



CERTIFICATE

This is to certify that the project entitled

HENNA WEBSITE

Is a sincere work of

SHIFA TOLE- SEAT NO: T18029

Submitted to The University of Mumbai in partial fulfilment of the requirement for the award of the Degree of Bachelor of Science in Information Technology for the academic year 2020-2021.

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Signature: _____ Date: _____

PROJECT REPORT
On
HENNA WEBSITE
Submitted to the
University of Mumbai
For the Degree of
Bachelor of Science
In
Information Technology
Submitted by
SHIFA TOLE– Seat NO: T18029
Guided by
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T18029 SHIFA TOLE

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ABSTRACT

Henna/Mehndi art has become very important among the all ages as it has been seen practising since a very long time in various culture and traditions.

The idea for creating the Henna/Mehndi website is to be able to give variety of facility like booking appointment, buying products, viewing designs gallery book, course availability information and many more things at one place.

INTRODUCTION

1. INTRODUCTION

The never ending festivals, occasions and celebrations are giving rise to the demand of Henna around the world.

Indian Wedding tradition calls for a Mehndi ceremony to be held the night before the wedding as a way of wishing the bride good health and prosperity as she makes her journey on to marriage. It has become an absolute important factor for a bride to apply Henna/Mehndi on her wedding.

Festivals have started seem to feel incomplete without Mehndi being a part of it. Henna/Mehndi is source of goodness in the tradition of many cultures. People are eager to try out various patterns for their different occasions, parties and events. Henna/Mehndi has become a trend which is being followed by massive number of people.

With all these comes the rise for the demand of Henna/Mehndi artist and sources to get all the essential products of it.

The Henna/Mehndi artists in this field are mostly booked before hand and the products too are highly requested which leads to being out of stock in markets.

By creating a website for themselves these artists can easily handle their data of customer booking and orders for their products. This will help in rise for their business growth.

ANALYSIS

2. ANALYSIS

2.1 SCOPE

The project “HENNA WEBSITE” will be created for Henna artist who started their own business in henna, by creating their own organic product to sell and to take various event orders.

- This website is being made to receive greater opportunities, better advertising and greater exposure to the artist's henna business.
- The website will help to receive more client's and customer's attention to their business.
- It will make their work of art easy to show to the world by providing picture gallery.
- It will also ease their work in collection of data about their business.
- The website could show various aspects like booking, ordering, joining class etc.
- Email notification for the artist for their new order or customer is an upgrade to their business.
- The website will make business life less complicated and more automated.

2.2 REQUIREMNET GATHERING

The idea for this project came to my mind when I saw one Henna Artist having trouble to keep up with the orders and booking she was receiving which leaded me to the idea of creating a Henna/Mehndi website.

As I was looking for ideas very rare websites provided all the facility like booking appointment or buying products in one website. This led me to the idea of integrating the website with many facilities like booking and buying along with a more features like course information and displaying their art work in gallery and more.

PROBLEM

DEFINTION

3. PROBLEM DEFINITION

3.1 EXISTING SYSTEM

- The current system consists of Artist advertising its work through newspapers, banners and posters.
- The existing system consists of manually handling orders.
- No software is used to manage the data of the clients or customers for booking and order in the current system.
- The possibility of booking is only through phone number in the existing system.
- The existing system makes advertising to a certain limit only.
- The existing system keeps the business of the artist to limited exposure.

3.2 PROBLEMS WITH EXISTING SYSTEM.

- The current system takes in Limited number of orders.
- Manually taking booking for services and without managing the data
- Fall in number of students due to pandemic in on-going system.
- Limitations over selling of items due to pandemic that is an offline selling system.
- No proper exposure to designs through newspapers, posters and banners in the current system.

3.3 PROPOSED SYSTEM.

- The system will give better ways of advertising.
- The system will have automated accepting of orders and booking.
- The system will give proper exposure to artist's work, design and classes information.
- The system will consist of showing various social media platforms of the artist at one place that will be on the website.
- Placing order for products will become easier due to this system.

3.4 ADVANTAGES OF THE PROPOSED SYSTEM.

- The proposed system can facilitate interaction among artist and student over the website.
- The system will enhance the business of the artist.
- Due to this system increase in the number of students and clients due to better advertising.
- The system will make an increase in the number of bookings due to the website.
- Automatic handling procedure.
- The system will increase the number of orders of items.

3.5 TOTAL MODULES IN THE PROJECT.

- Sign up Page
- Login Page
- Home Page

- Gallery Page
- Service Page
 - Bridal Page
 - Celebration Page
 - Special Page
 - Black Henna Page
- Order Page
 - Cart Page
 - Checkout Page
 - Payment Page
- Contact Page

3.6 DETAILED FUNCTIONALITY IN EACH MODULE.

- **Sign up Page**
The user signs up in order to get access of website through entering username and password for itself.
- **Login Page**
The user does the login in order to enter the website through entering username and password.
- **Home Page**
The user after login sees the Home Page which includes navigation bar where all other pages exist that is Gallery, Service Page, Order Page and Contact Page. It also consists of little information of each page.
- **Gallery Page**
The Gallery Page includes photo gallery of the various designs provided by the artist of the website.
- **Service Page**
It is made for the users to book themselves an appointment of the artist for various services provided by the artist like Bridal designs, Party designs, Festival designs and many other designs.
- **Order Page**
The user can add products to cart from the order page and lead themselves to further checkout procedure to buy the product.
- **Contact Page**
The contact page contents information about the artist as well as it gives option to get in touch with the artist.

FUNCTIONAL

REQUIREMENTS

4. FUNCTIONAL REQUIREMENT

Requirement Engineering is the process of defining, documenting and maintaining the requirements. It is a process of gathering and defining service provided by the system. Requirements Engineering Process consists of the following main activities:

- Requirements elicitation
- Requirements specification
- Requirements verification and validation
- Requirements management

Requirements Elicitation:

It is related to the various ways used to gain knowledge about the project domain and requirements. The various sources of domain knowledge include customers, business manuals, and the existing software of same type, standards and other stakeholders of the project.

The techniques used for requirements elicitation include interviews, brainstorming, task analysis, Delphi technique, prototyping, etc. Elicitation does not produce formal models of the requirements understood. Instead, it widens the knowledge domain of the analyst and thus helps in providing input to the next stage.

Requirements Specification:

This activity is used to produce formal software requirement models. All the requirements including the functional as well as the non-functional requirements and the constraints are specified by these models in totality. During specification, more knowledge about the problem may be required which can again trigger the elicitation process. The models used at this stage include ER diagrams, data flow diagrams (DFDs), function decomposition diagrams (FDDs), data dictionaries, etc.

Requirements Verification and Validation:

Verification: It refers to the set of tasks that ensure that software correctly implements a specific function.

Validation: It refers to a different set of tasks that ensure that the software that has been built is traceable to customer requirements. If requirements are not validated, errors in the requirements definitions would propagate to the successive stages resulting in a lot of modification and rework.

The main steps for this process include:

- The requirements should be consistent with all the other requirements i.e. no two requirements should conflict with each other.
- The requirements should be complete in every sense.
- The requirements should be practically achievable.
- Reviews, buddy checks, making test cases, etc. are some of the methods used for this.

Requirements Management:

Requirement management is the process of analysing, documenting, tracking, prioritizing and agreeing on the requirement and controlling the communication to relevant stakeholders. This stage takes care of the changing nature of requirements. It should be ensured that the SRS is as modifiable as possible so as to incorporate changes in requirements specified by the end users at later stages too.

4.1 FUNCTIONAL REQUIREMENTS:

- Strong Data Validation:**

Whenever user inputs the data in the data field the entered data should validate properly to avoid the inconsistency.

- Automatic Updation of the Database:**

The updation of the database after every transaction should be done without any inconsistency.

- Provide efficiency querying based on user request:**

The major task of any application is to generate efficient report on any use request.

4.2 EXTERNAL INTERFACE REQUIREMENTS:

- User friendly interface:**

The interface should be developed in such a manner that it not only improve the interaction but also saves data every time.

- Making well designed forms for capturing data:**

The form used in the application is able to capture all the data in well-designed manner.

4.3 PERFORMANCE REQUIREMENTS:

- Security:**

All users are not allowed to access the database. The username and password helps to deny the unauthorized user. Each user is given the specific rights to access the ins Read Only, Read Write, Delete.

SYSTEM

REQUIREMENT

SPECIFICATION

5. REQUIREMENT SPECIFICATION

5.1 SOFTWARE USED

- HTML
- JAVASCRIPT
- CSS
- PHP
- MYSQL

5.2 FRONTEND: HTML, JAVASCRIPT, CSS

HTML: The HyperTextMarkup Language, or HTML(HyperText Markup Language) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

JAVASCRIPT: JavaScript (often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web.^[10] JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it for client-side page behaviour and all major web browsers have a dedicated JavaScript engine to execute it.

CSS :Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

5.3 BACKEND: PHP, MYSQL

PHP: PHP is a general-purpose scripting language especially suited to web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialize PHP: Hypertext Pre-processor.

