Online Tailor App

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DEPARTMENT OF COMPUTER SCIENCES COMSATS UNIVERSITY ISLAMABAD, ATTOCK CAMPUS – PAKISTAN

SESSION 2017-2021

Online Tailor App

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A DISSERTATION SUBMITTED AS A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING

DEPARTMENT OF COMPUTER SCIENCES COMSATS UNIVERSITY ISLAMABAD, ATTOCK CAMPUS – PAKISTAN

SESSION 2017-2021

UNDERTAKEN

We certify that this is my/our own work. The work has not, in whole or in part, been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged. If this statement is untrue, we acknowledge that we will have committed an assessment offence and shall be liable to punishable action under the plagiarism rules of HEC.

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FINAL APPROVAL

Certified that we have read this project report submitted by Mr.

(Arman Ali, Muhammad Ibrahim &, Muhammad Shoaib) and it is, in our judgment, of sufficient standard to warrant its acceptance by Department of Computer Science, Comsats University Islamabad Attock Campus, for the (BS degree) in Computer Science.

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DEDICATION

I dedicate this proposal to my lovely family for giving me the chance to be in university by paying my school fees and believing in me. To my friends for giving me the support I needed during the proposal writing and also for helping me and anyone who is willing to adopt new changes and embrace technology. To my supervisor Mr. Muhammad Kamran to support us and help to solve the problem and giving new ideas to implement for project success. May God bless you all and be happy in your life.

ACKNOWLEDGEMENT

Thanks to Allah Almighty for giving encouragement to take challenges in life and complete the project.

We would like to thanks our project supervisor Mr. Muhammad Kamran. Without their personal supervision, advice, and valuable guidance, the completion of this project would have been doubtful.

We would like to thanks our friends and family for loving caring and supporting My sincere gratitude also goes to the entire Comsat University fraternity for giving me an opportunity to pursue my career there. Also to the lecturers, management, and staff of Comsat University (Attock Campus) for their inputs especially in units that were essential in my proposal writing and development of this project for their support, patient, and belief in me.

PROJECT BRIEF

PROJECT NAME ONLINE TAILOR APP

ORGANIZATION NAME COMSAT UNIVERSITY ISLAMABAD

OBJECTIVE USER IS ABLE TO ORDER ONLINE FOR CLOTH

UNDERTAKEN BY MUHAMMAD SHOAIB

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LECTURAR

COMPUTER SCIENCE

COMSATS UNIVERSITY ISLAMBAD

ATTOCK CAMPUS

STARTED ON 25 October 2020

COMPLETED ON /* END DATE */

COMPUTER USED HP PAVILION CORE I5 7TH GENERATION

SOURCE LANGUAGE HTML CSS JAVASCRIPT AND MERN STACK

OPERATING SYSTEM WINDOWS

TOOLS USED VISUAL CODE

START UML

ADOBE PHOTOSHOP

MONGODB EXPRESS NODE REACT

GIT DESKTOP

HTML CSS

JAVASCRIPT INSOMNIA

ABSTRACT

The project is aimed to automate the tailoring sector which is manually maintained. After the automation this will mean better services and good keeping of records, data integrity, data security, quick search and also paperless environment. The project has mainly tackled management of information for the customers and in decision making. Every user of the system will have to log into the system using username and password so that security and authentication will be ensured. Once logged in, a customer can make and order, check dress status or even give feedback. The system administrator is able to manage customer information and also update records.

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Chapter 1

Introduction

1. Introduction

With the advancement in internet technology, almost every department uses their own online application to run business easily and effectively. An online tailoring Application is an automated system is to help the management of tailoring activities.

It will provide an online services to customers such as: measurement submission to their tailors, select the tailors, hire an experts for measurements, help for the proper keeping of records. This system ensures the right information availability, Safety of information also access and retrieval. For better use and more efficient than the existing manual system. The Online Tailoring App must check the validity of the user and allow the user to register for submission of measurement to the selected tailor.

It maintains user information to generate reports about the tailor shop. System administrators and Customers are the main users of the Online Tailor Management System. It allows the customer to check the status of their garments for example order is complete or not for collection.

The system provides a various information like a cost, fabric type and different type of dressing wants to user, which type of martial want to be used, The quantity he needs or wants to make and Check the total cost after complete the form.

To enable report generation it is able to give report of finished garments or dressing to the clients for collecting and booking made administrations is able to views all the customers and their details, finished garments and all the booking made.

The online Tailoring App provide Payment method either via mobile money transfer services like easy paisa, jazz cash.

