop">Shop</a>

              <a class="nav-link dropdown-toggle" href="/about" >About
              Us</a>

              <a class="nav-link dropdown-toggle" href="/help" >Help</a>

            </ul>
```

```
        </div>
       </div>
      </div>
    </div>
  </header>
<!-- Page Title-->
<div class="page-title-overlapbg-dark pt-4">
  <div class="container d-lg-flex justify-content-between py-2 py-lg-3">

    <div class="order-lg-1 pe-lg-4 text-center text-lg-start">
      <h1 class="h3 text-light mb-0">Shop Now!</h1>
    </div>
  </div>
</div>
<div class="container pb-5 mb-2 mb-md-4">
  <div class="row">

    <!-- Content -->
    <section class="col-lg-12">
```

```
<!-- Toolbar-->

<div class="d-flex justify-content-center justify-content-sm-
between align-items-center pt-2 pb-4 pb-sm-5">

<div class="d-flex flex-wrap">

<div class="d-flex align-items-center flex-nowrap me-3 me-sm-4
pb-3">

<label class="text-light opacity-75 text-nowrap fs-sm
me-2 d-none d-sm-block" for="sorting">Category :</label>

<form action="/filter" method="POST">

<input type="text" placeholder="Search
by Category"name="search">


</form>

<span class="fs-sm text-light opacity-75 text-nowrap
ms-2 d-none d-md-block"> AvailableCategories : Shirt,
Hoodie,Saree, Chudi

</span>

</div>

</div>


<div class="d-flex pb-3"><a class="nav-link-style nav-link-
light me-3"href="#"><i

class="ci-arrow-left"></i></a><span class="fs-md
text-light">1 /5</span><a

class="nav-link-style nav-link-light ms-3"
href="#"><i class="ci-arrow-right"></i></a></div>
```

```
        </div>

        <!-- Products grid-->

        <div class="row mx-n2">

          <!-- Product-->

          {% for row in products%}

          <div class="col-md-4 col-sm-6 px-2 mb-4">

            <div class="card product-card">

              <button class="btn-wishlist btn-sm"
type="button" data-bs-toggle="tooltip" data-bs-
placement="left"
                title="Add to wishlist"><i class="ci-heart"></i></button>

              <img src='{{row["IMAGE"]}}' alt="Product" width="270">

              <div class="card-body py-2">

                <h3 class="product-title
fs-sm">{{
row["PRODUCTNAME"]}}</h3>


                <div class="d-flex justify-content-between">

                  <div class="product-price"><span
class="text-accent">{{row["COST"]}}</span></div>

                  <div class="star-rating"><i class="star-rating-icon
ci-star-filledactive"></i><i
```

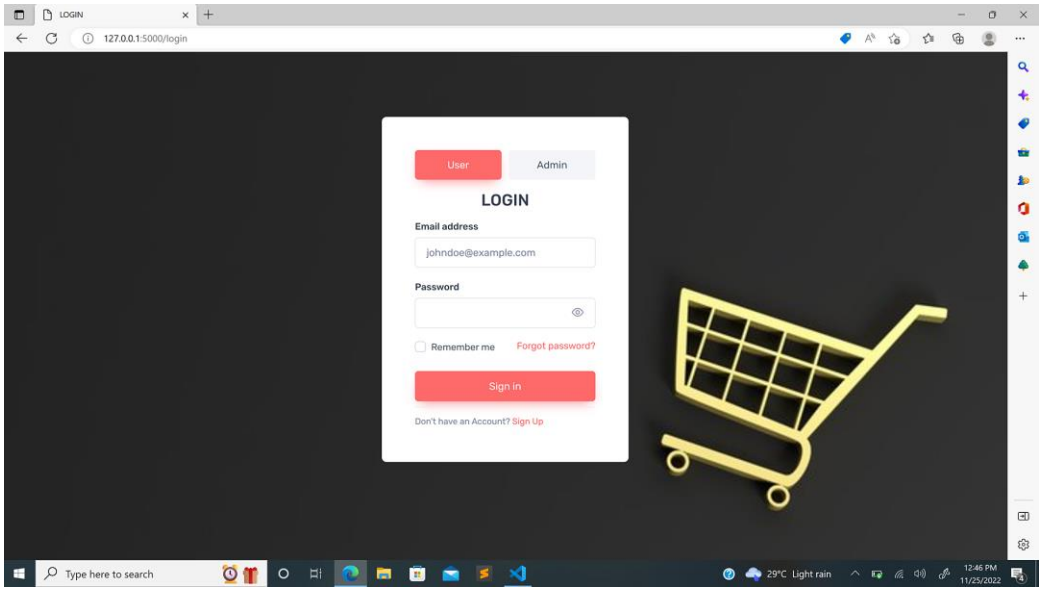
```
                class="star-rating-icon ci-star-filled
                active"></i><i class="star-rating-icon
                ci-star-filled active"></i><iclass="star-
                rating-icon ci-star-filled active"></i><i
                class="star-rating-icon ci-star-half
                active"></i>
              </div>