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and

executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response.

MYSQL: MySQL (is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter,¹ and "SQL", the abbreviation for Structured Query Language. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

5.4 Feasibility Study

A feasibility study is carried out to select the best system that meets performance requirements. The main aim of the feasibility study activity is to determine whether it would be financially and technically feasible to develop the product. It consists three types of feasibility.

▪ Operational Feasibility

Operational feasibility is a measure of how well a proposed system solves the Problems and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirement analysis phase of System development .If the users have difficulty with a new system, it will not produce the expected benefits. It basically measures the visibility of the system. In comparison with the existing system

Operational feasibility refers to the measure of solving problems with the help of a new proposed system. It helps in taking advantage of the opportunities and fulfills the requirements as identified during the development of the project. It takes care that the management and the users support the project.

Operational feasibility study would follow this path based on six elements:

- **Process** – Input and analysis from everyone the new redesign will affect along with a data matrix on ideas and suggestions from the original plans.
- **Evaluation** – Determinations from the process suggestions; will the redesign benefit everyone?
- **Implementation** – Identify resources both inside and outside that will work on the redesign. How will the redesign interfere with current work?
- **Resistance** – What areas and individuals will be most resistant? Develop a change resistance plan.
- **Strategies** – How to deal with the changed workspace environment? Do new processes or structures need to be reviewed or implemented in order for the redesign to be effective?
- **Adapt & Review** – How much time does it need to adapt to the new redesign? How will it be reviewed and monitored? What will happen if through a monitoring process, additional changes must be made?
- **Operational feasibility in our project:**
 - Database support is available in MYSQL.
 - Every operation carried out is stored into the database.
 - Since things are automated it is less time consuming.
 - Information is just a click away.
 - Information is compact and available in the navigation bar.

▪ Technical Feasibility

- The technical feasibility study compares the level of technology available in the software development firm and the level of technology required for the development of the product. Here the level of technology consists of the programming language, the hardware resources and other software tools etc.
- We would need to know whether it is technically feasible which means that we should have the correct hardware and software to create. If we aren't familiar with a piece of software but continue to use it there is a higher risk of something wrong happening because we aren't familiar with a piece of software or hardware.
- Being a small scale project the working of the project is quite simple.
- The project is user friendly and the flow of the project is not so complicated.
- Google provides with free APIs to integrate Google services in the application.

▪ Economic Feasibility:

The economic feasibility study evaluates the cost of the software development against the ultimate income or benefits from the developed system. There must be scopes for profit after the successful completion of the project. This will review the expected cost to see if they are in-line with the projected budget. A rough estimation of the project schedule is required to determine if it would be feasible to complete the system project within a required timeframe.

In economic feasibility, the most important is cost-benefit analysis. As the name suggests, it is an analysis of the costs to be incurred in the system and benefits derivable out of the system. Benefits of a new system should be more than the cost incurred to achieve profit of system.

This project does not incur much development cost.

Henna Website is not a large scale project; hence it is not much expensive. The website is made using HTML, JAVASCRIPT, CSS, PHP and MYSQL which is available as free software.

5.5 Schedule feasibility:

It is the degree to which a deadline for a strategy plan, project or process is realistic and achievable.

It is defined as the probability of a project to be completed within its scheduled time limits, by a planned due date. If a project has a high probability to be completed on time, then its schedule feasibility is appraised as high. In many cases a project will be unsuccessful if it takes longer than it was estimated: some external environmental conditions may change, hence a project can lose its benefits, expediency and profitability. If a work to be accomplished at a project does not fit the timeframes demanded by its customers, then a schedule is unfeasible then amount of work should be reduced or other schedule compression methods applied.

5.6 COST ESTIMATION:

Cost Estimation is part of the cost engineering profession. It is used to predict the quantity, cost & price of the resources required by the scope of a project. A project might be any process that is started to perform work activities and /or create assets.

Cost Estimation is needed to provide decision makers with the means to make investment decision, choose between alternatives & to setup the budget during the front end of the project.

Estimating was done by breaking down the total scope of the project in manageable. Parts to which of the resources can be assigned and costed.

The cost is calculated based on the requirement and development of this system.

They are as follows:

- Licensed version of the API.
- Licensed version of the Operating System.
- Usage of Internet.
- Efforts taken to develop and design the system.

SYSTEM

IMPLEMENTATION

6. **SYSTEM IMPLEMENTATION**

6.1 **USER INTERFACE DESIGN AND IMPLEMENTATION**

The Graphical user interface is design and implemented using languages HTML, PHP, JAVASCRIPT, CSS and for the data base MYSQL platform. The main components used in designing of the website are container class, table view, list view, card views, buttons, carousel, form method, date picker, radio button, etc.

6.2 **MODULEACTORS**

- System (Admin)
- User

6.3 **RESPONSIBILITY OF EACH ACTOR**

- **System(Admin) :**
 - The artist provides its product on the website to be sold.
 - The website shows all the variety of services provided by the artist.
 - The artist receives payment from the website for its product and booking orders from the users.
- **User :**
 - The user may view the website, can see the gallery as well. The user can book themselves appointment for henna from the services provided on the website.
 - The user may order themselves products presented by the artist from the order page.
 - The user can contact the artist through the contact page included in the website.

SOFTWARE

DEVELOPMENT LIFE

CYCLE

7. SOFTWARE DEVELOPMENT LIFE CYCLE

SDLC is the acronym of Software Development Life Cycle. It is also called as Software development process. The software development life cycle (SDLC) is a framework defining tasks performed at each step in the software development process.

7.1 Overview

SDLC (Software Development Life Cycle) is the process of creating or altering software systems, and the models and methodologies that people use to develop these systems. It is a process for a software project, within a software organization. The life cycle defines a methodology for improving the quality of software and the overall development process. The SDLC aims to produce a high quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.



7.2 System Development Phases

Software life cycle models describe phases of the software cycle and the order in which those phases are executed. Each phase produces deliverables required by the next phase in the life cycle. Requirements are translated into design. Code is produced according to the design which is called development phase. After coding and development the testing verifies the deliverable of the implementation phase against requirements.

7.3 Phases of SDLC

There are following six phases in every Software Development Life Cycle model:

1. Requirement gathering and analysis
2. Design
3. Implementation or coding
4. Testing
5. Deployment
6. Maintenance

Phase 1: Defining Requirements

Once the requirement analysis is done the next step is to clearly define and document the product requirements and get them approved from the customer or the market analysts. Thesis done through SRS (Software

Requirement Specification) document which consists of all the product requirements to be Designed and developed during the project life cycle.

- The SRS for Henna Website application, has been documented within the phase with a well define proposed system as well as the project.

Phase 2: Design

In this phase the system and software design is prepared from the requirement. Specifications to which were studied in the first phase. System Design helps in specifying hardware and system requirements and also helps in defining overall System architecture. The system design specifications serve as input for the next Phase of the model.

- The Henna Website, is developed on HTML, JAVA, CSS and PHP which helps to develop and design

Phase 3: Implementation / Coding

On receiving system design documents, the work is divided in modules/units and actual coding is started. Since, in this phase the code is produced so it is the main focus for the developer. This is the longest phase of the software development life Cycle. In SCFW each module was coded based on the design of each module and how the working and process needs to go about. The code was checked particularly twice since its case sensitive, so that at the time of testing where the whole app is set to test is error free and to avoid large modifications.

- In Henna Website, each module was coded based on the design of each module and how the working and process needs to go about.

Phase 4: Testing

After the code is developed it is tested against the requirements to make sure that the product is actually solving the needs addressed and gathered during the requirements phase. During this phase all types of functional testing like unit testing, integration testing, system testing, acceptance testing are done as wells non-functional testing. In SCFW after each module was designed and coded was tested immediately on the emulator to check whether it meets the requirement of the end user

- In Henna Website, each module was designed and code was tested immediately to check whether it meets the requirements of the end user.

Phase 5: Deployment

After successful testing the product is delivered / deployed to the customer for their use. As soon as the product is given to the customers they will first do the beta testing. If any changes are required or if any bugs are caught, then they will report it to the engineering team. Once those changes are made or the bugs are fixed then the final deployment will happen.

- After the successful, testing of the Henna website, the app will be deployed to see whether it is useful to meet the requirements of the website owner and if at all any changes need to be made then release update will be sent.