1.1 Brief

This project development purpose is to provide better services and good keeping of records, Data security, data integrity, and quick search and not the use of paper documentation. For customers and decision-making information, the project used mainly tackled management process. The System user must have to log in using his/her username and password to ensured security and authentication. After

successfully login into a system, the User can make an order, check dress status, and give feedback. The administrator can manage customer information and update records. This project promotes an automate system for user ease and time safe.

1.2 Relevance to course modules

In this section, we discuss a multiple courses of software engineering program to help us and then making this project.

1.2.1 Software Project Management

Software Project Management helps us in understanding how the project is managing by the organization and how they develop their project. Setting the time, objectives, and goals is useful information that we learn from this course.

Software Requirement Engineering is one of the most important courses that we learn in our degree, this program tells us the importance of requirement in the Software Development Life Cycle. How to write requirements and what is the difference between functional and non-functional requirements.

1.2.2 Software Quality Assurance

This course enables us to understand what the quality of the software is and how we measure it using quantitative and qualitative data. How a software project is evaluated? What are the types and techniques of testing? Also, we study test cases that are useful in the evaluation phase of our project.

1.2.3Software Design and Architecture

This course enables us to learn the Unified Modeling Language Diagrams. How to design a software system based on requirement. This course helps in our project that how to design a system. We learn following diagram from this course.

- Activity Diagram
- Use Case Diagram
- Sequence Diagram
- Class Diagram

Data flow Diagram

1.3 Project background

The online tailor gave the offer to his/her user to use our service by setting anywhere in the country-specific areas and save his/her precious time. The clients have to travel to location of the tailor to get their measurement taken. The tailors all the measurements to be written on papers and papers. This method pose a high threat in terms of security and get to lose the information unauthorized people can easily to access the information and not a properly data to be maintained.

The online tailor application to solve all the problems. An online tailoring Application is an automated system is to help the management of tailoring activities.

1.4 Goals and Objectives

Our goals and objectives are as follows!

- Aim to update the manual tailoring system to automate the system and maintain a customer, data security, and product database and user rights
- The wants to be made by the user can able to send their measurements to their tailors.
- For the customers to maintain all the records he/she can use his measurements submission again and again or update it whenever he/she want to made again.
- Facilities to provide information about fabric type, the cost of the product the type of material to be used, and the urgency at which a customer wants the dress finished. The total cost which is computed depends on user-selected fabric, type of material, quantity and duration.
- For a client satisfaction, send a message to it provide number for his/her order complete status.
- To enable report generation: it is able to give a report of finished garments to the clients for collection and bookings made.

1.5 Literature Review

In this section, we will highlight some of the previous applications that already in the market and compare it with our application.

1.5.1MTailor

For Mtailor of these features are uncorrupted. [1]

- Cloth measurements
- Shipment
- Tailor selection

1.5.2 Etailor Master

For Etailor master of these features are uncorrupted. [2]

- Cloth measurements
- Shipments
- Suit or tux

1.5.3Online Tailor Application

In these features are included in online tailor application

• Cloth measurements

- Shipments
- Suit or tux
- Tailor selection
- Measurement record

1.5.4 Comparison Table

Table 1.1 Comparison Table

Features	MTailor	ETailor	Online Tailor app
Cloth measurements	Yes	Yes	Yes
Shipments	Yes	Yes	Yes
Suit or tux	No	Yes	Yes
Tailor selection	Yes	No	Yes
Measurement Record	No	No	Yes

1.6 Methodology

This project is built in incremental fashion as shown in figure. Thus, Online Tailor Application built using incremental model by adding small parts to complete entire task. It is software development life cycle model where projects/system is designed, built and tested incrementally. Increment mean "a little more is added each time" until the product is finished. This model is a combination of Waterfall Model with the philosophy of prototyping. This project is divided into smaller number of increments based on requirement priority.. [3]

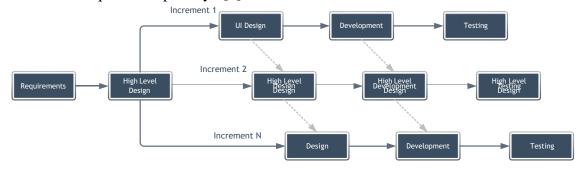


Figure 1.6 Designed

1.6.1Relational Behind Selected Methodology

Our project contains many modules, so we implement each module in a single increment. Characteristics of Incremental SDLC are

- 1. Project is divided into a smaller portions.
- 2. System is built partially to produce a final system.
- 3. Highest priority requirements are handled first.

Chapter 2

Problem Definition

2. Problem Definition

2.1 Problem Statement

Customers have many problems with currently tailoring shop because of time-consuming and waiting for cloth prepare or not and for his/her measurement taken he/she have to walk to the tailor shop and all his/her detail measurement is taken on paper. User is not sure and unknown about the status of his her cloth and every time if he/she wants to know the status they need to move to form their home to check. Customers too have no prior information on the cost of their garments. Due to the manual system, it is costly and time-consuming and the system is too slow.