            </div>

            <br>

            <h6 class="product-title fs-
sm">Category : {{row["CATEGORY"]}}</h6>
          </div>

          <div class="card-body card-body-hidden">

            <div class="text-center pb-2">

      <div class="form-check form-option form-check-inline mb-2">

              <input class="form-check-input" type="radio"
name="size5"id="s4" checked>

              <label class="form-option-label" for="s4">S</label>

            </div>

            <div class="form-check form-option form-check-inline mb-2">

              <input class="form-check-input" type="radio" name="size5"
id="m4">

              <label class="form-option-label" for="m4">M</label>
```

```
            </div>
            <div class="form-check form-option form-check-inline mb-2">
              <input class="form-check-input" type="radio" name="size5"
id="l4">
              <label class="form-option-label" for="l4">L</label>
            </div>
          </div>
          <a href='/payment'>
          <button class="btn btn-primary btn-sm d-block
w-100 mb-2"type="button" ><i
              class="ci-cart fs-smme-1"></i>Payment</button></a>

        </div>
      </div>
      <hr class="d-sm-none">
    </div>
    {% endfor %}
  </div>
  <hr class="my-3">
```

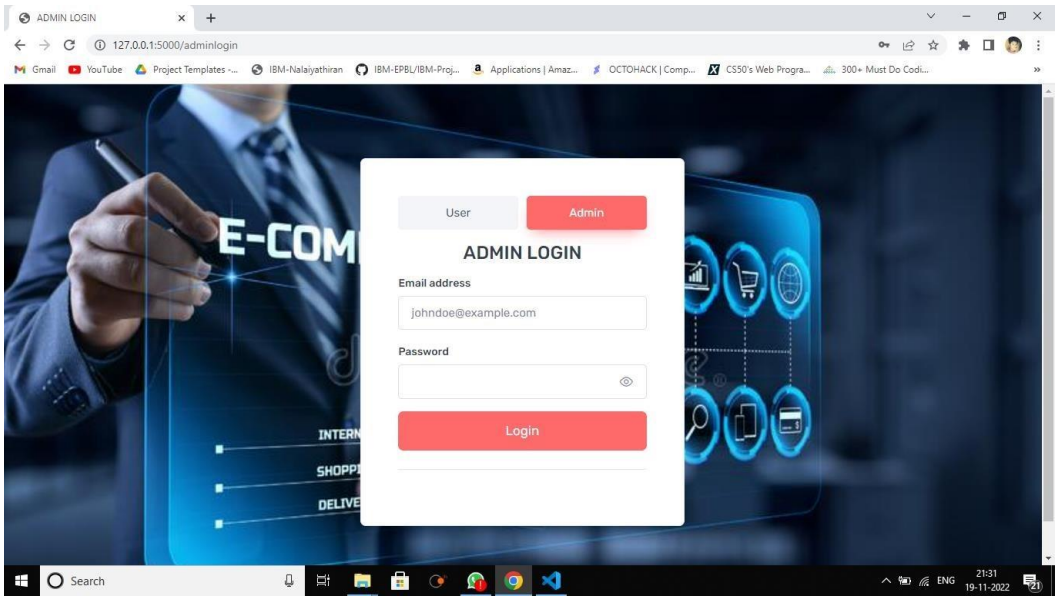
```
  <!-- Vendor scrits: js libraries and plugins-->