Phase 6: Maintenance

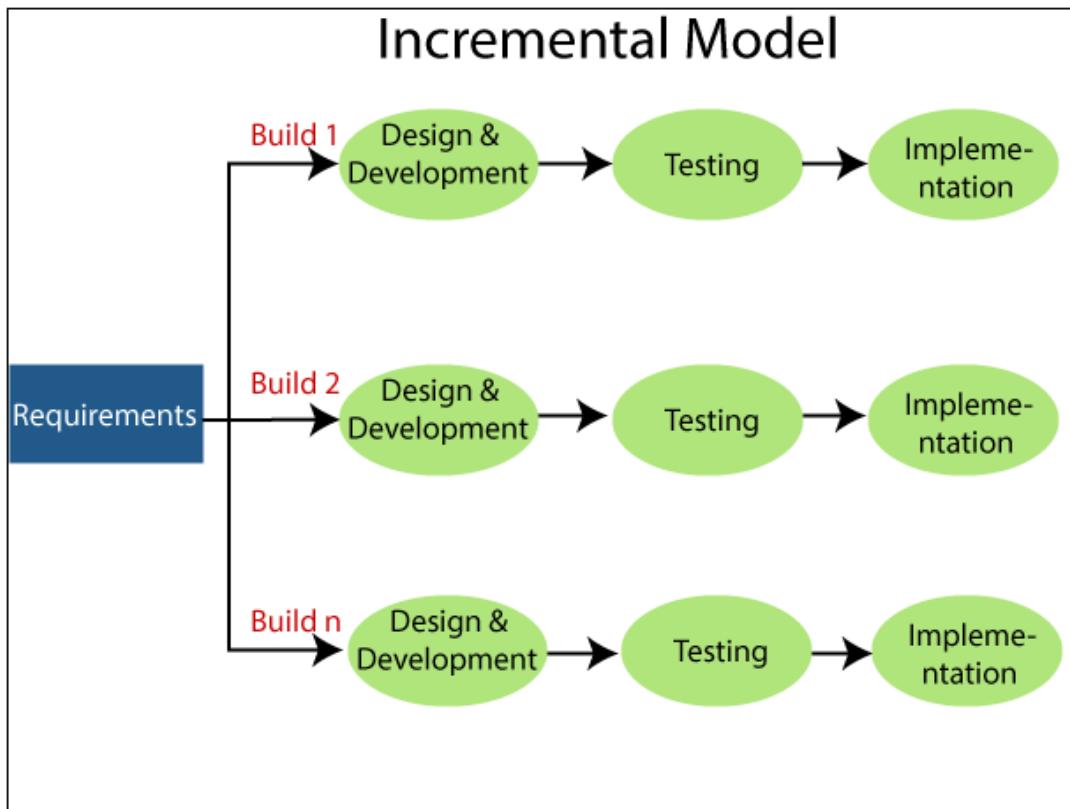
Once when the customers start's using the developed system then the actual problems comes up and needs to be solved from time to time. This process where the care is taken for the developed product is known as maintenance.

- Once when the user starts using the developed system, then the actual problems comes up and needs to be solved from time to time.

7.4 Incremental Delivery Model

Incremental Delivery:

The incremental delivery model is a method of software development where the product is designed and tested immediately until the product is finished. The product is defined as finished when it satisfies all the requirements. The model combines the element waterfall model with the iterative philosophy of prototyping. The product is decomposed into a number of components each of which is designed and build separately. Each component is delivered to client when it is complete. This allows partial utilization of the products and avoids a large initial capital outlet and subsequent long waiting period.



Reason For Choosing This Topic:

Incremental development is done in steps from design, implementation, testing/verification etc. These can be broken down further into sub same pattern. The waterfall model is a traditional incremental development approach. The iterative approach has no set of steps; rather the development is done in cycles

- Generates working software quickly and early during the software life cycle.
- More flexible- less costly to change the scope and requirements.
- Easier to test and debug during a smaller iteration.
- Easier to manage risk because risky pieces are identified and handled during its iteration.

7.5 Working of incremental delivery model

1. Requirement analysis: In the first phase of the incremental model, the product analysis expertise identifies the requirements. And the system functional requirements are understood by the requirement analysis team. To develop the software under the incremental model, this phase performs a crucial role.

2. Design & Development: In this phase of the Incremental model of SDLC, the design of the system functionality and the development method are finished with success. When software develops new practicality, the incremental model uses style and development phase.

3. Testing: In the incremental model, the testing phase checks the performance of each existing function as well as additional functionality. In the testing phase, the various methods are used to test the behaviour of each task.

4. Implementation: Implementation phase enables the coding phase of the development system. It involves the final coding that design in the designing and development phase and tests the functionality in the testing phase. After completion of this phase, the number of the product working is enhanced and upgraded up to the final system product.

UNIFIED **MODELLING** **LANGUAGE**

8. UNIFIED MODELLING LANGUAGE

The Unified Modelling Language (UML) is a standard language for writing Software blueprints. The UML may be used to visualize, specify, construct, and document the artefacts of a software-intensive system. The UML is appropriate for modelling systems ranging from enterprise information systems to distributed Web-based applications and even to hard real time embedded systems. It is a very expressive language, addressing all the views needed to develop and then deploy such systems. Even though it is expressive, the UML is not difficult to understand and to use. Learning to apply the UML effectively starts with forming a conceptual model of the language, which requires learning three major elements the UML's basic building blocks, the rules that dictate how these building blocks may be put together, and some common Mechanisms that apply throughout the language. The UML is only a language and so is just one part of a software development method. The UML is process independent, although optimally it should be used in a process that is use case driven, architecture-centric, iterative, and incremental.

8.1 ENTITY RELATIONSHIP (ER) DIAGRAM

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how "entities" such as people, objects or concepts relate to each other within a system. ER diagrams are related to data structure diagrams (DSDs), which focus on the relationships of elements within entities instead of relationships between entities themselves. ER diagrams also are often used in conjunction with data flow diagrams (DFDS), which map out the flow of information for processes or systems.

Table 8.1.1 ERD ENTITY NOTATIONS

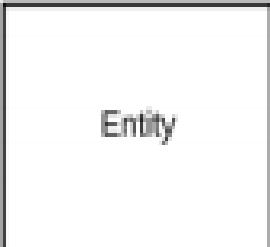
Entity symbol	Name	Description
 Entity	Strong entity	These shapes are independent from other entities, and are often called parent entities, since they will often have weak entities that depend on them. They will also have a primary key, distinguishing each occurrence of the entity.
 Weak Entity	Weak entity	Weak entities depend on some other entity type. They don't have primary keys, and have no meaning in the diagram without their parent entity
 Associative Entity	Associative entity	Associative entities relate the instances of several entity types. They also contain attributes specific to the relationship between those entity instances

Table 8.1.2 ERD RELATIONSHIP NOTATIONS

Relationship Symbol	Name	Description
	Relationship	Relationships are associations between or among entities
	Weak relationship	Weak Relationships are Connections between a weak entity and its owner.

Table 8.1.3 ERD ATTRIBUTE NOTATIONS

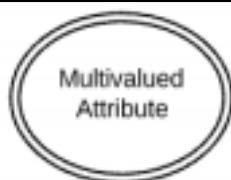
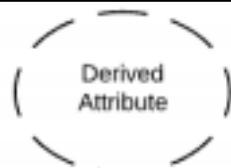
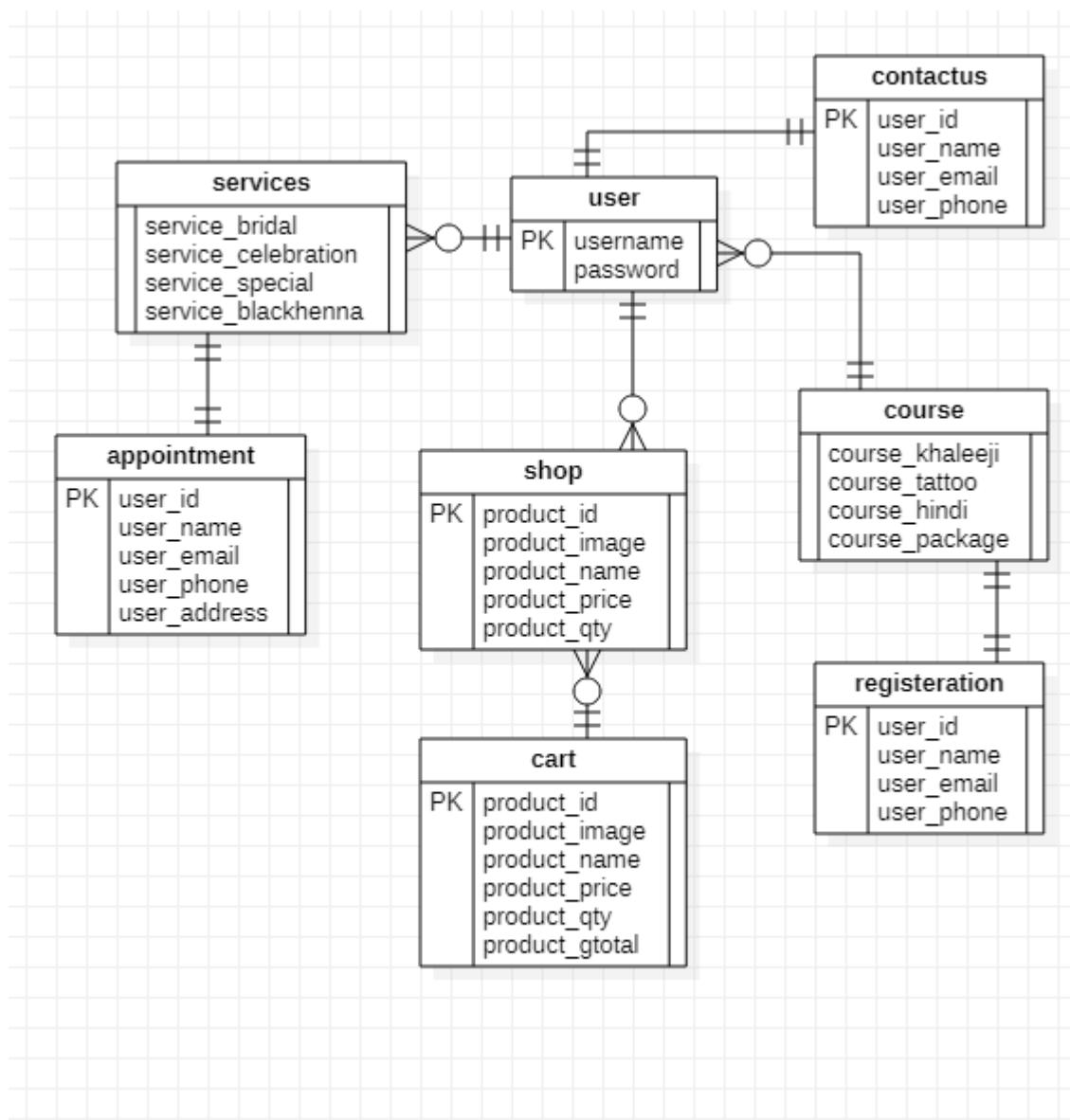
Attribute Symbol	Name	Description
	Attribute	Attributes are characteristics of an entity, a many-to-many relationship, or a one-to-one relationship
	Multi-valued Attribute	Multi-valued attributes are those that can take on more than one value
	Derived Attribute	Derived attributes are attributes whose value can be calculated from related attribute values