2.2 Proposed Solution

The proposed online tailoring application will eliminate all these manual interventions and increase the speed of the whole process The Online Tailoring Management System must check the validity of the user and allow the user to register for submission of measurement to the selected tailor. It maintains user information to generate reports about the tailor shop. System administrators and Customers are the main users of the Online Tailor Management System. It allows the customer to check the status of their garments for example order is complete or not for collection.

The System provides various information like:

- 1. Cost
- 2. Fabric type
- 3. Which garment customer wants his/her dress.
- 4. When the customer wants his/her dress.
- 5. Which type of material want to be used.
- 6. The quantity he needs or wants to make.
- 7. Check the total cost after complete the form.

The online Tailoring Management System provide Payment method either via mobile money transfer services like easy paisa, jazz cash.

2.3 Deliverables

Deliverables after the end of the Final Year project to the FYP committee are as follows.

- Design File (HTML, CSS, JavaScript, React)
- Server-side file (Node and Express)
- Database (Mongo DB)
- Documentation (.docx , .pdf)

2.4 Development Requirements

To develop this website, we need the following gadget that matches these features or above.

- 4^{rth} Generation Laptop
- 2.5 Or above GHz processor.
- Minimum of 4 GM of RAM

2.4.1 Tools and technologies

2.4.1.1 Tools

Tools are as under!

- Visual Studio Code
- MongoDB Tool
- MongoDB Compass
- Adobe Photoshop
- MS Word
- MS PowerPoint
- Start UML
- Chrome DEV Tool
- Insomnia
- GIT Desktop

• Node (NPM)

2.4.1.2 Technology

- HTML
- CSS
- JavaScript
- MongoDB
- React
- Node
- JSON
- Express

Chapter 3

Requirement Specifications

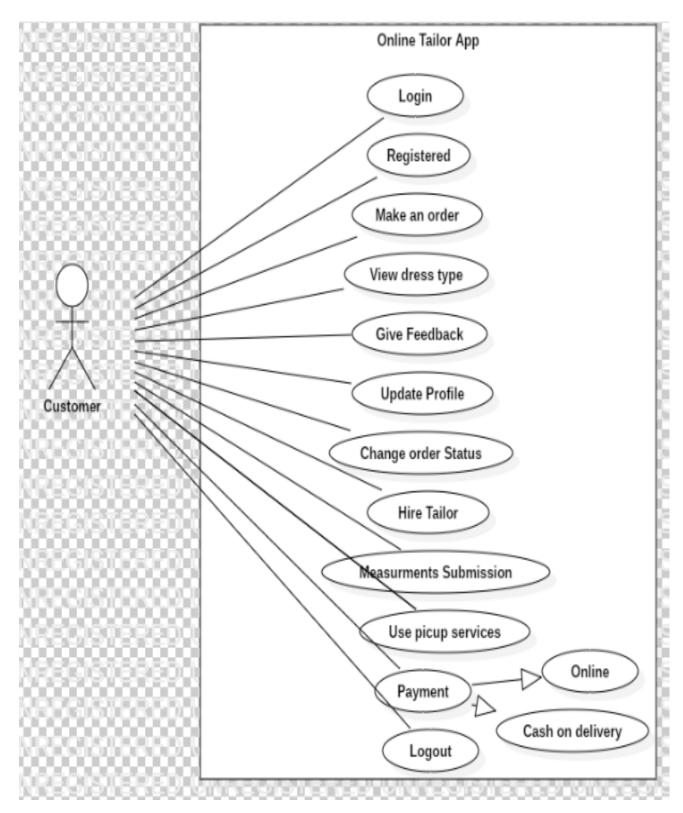
3. Requirement Specification

This chapter, we will discuss the requirement specification of the project. In this section, we will also discuss the functional and non-functional requirements of the project. Functional requirements describe the behavior of our system. On the other side non-functional requirement define the criteria to be assessed operating system, no specific behavior. Requirements collection and analysis is one of the important steps in the project development life cycle. The software requirements specification defines the requirements that are being designed and then developed to make the workable product. Requirements specifications are divided into two main categories.

3.1 Functional Requirement

In Functional Requirements, describe features of the app, all technical and logical operations will discuss. All features detail about input and output will discuss in this section. As the name suggests, function means those requirements that a system performs an operation on a specific situation. An operation and function are performed as a specific set of behavior between outputs and inputs.