  <script
src="https://cartzilla.createx.studio/vendor/bootstrap/dist/js/bo
otstrap.bundle.mi n.js"></script>
  <script
src="https://cartzilla.createx.studio/vendor/simplebar/dist/simp
lebar.min.js"></s cript>
  <scriptsrc="https://cartzilla.createx.studio/vendor/tiny-
slider/dist/min/tiny-slider.js"></script>

  <scriptsrc="https://cartzilla.createx.studio/vendor/smooth-
scroll/dist/smooth-scroll.polyfills.min.js"></script>
  <script
src="https://cartzilla.createx.studio/vendor
/drift-zoom/dist/Drift.min.js"></script>
  <!-- Main theme script-->

  <script src="https://cartzilla.createx.studio/js/theme.min.js"></script>
</body>

</html>
```

SCREENSHOTS

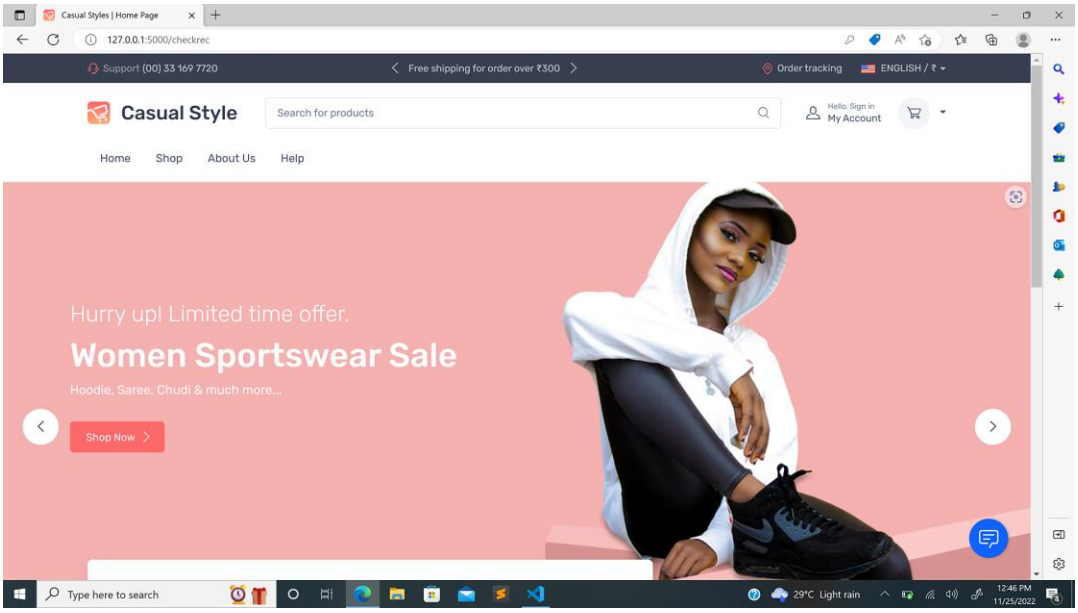
Login Page:



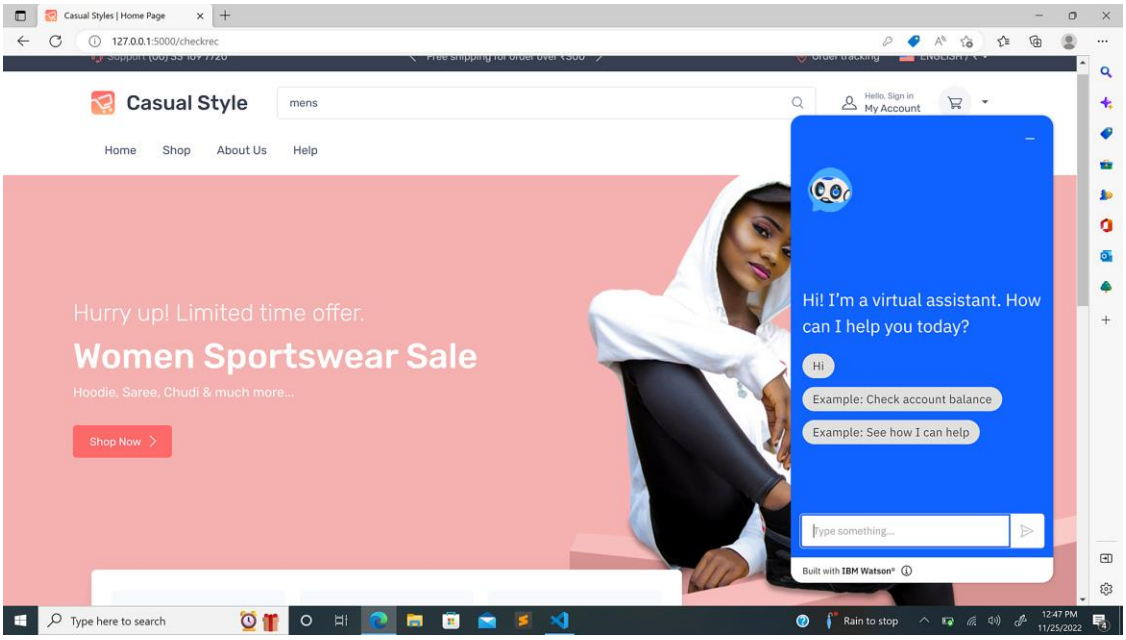