Table 8.1.4 ERD CARDINALITY

	One
	Many
	One (and only one)
	Zero or one
	One or many
	Zero or many

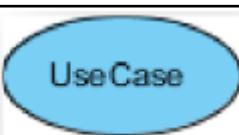
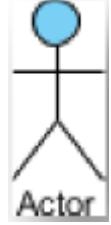
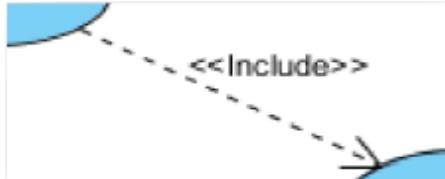
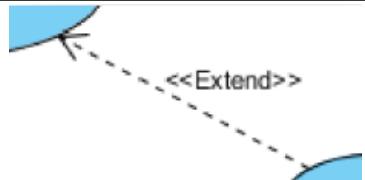
FIGURE 8.1.1 ERD FOR HENNA/MEHNDI WEBSITE



8.2 USE CASE (UC) DIAGRAM

A use case diagram is a dynamic or behaviour diagram in the functionality of a system using actors and use cases. In this context, a "system" is something being developed or operated, such as a web site. The "actors" are people or entities operating under defined roles within the system.

Table 8.2.1 USE CASE DIAGRAMS NOTATIONS

Entity symbol	Name	Description
	Use case	A use case represents a user goal that can be achieved by accessing the system or software application.
	Actors	Actors are the entities that interact with a system. Although in most cases, actors are used to represent the users of system, actors can actually be anything that needs to exchange information with the system. So, an actor may be people, computer hardware, other systems, etc.
	Include	An include relationship specifies how the behaviour for the inclusion use case is inserted into the behaviour defined for the base use case.
	Extend	An extend relationship specifies how Behaviour of the extension use case can be inserted into the behaviour defined for the base use case.
	Dependency	A dependency relationship represents that a model element relies on another model element for specification and/or implementation.

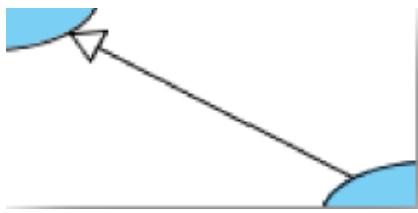
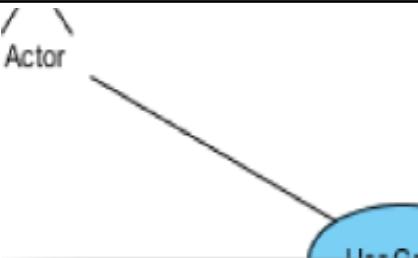
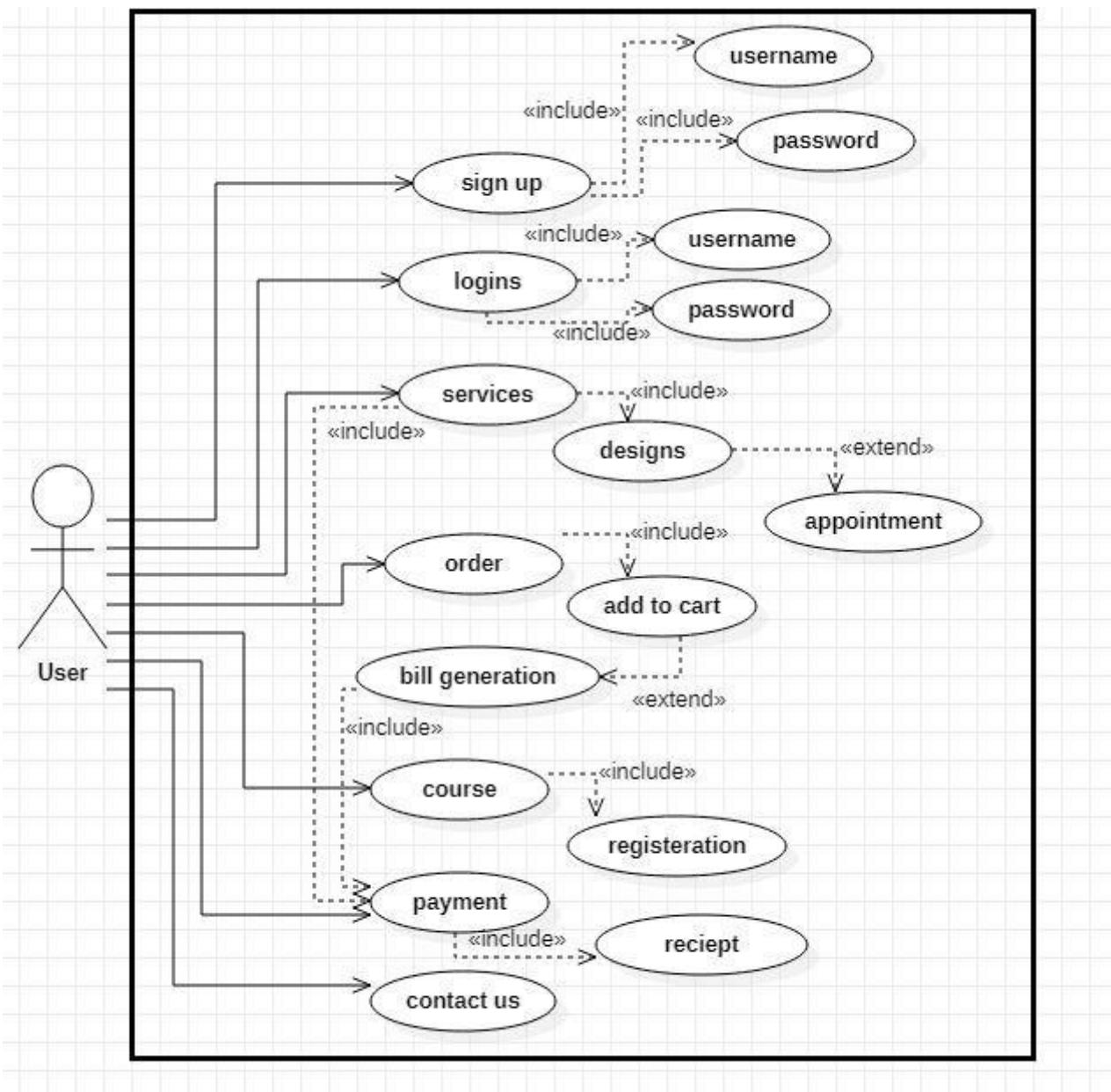
	Generalization	A generalization relationship is used to represent inheritance relationship between model elements of same type
	Actor and use case	Actor and use case can be associated to indicate that the actor participates in that use case. Therefore, an association correspond to a sequence of actions between the actors and use case in achieving the use case.