3.2 Customer Use Case Diagram



3.2.1 FR-1 Sign-up User

Table 2 3.2.1 FR-01 Sign-up user

Name	Sign-up User	
Summary	This interface gives customer to register our portal. Customer must require a valid email address and mobile number.	
Rationale	To create account or register on app.	
Requirements	User must have at sign-up form of web application.	
	User must fill all credentials on sign-up form.	
	User must put valid data in credentials.	
	After fill click on Register button.	
References		

3.2.2 FR-2 Log-in

Table 3 **3.2.2 FR-02 Login**

Name	Login	
Summary	This purpose to client Login.	
Rationale	This interface offers a login r portal. After the account is registered to our system, then customer can login into the system.	
Requirements	 User must have an account. User must have login to online tailor app. User must fill all credentials on Login form. User fill valid data in credentials. After fill click on sign in button 	
References		

3.2.3 FR-3 Order

Table 43.2.3 FR-03 order

Name	Order	
Summary	User is able to order his/her desire dress and material type and styles	
Rationale	User is able to order once register is successful.	
Requirements	User must have at Login Form.	
	Enter all fields on Login Form.	
	After Login appear order on user dashboard.	
	Then fill the form according to desire information and click order now.	
References		

3.2.4 FR-4 Feedback

Table 5 3.2.4 FR-04 Feedback

Name	Feedback	
Summary	When the tailor complete the desired customer order then the customer give the feedback	
	about the tailor work.	
Rationale	Online Tailoring system of user is able gave feedback to tailor about his/her cloth.	
Requirements	After submit order and get delivery.	
	User is able to give feedback on that order.	
References		

3.2.5 FR-5 View items

Table 6 3.2.5 FR-05 View items

Name	Views Items
Summary	After customer login in our portal then customer view all the product of cloth. Customer also view the tailor.
References	

3.2.6 FR-6 Payment

Table 7 3.2.6 FR-06 Payment

Name	Payment
Summary	When the tailor complete the desired customer order then the customer give the feedback about the tailor work.
References	

3.2.7 FR-7 Received notification

Table 8 3.2.7 FR-07 Received notification

Name	Received notification
Summary	This interface give a customer to received notification when their order complete.
References	

3.2.8 FR-8 Hire tailor

Table 9 3.2.8 FR-08 Hire tailor

Name	Received notification
Summary	This interface give a customer can also hire a tailor. If the customer have no idea about
	the measurement of cloth.
References	

3.2.9 FR-9 Submit measurement

Table 10 3.2.9 FR-09 Submit measurement

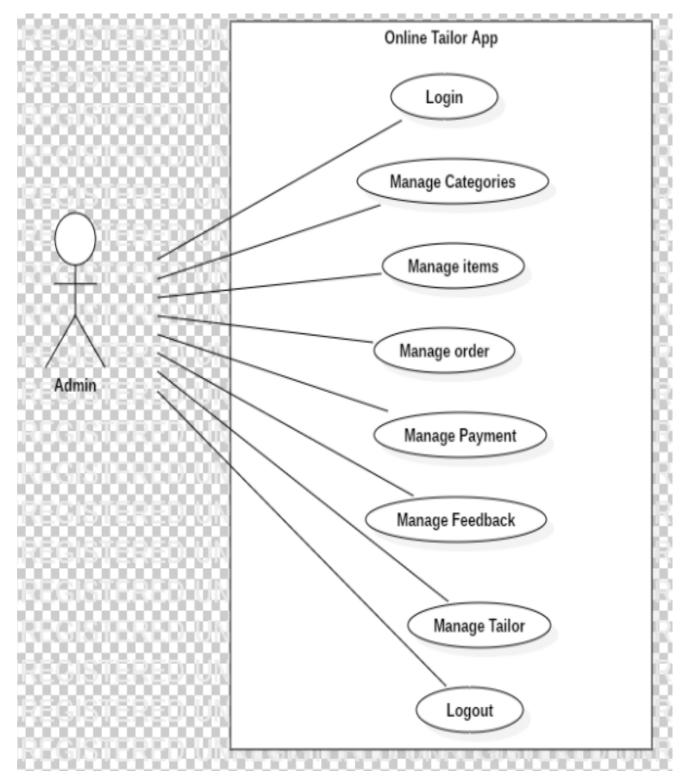
Name	Received notification
Summary	After customer login in our portal then customer see all the product of cloths. This
	interface customer give a measurement of cloth. After complete the measurement then
	they submit the measurement.
References	

3.2.10 FR-10 Pickup services

Table 11 3.2.10 FR-10 Pickup Services

Name	Received notification
Summary	This interface give a customer a pickup services. The pickup services require a valid
	address of location and mobile number.
References	