Admin Login Page:



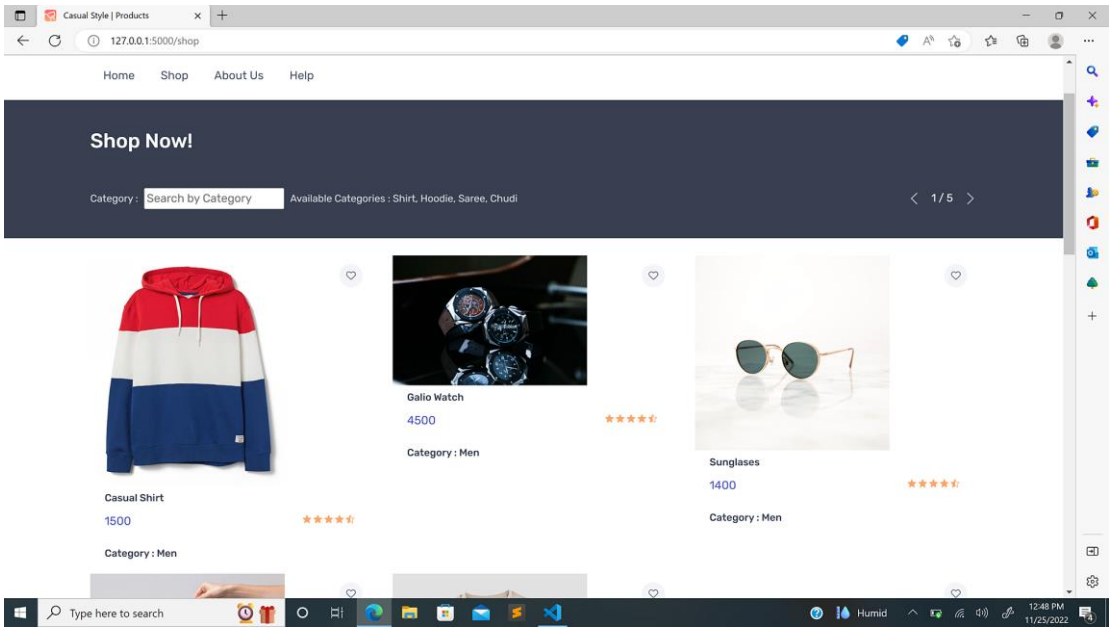
User Home Page:



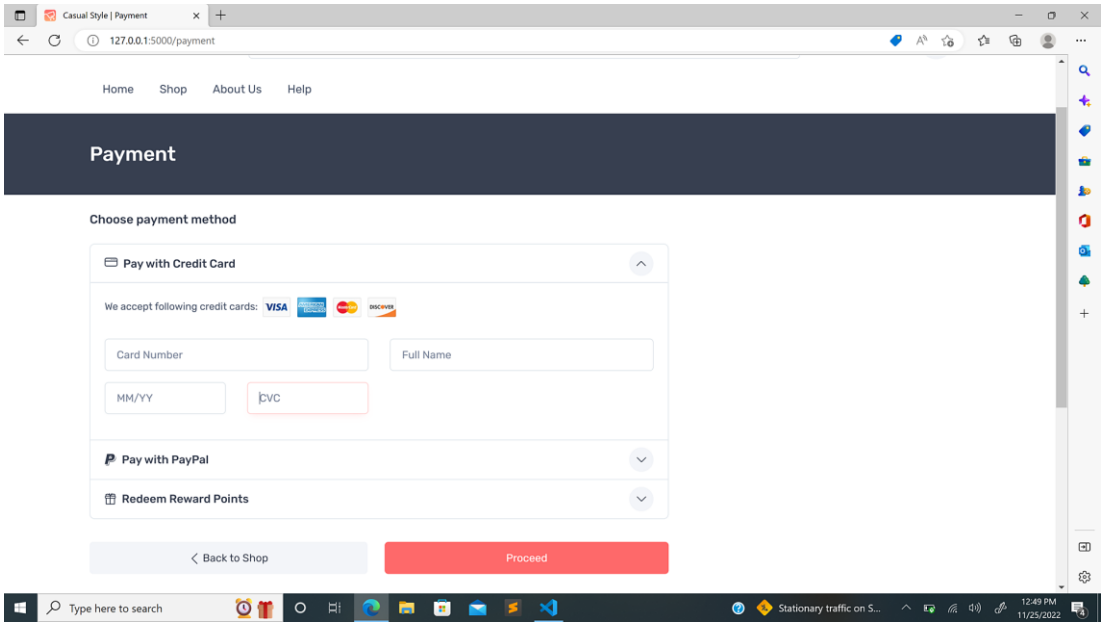
Chatbot:



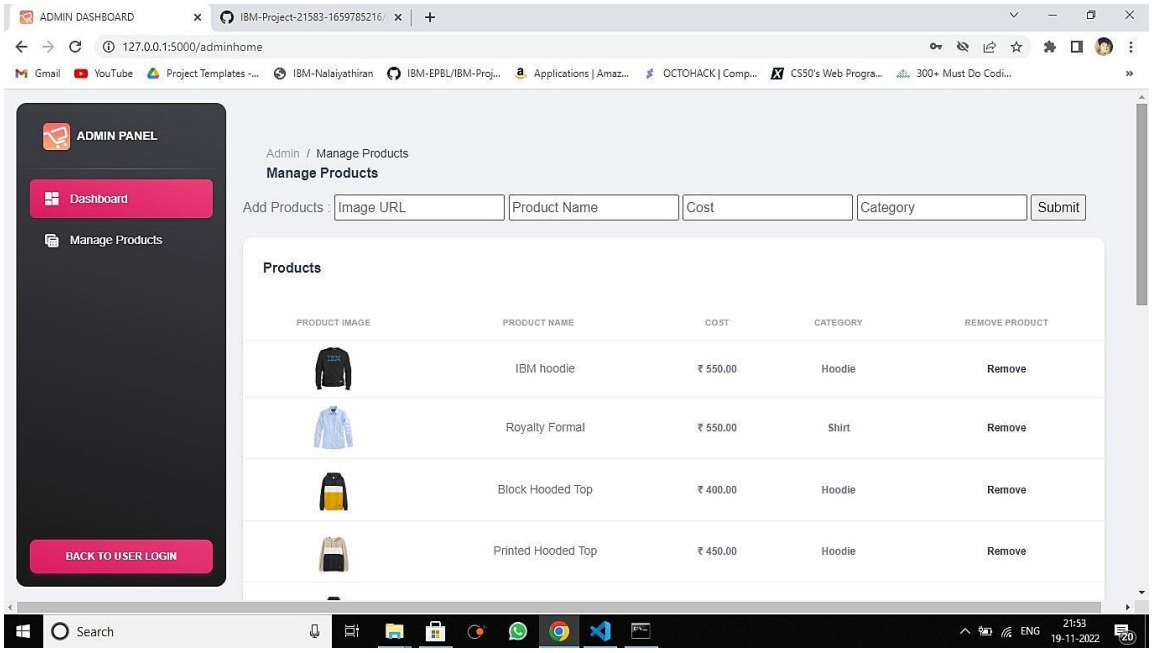
Product page:



Payment Page:



Admin dashboard:



GITHUB & PROJECT DEMO LINK

GITHUB LINK : https://github.com/IBM-EPBL/IBM-Project-34200-1660232781

DEMO LINK: https://www.youtube.com/watch?v=18ljXeinY9M