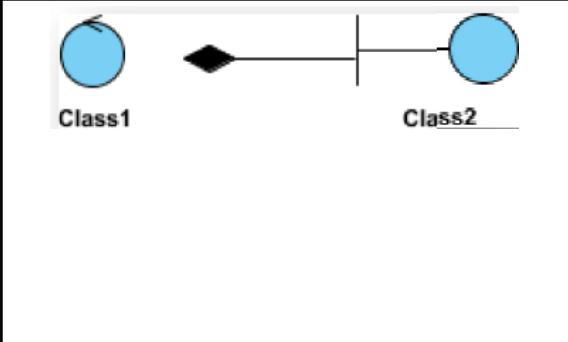
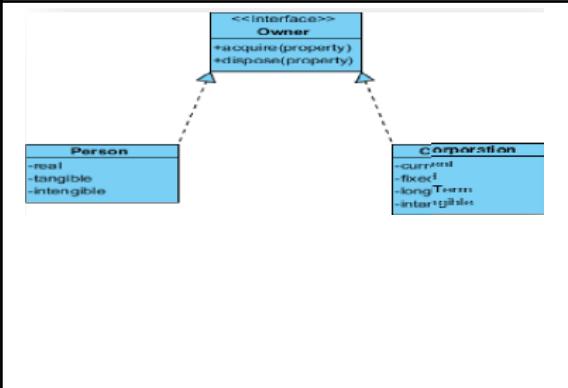
Figure 8.2.1 USE CASE DIAGRAM FOR HENNA WEBSITE

8.3 CLASS DIAGRAM

A class represent a concept which encapsulates state (attributes) and behaviour (operations). Each attribute has a type. Each operation has a signature. The class name is the only mandatory information. The purpose of class diagram is to model the static view of an application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction.

Table 8.3.1 CLASS DIAGRAMS NOTATIONS

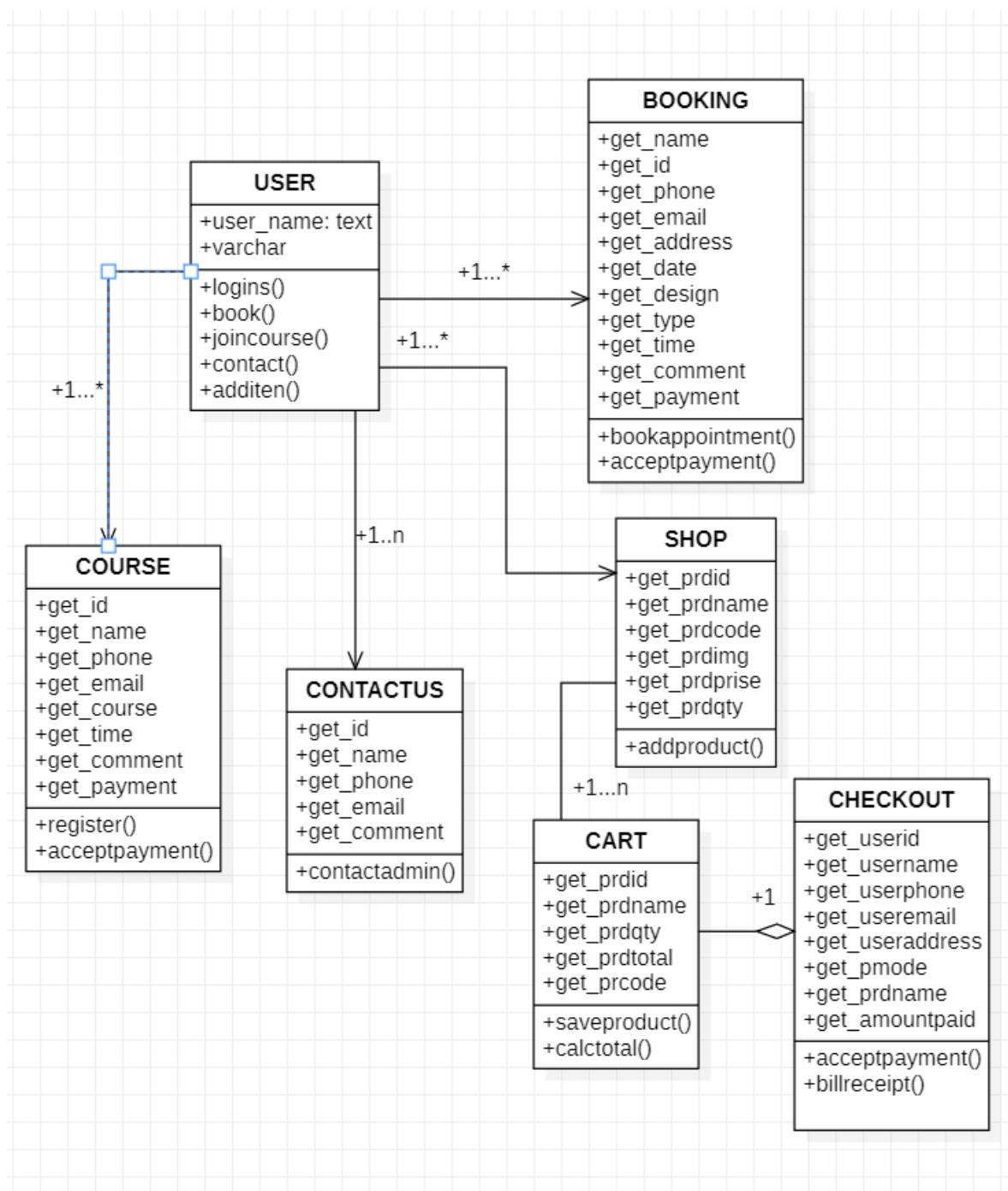
Entity symbol	Name	Description
	Class Name	The name of the class appears in the first partition. Class Attributes: Attributes are shown in the second partition. The attribute type is shown after the colon. Attributes map onto member variables (data Members) in code.
	Generalization	A generalization is a taxonomic relationship between a more general classifier and a more specific classifier. Each instance of the specific classifier is also an indirect instance of the general classifier.
	Associations	Associations are relationships between classes in a UML Class Diagram. They are represented by a solid line between classes.
	Dependency	The relationship is displayed as a dashed line with an open arrow.
	Aggregations	The figure below shows an example of aggregation. The relationship is displayed as a solid line with An unfilled diamond at the association end, which is connected to the class that represents the aggregate.

 <pre> graph LR Class1((Class1)) -- "Composition" --> Class2((Class2)) </pre>	Composition	<p>The figure below shows an example of composition. The relationship is displayed as a solid line with a filled diamond at the association end, which is connected to the class that represents the whole or composite</p>
 <pre> classDiagram interface Owner { +acquire(property) +dispose(property) } class Person { -real -tangible -intangible } class Corporation { -current -fixed -longTerm -intangible } Person < -- Owner Corporation < -- Owner </pre>	Realization	<p>A Realization is a relationship between the blueprint class and the object containing its respective implementation level details. This object is said to realize the blueprint class. In other words, you can understand this as the relationship between the interface and the implementing class.</p>

Cardinalities :

Indicator	Meaning
0..1	Zero or one
1	One only
0..*	0 or more
1..* *	1 or more
n	Only n (where $n > 1$)
0..n	Zero to n (where $n > 1$)
1..n	One to n (where $n > 1$)

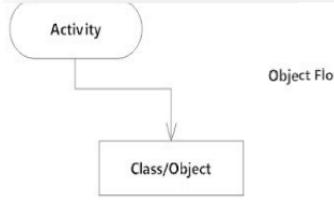
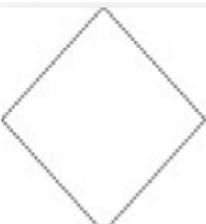
Figure 8.3.1 CLASSDIAGRAM FOR HENNA WEBSITE



8.4 ACTIVITY DIAGRAM

Activity diagram is another important diagram in UML to describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc.

Table 8.4.1 ACTIVITY DIAGRAMS NOTATIONS

Entity symbol	Name	Description
 Start Point/Initial State	Initial State or Start Point	A small filled circle followed by an arrow represents the initial action state or the start point for any activity diagram. For activity diagram using swim lines, make sure the start point is placed in the top left corner of the first column.
 Activity	Activity or Action State	An action state represents the non-interruptible action of objects. You can draw an action state in Smart Draw using a rectangle with rounded corners.
 Action Flow	Action Flow:	Action flows, also called edges and paths, illustrate the transitions from one action state to another.
 Object Flow	Object Flow	Object flow refers to the creation and modification of objects by activities. An object flow arrow from an action to an object means that the action creates or influences the object.
 Decision Symbol	Decisions and Branching	A diamond represents a decision with alternate paths. When an activity requires a decision prior to moving onto the next activity, add a diamond between the two activities.