3.3 Admin Use case diagram



3.3.1 FR-1 Manage items

Table 12 3.3.1 FR-1 Manage items

Name	Manage items
Summary	This interface give an admin to manage the all product .Admin can be add, update and
	delete the record of product.
References	

3.3.2 FR-2 Manage customers

Table 13 3.3.2 FR-2 Manage customers

Name	Manage customers
Summary	This interface give an admin to see a record of customer. Admin can be add, update and
	delete the record of customers.
References	

3.3.3 FR-3 Manage tailors

Table 14 3.3.3 FR-3 Manage tailors

Name	Manage tailors
Summary	This interface give an admin to see a record of tailor. Admin can be add, update and delete
	the record of customer.
References	

3.3.4 FR-4 Manage pickup services

Table 15 3.3.4 FR-4 Manage pickup services

Name	Manage pickup services
Summary	This interface give an admin to see a record of pickup services. Only admin verified the
	information of customer who select the pickup services. Admin can be add, update and delete the record of customer.
References	

3.3.5 FR-5 Manage notification

Table 16 3.3.5 FR-5 Manage notification

Name	Manage notification
Summary	This interface give an admin to see a notification of both customer as well as tailor. Admin
	can be send notification of both tailor and customer.
References	

3.3.6 FR-6 Manage feedback

Table 17 3.3.6 FR-6 Manage feedback

Name	Manage feedback
Summary	When the tailor complete the desired customer order then the customer give the feedback
	about the tailor work. This interface admin can see the feedback of customer .Admin can
	be delete the feedback of customer.
References	

3.3.7FR-7 Manage payment

Table 18 3.3.7 FR-7 Manage payment

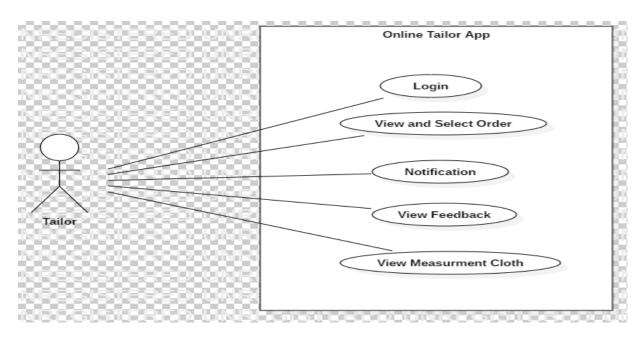
Name	Manage payment
Summary	This interface give an admin to see the customer and tailor payment records. In case of
	customer admin verified the payment information then admin update and delete the record of payment but in case of tailor admin can be add, update and delete payment of record.
References	

3.3.8FR-8 Communication

Table 19 3.3.8 FR-8 Communication

Name	Communication
Summary	This interface gives admin to communicate with the tailor. Require to enter text in the field and click send to start conversation
References	

3.4 Tailor



3.4.1FR-1 Register Tailor

Table 20 3.4.1 FR-01 Register Tailor

Name	Register Tailor
Summary	Tailor will be registered by admin .Unregister tailor would not get access to system.
Requirements	Tailor has valid CNIC.
	Tailor has valid mobile number
	Tailor has valid address of location.
References	

3.4.2 FR-2 View and update measurement cloth

Table 21 3.4.2 FR-02 view and update measurement cloth

Name	View and update measurement cloth
Summary	This interface give a tailor to see the measurement of cloth. If any issue in
	measurement then tailor contact the customer then update the measurement of
	cloth according to customer.
Requirements	The tailor must login into the portal
	Tailor need admin provide email and password for login.
	Tailor must contact if any issue in measurement of cloth.
References	

3.4.3FR-3 view customer information

Table 22 3.4.3 FR-03 view customer information

Name	View customer information
Summary	This interface give a tailor to see the customer information and through this
	information tailor contact the customer.
Requirements	The tailor must login into the portal
	Tailor need an admin provide email and password for login.
	Tailor need to click customer profile page.
References	

3.4.4FR-4 view orders

Table 23 3.4.4 FR-04 View orders

Name	View orders
Summary	This interface give a tailor to see the history of order. The history order contain all
	only complete order information.
Requirements	The tailor must login into the portal
	Tailor need an admin provided email and password for login.
	.Tailor need to click history of order page.
References	

3.4.5FR-5 view feedback

Table 24 3.4.5 FR-05 view feedback

Name	View feedback
Summary	This interface give a tailor to see the feedback of customer. The customer feedback
	the rating of tailor up or down
Requirements	The tailor must login into the portal
	Tailor need admin provided email and password for login.
	.Tailor need to click feedback page.
References	

3.4.6FR-6 Notification

Table 25 3.4.6 FR-06 Notification

Name	Notification
Summary	This interface give a tailor to see the Notification of admin. When the order
	compete the tailor send a notification to the customer.
Requirements	The tailor must login into the portal
	Tailor need to type a notification.
	.Tailor need to click notification page.
References	

3.4.7 FR-7 Tailor to customer communication

Table 26 3.4.7 FR-07 Tailor to customer communication

Name	Tailor to customer communication
Summary	This interface give a tailor to communicate with the customer.
Requirements	The tailor must login into the portal
	Tailor need to type a text in the text field.
	.Tailor click to send a message.
References	

3.5 Non-Functional Requirements

3.5.1FR-1 Performance

Table 273.5.1 FR-1 Performance

Name	Performance
Summary	The system has high performance. The average repair time between failures is
	high. This system can accommodate a large number of users who are connected at

	the same time. The project start time is 10 seconds. The JavaScript verification
	message will display in 0.4 seconds then open the home page of the website.
References	

3.5.2FR-2 Security

Table 28 3.5.2 FR-2 Security

Name	Security
Summary	Unauthorized users cannot access the system. Security restrictions are that customers must enter a valid email address, customers must enter a valid mobile phone number, and customer data cannot be shared with any third party, and the session will expire after logout
References	

3.5.3FR-3 Portability

Table 29 3.5.3 FR-3 Portability

Name	Portability
Summary	 The website is sufficiently responsive to different screen sizes This website is compatible with all major browsers. (Firefox, Chrome, Safari, Opera, etc.)
References	

3.5.4FR-4 User Friendly

Table 30 3.5.4 FR-4 User Friendly

Name	User Friendly
Summary	This system has a user-friendly interface. All user will easily use this
References	

Chapter 4

Design and Architecture

4. Design and Architecture

4.1 Project Design

This chapter introduces our overall project design. Project design is an important part of developing a graphical view. The requirements based on the functional and non-functional requirements detailed in the previous chapter. After understanding the requirements of the project planned for development, the project design can be accepted and marked as good. The best practice is always to create the high-level design first, then move on to the low-level design stage.

4.2 Data Modeling (Diagram)

In this sub-section, we design a project for a web application. In data modeling, the design of complex software systems is recorded in easy-to-understand diagrams. In our project, the data modeling diagram is as follows.

- Data flow diagram
- Activity diagram
- Sequence diagram
- Class diagram

4.2.1Data Flow Diagram

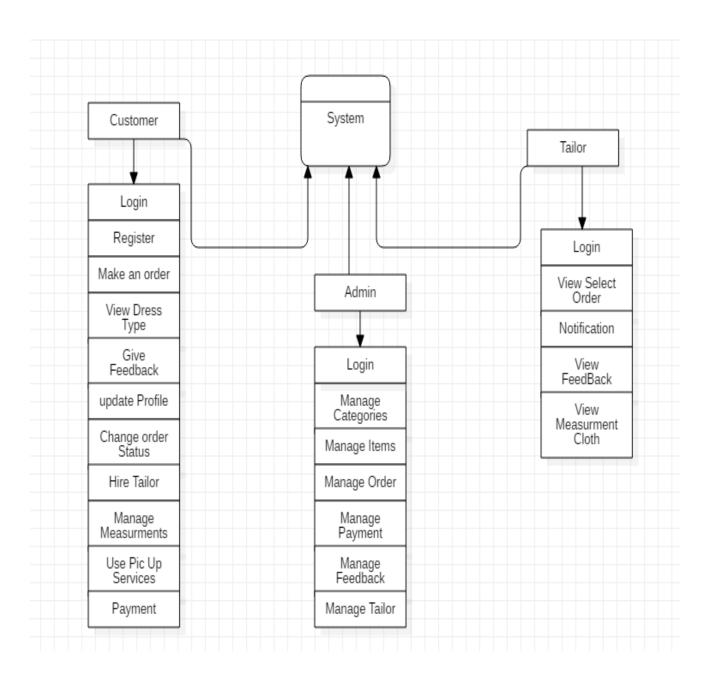


Figure 4.1 Data Flow Diagram

Activity Diagram

In our web application of online tailor app we have three actor that perform different activity in our system.