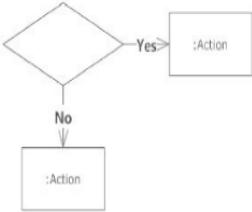
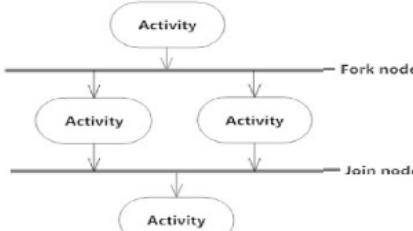
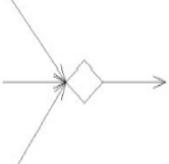
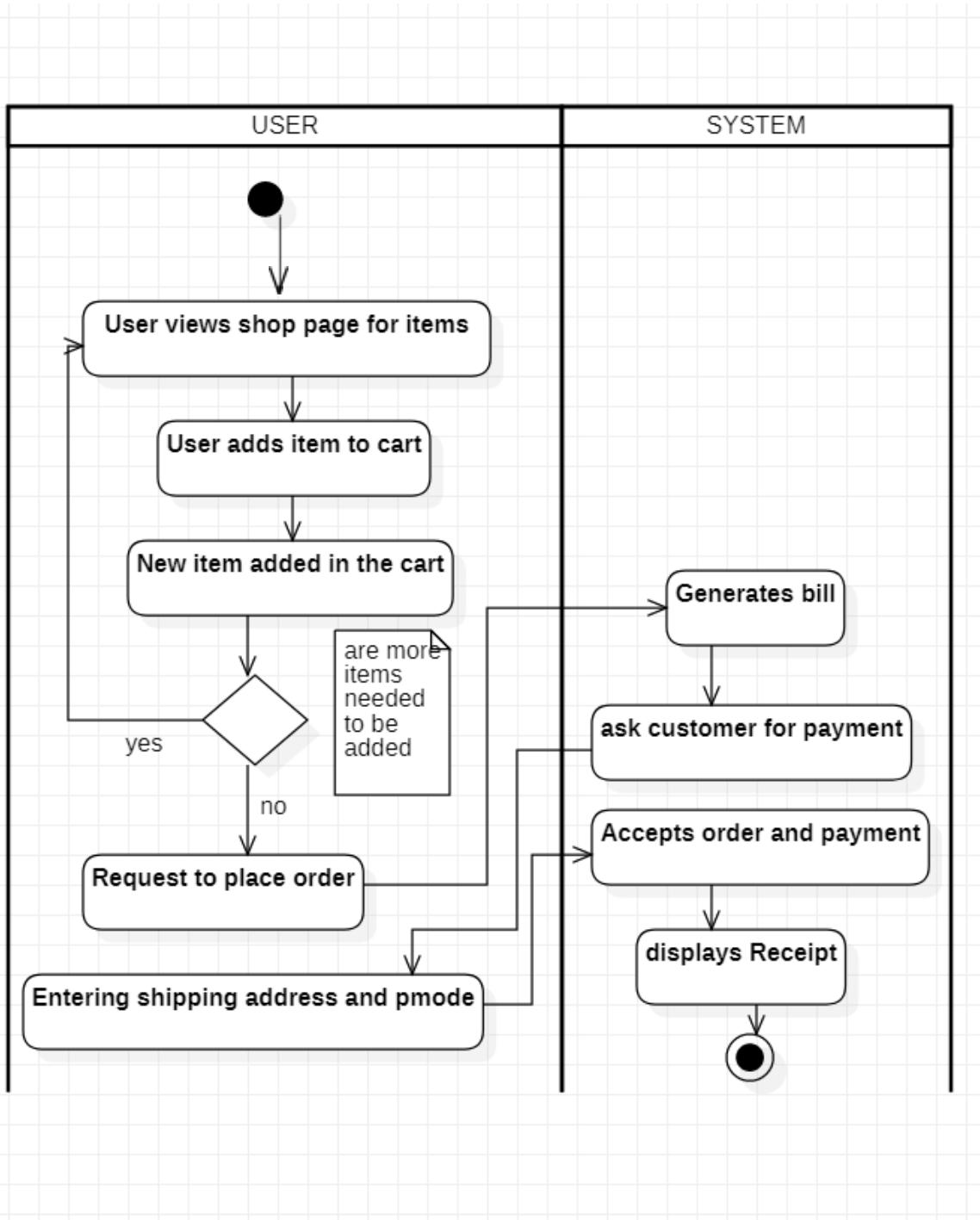
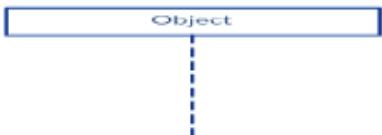
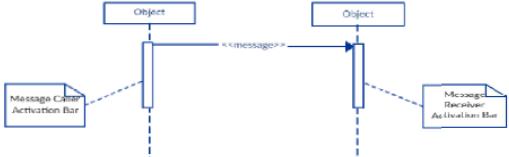
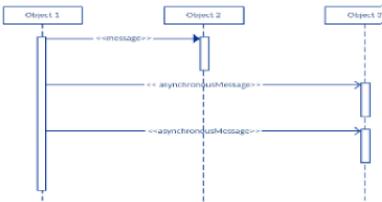
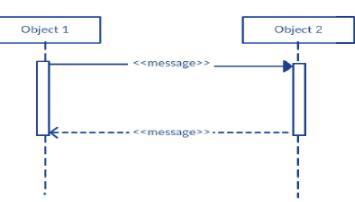
 <p>Guard Symbols</p>	<p>Guards</p>	<p>In UML, guards are a statement written next to a decision diamond that must be true before moving next to the next activity.</p>
 <p>Synchronization</p>	<p>Fork and Join nodes</p>	<p>A fork node is used to split a single incoming flow into multiple concurrent flows. It is represented as a straight, slightly thicker line in an activity diagram. A join node joins multiple concurrent flows back into a single outgoing flow. A fork and join mode used together are often referred to as synchronization.</p>
 <p>Merge</p>	<p>Merge Event</p>	<p>A merge event brings together multiple flows that are not concurrent.</p>
 <p>End Point Symbol</p>	<p>Final State or End Point</p>	<p>An arrow pointing to a filled circle nested inside another circle represents the final action state.</p>

Figure 8.4.1 ACTIVITY DIAGRAM FOR HENNA WEBSITE

8.5 SEQUENCE DIAGRAM

Sequence diagrams, commonly used by developers, model the interactions between objects in a single use case. They illustrate how the different parts of a system interact with each other to carry out a function, and the order in which the interactions occur when a particular use case is executed. In simpler words, a sequence diagram shows different parts of a system work in a ‘sequence’ to get something done.

Table 8.5.1 SEQUENCE DIAGRAMS NOTATIONS

Entity symbol	Name	Description
	Lifeline	A sequence diagram is made up of several of these lifeline notations that should be arranged horizontally across the top of the diagram. No two lifeline notations should overlap each other.
	Activation bar	The box placed on the lifeline. It is used to indicate that an object is active (or instantiated) during an interaction between two objects.
	Synchronous message	As shown in the activation bars example, a synchronous message is used when the sender waits for the receiver to process the message and return before carrying on with another.
	Asynchronous message	An asynchronous message is used when the message caller does not wait for the receiver to process the message and return before sending other messages to other objects within the system.
	Return message	A return message is used to indicate that the message receiver is done processing the message and is returning control over to the message caller. Return messages are optional notation pieces, for an activation triggered by a synchronous message always implies a return message.