- Customer
- Admin
- Tailor

4.2.1.1 Customer Activity Diagram

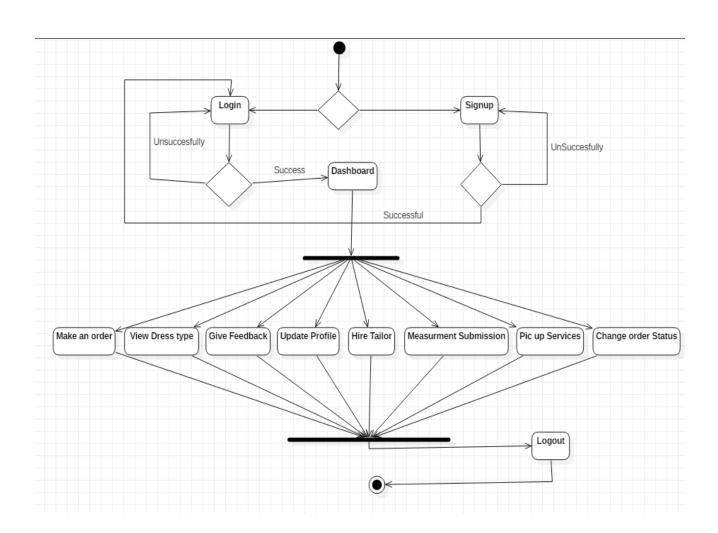


Figure 4.2.2.1 Customer activity Diagram

4.2.1.2 Admin Activity Diagram

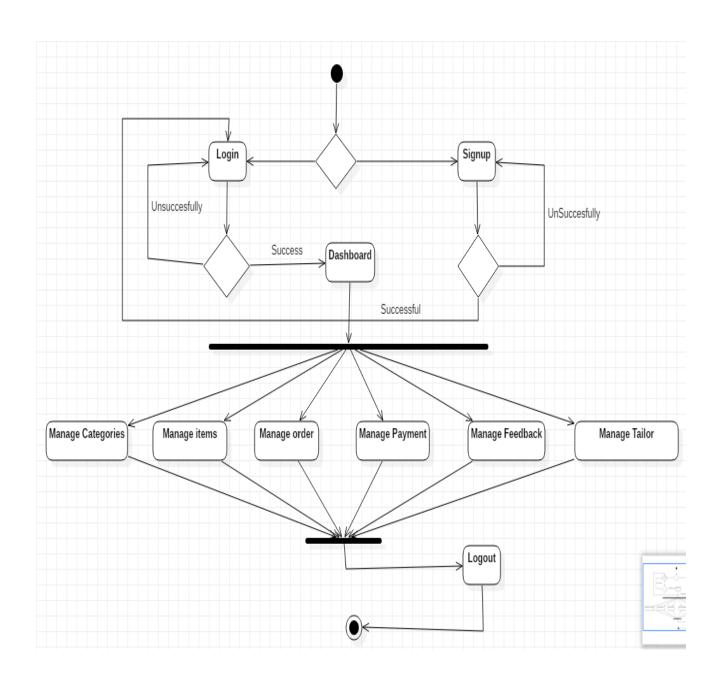


Figure 4-2.2.2 Admin activity Diagram

4.2.1.3 Tailor Activity Diagram

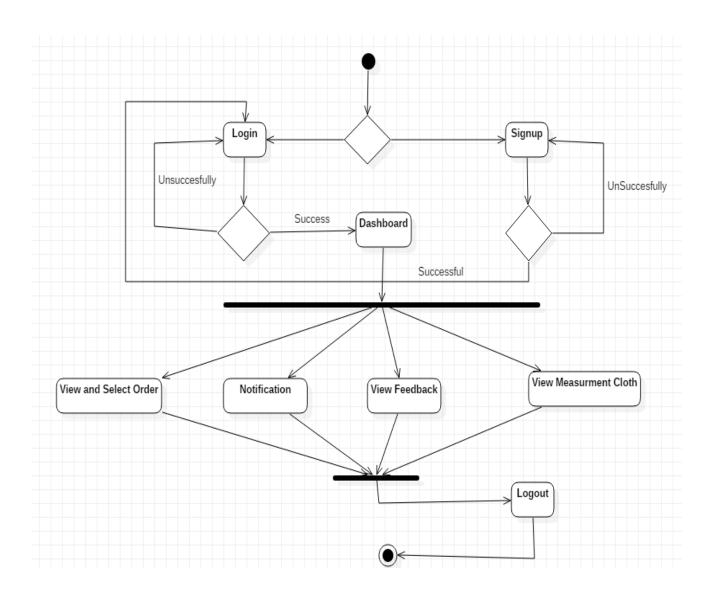


Figure 4.2.2.3 Tailor activity diagram

4.3 Sequence Diagram

This is a UML diagram of behavior. It logically shows the implementation of the system under development. It represents the message flow between the system and the lifetime when certain operations are performed. Messages are arranged in ascending order to keep the system flowing. It shows the dynamic behavior of the system based on the messages delivered.

4.3.1Customer Sequence Diagram

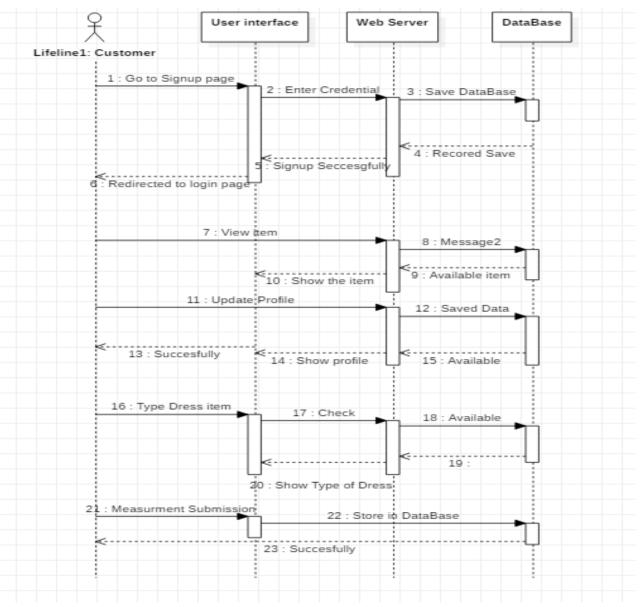


Figure 4.3.1 customer sequence diagram

4.3.2Admin Sequence Diagram

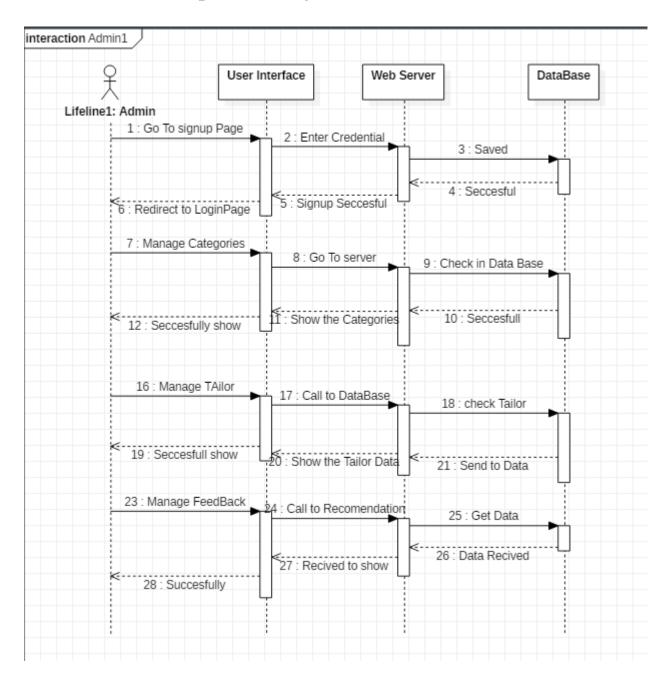


Figure 4.3.2 admin sequence diagram

4.3.3Tailor Sequence Diagram

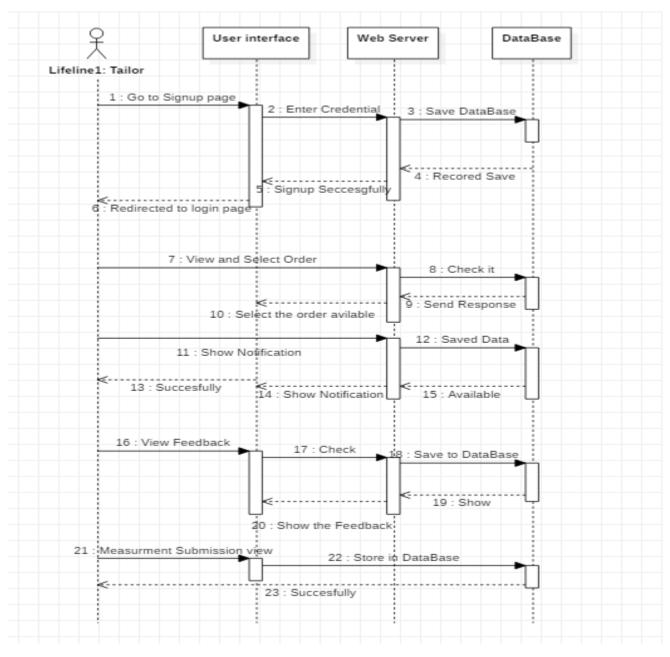


Figure 4.3.3 Tailor sequence diagram

4.4 Class Diagram

It is a structural modeling diagram used to represent various objects in our system, their attributes, and the relationships between them. The class diagram contains six connection types.

- Directed association
- Composition
- Dependency
- Generalization
- Aggregation
- Association