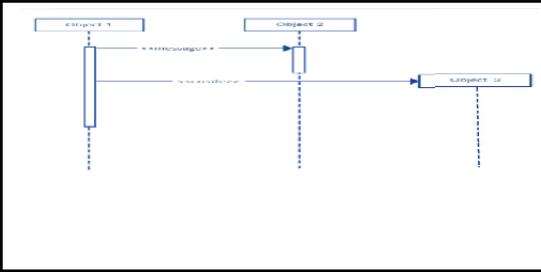
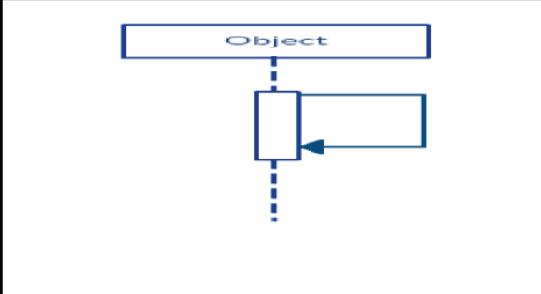
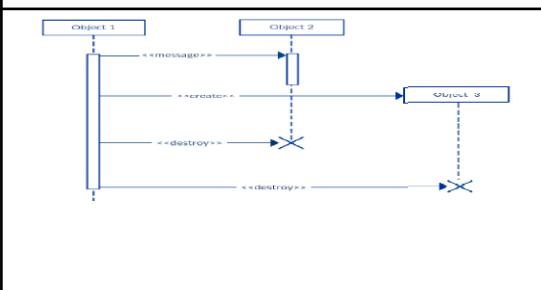
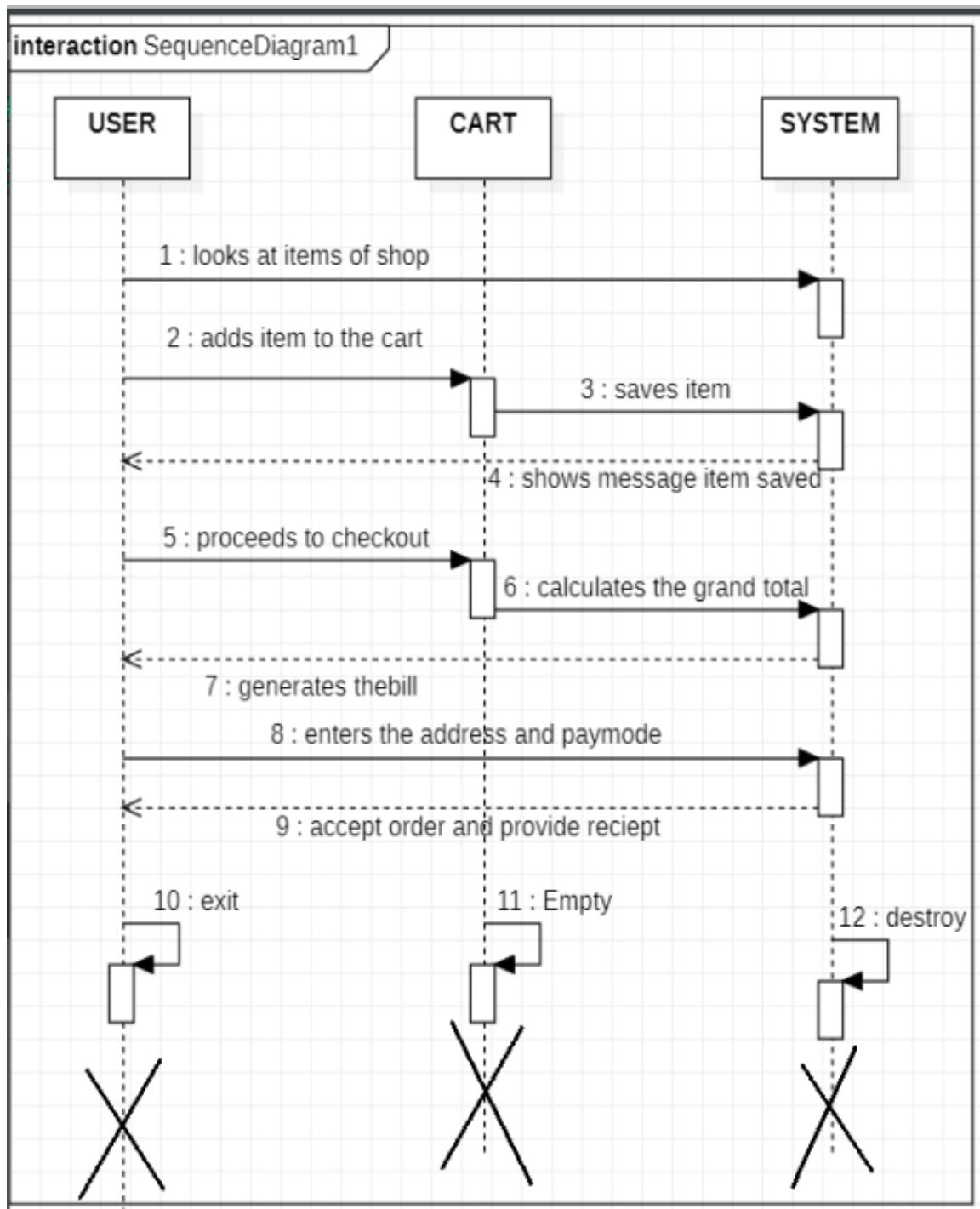
 <pre> sequenceDiagram participant Object3 participant Object2 participant Object4 Object3->>Object2: message activate Object2 Object2->>Object4: create deactivate Object2 deactivate Object3 </pre>	Participant creation message	Objects do not necessarily live for the entire duration of the sequence of events. Objects or participants can be created according to the message that is being sent.
 <pre> sequenceDiagram participant Object Object->>Object: self-call </pre>	Reflexive message	When an object sends a message to itself, it is called a reflexive message. It is indicated with a message arrow that starts and ends at the same lifeline as shown in the example below.
 <pre> sequenceDiagram participant Object1 participant Object2 Object1->>Object2: message activate Object2 Object2->>Object2: destroy deactivate Object2 Object1->>Object2: destroy </pre>	Participant destruction message	Likewise, participants when no longer needed can also be deleted from a sequence diagram. This is done by adding an 'X' at the end of the lifeline of the said participant.

Figure 8.5.1 SEQUENCE DIAGRAM FOR HENNA WEBSITE

8.6 DATA FLOW DIAGRAM (DFD)

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in data from the input to the file storage and reports generation.

Table 8.6.1 DATA FLOW DIAGRAM (DFD) NOTATIONS

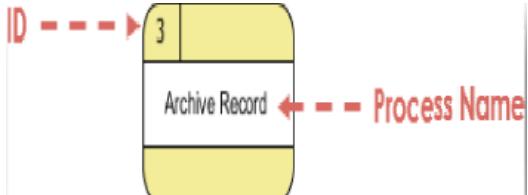
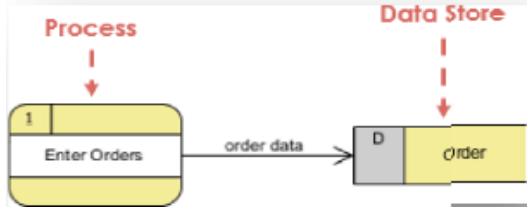
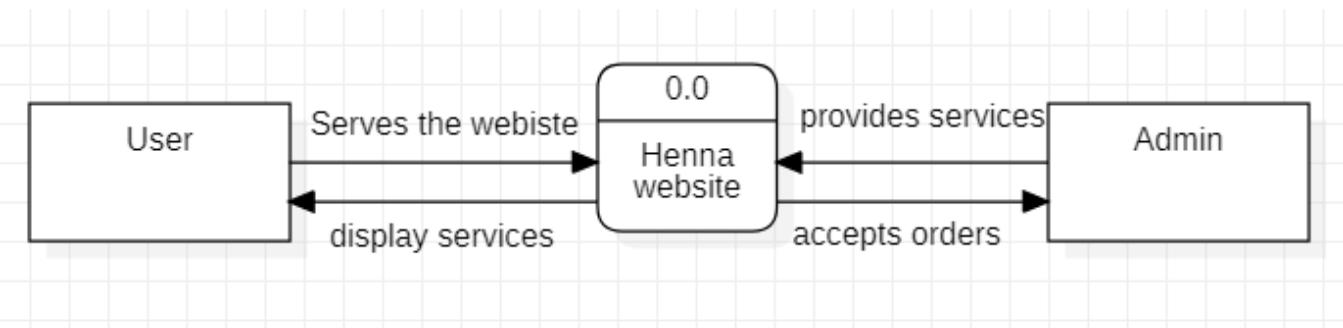
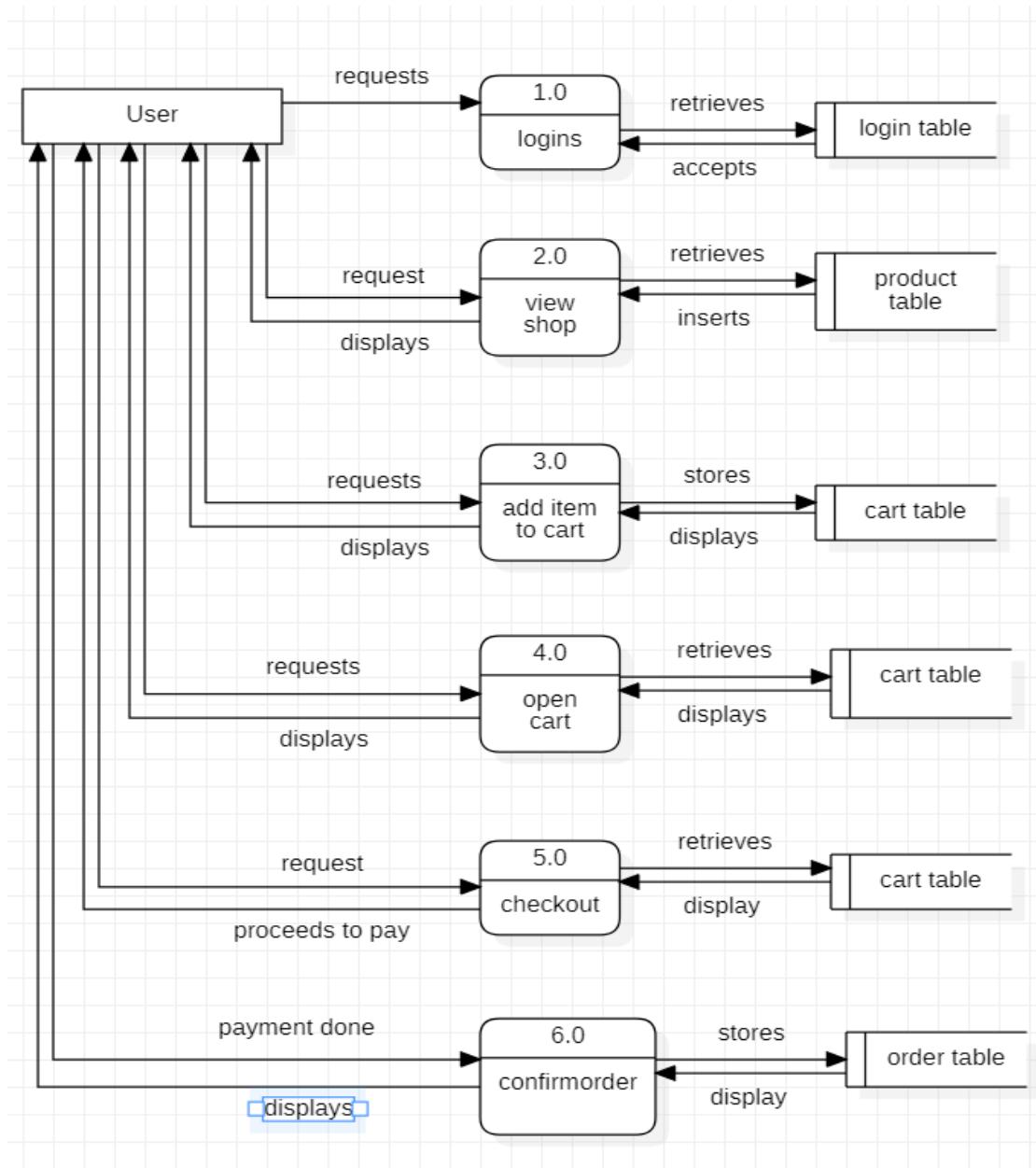
Entity symbol	Name	Description
	Process	A process receives input data and produces output with a different content or form. Processes can be as simple as collecting input data and saving in the database.
	Dataflow Notations	A data-flow is a path for data to move from one part of the information system to another. A data may represent a single data element such the Customer ID or it can represent a set of data element (or a data structure).
	Data store Notations	Data stores are repositories of data in the system. They are sometimes also referred to as files.
	External Entity Notations	External entities are objects outside the system, with which the system communicates. External entities are sources and destinations of the system's inputs and outputs.

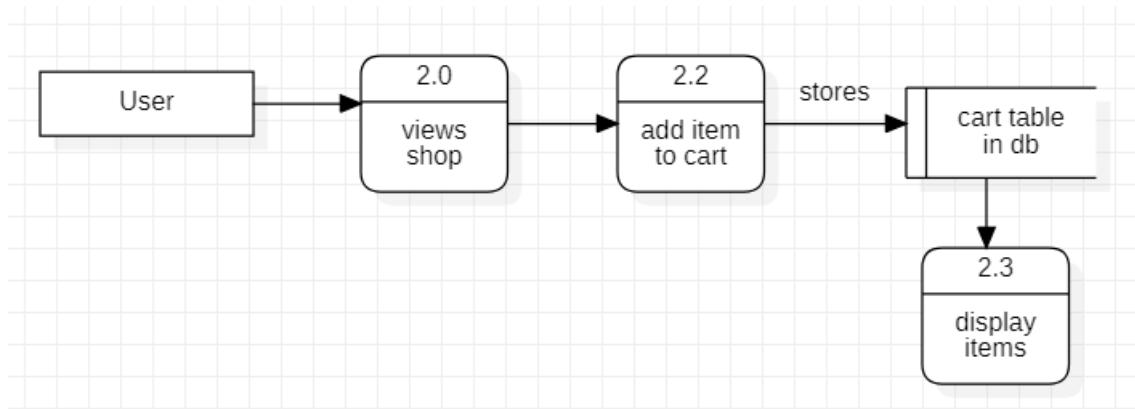
Figure 8.6.1 DATA FLOW DIAGRAM FOR HENNA WEBSITE
LEVEL 0.0



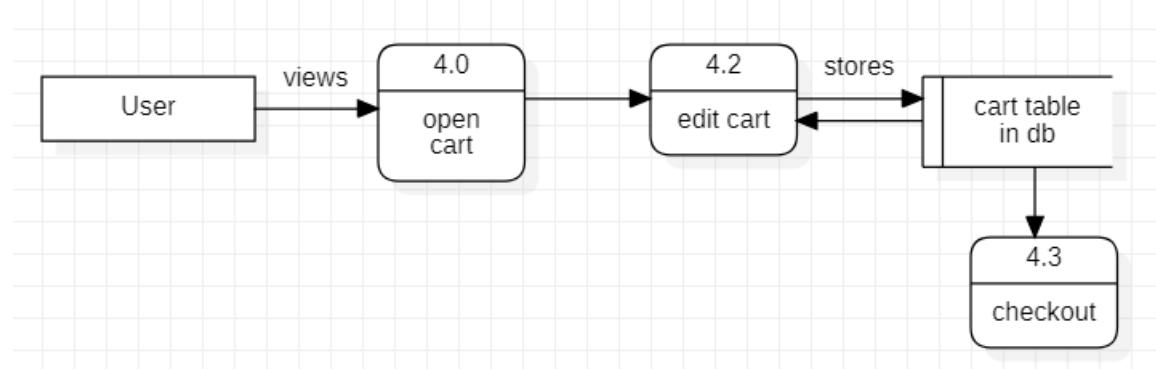
LEVEL 1.0



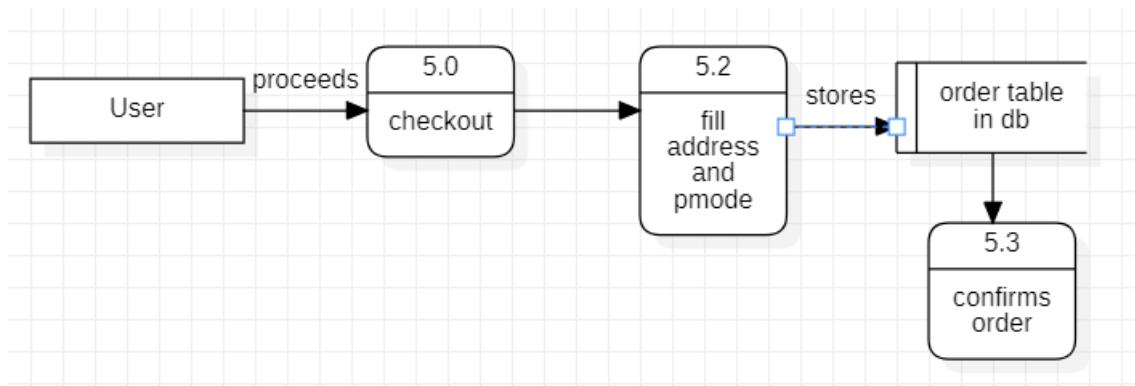
LEVEL 2 of 2.0



LEVEL 2 of 4.0



LEVEL 2 of 5.0



SYSTEM PLANNING AND SCHEDULING

9.SYSTEM PLANNING AND SCHEDULING

Table 9.1 DATA FLOW DIAGRAM FOR HENNA WEBSITE

SR. NO	CONTENT	Performance date	Submission Date	Teacher's Signature	Remark
1	Investigation	20-08-2020	03-11-2020		
	Topic selection	20-08-2020	29-10-2020		
	Synopsis	29-10-2020	03-11-2020		
2	Requirement analysis and planning	4-11-2020	23-12-2020		
	Requirement gathering	4-11-2020	30-11-2020		
	Objective and scope of the project	7-11-2020	30-11-2020		
	Problems with existing system Advantages of proposed system	10-11-2020	30-11-2020		
	Feasibility study	15-11-2020	30-11-2020		
	Requirement specification	17-11-2020	30-11-2020		
	Tools and technology	19-11-2020	30-11-2020		
3	Design phase	21-11-2020	27-03-2021		
	SDLC	21-11-2020	15-04-2021		
	Use case diagram	21-11-2020	30-11-2020		
	E-R diagram	21-11-2020	30-11-2020		
	Class diagram	23-11-2020	30-11-2020		
	DFD diagram	23-11-2020	30-11-2020		
	Activity diagram	24-11-2020	30-11-2020		
	Sequence diagram	26-11-2020	30-11-2020		
	Data structures	28-11-2020	30-11-2020		
4	Coding phase	02-01-2021	13-04-2021		
	Module testing	19-01-2021	27-03-2021		
5	Testing phase	19-01-2021	15-04-2021		

	Black Box Testing	27-03-2021	01-04-2021		
	White box testing	28-03-2021	01-04-2021		
6	Future Scope	29-03-2021	01-04-2021		
7	Conclusion	05-04-2021	15-04-2021		
8	Review				
9	Project and black book submission				

GANTT CHART

10. GANNT CHART

S.R.NO	OBJECTIVES	OCT	NOV	DEC	JAN	FEB	MAR	APR
1	PROJECT INITIATION							
1.1	PRELIMINARY INVESTIGATION	█						
1.2	GATHERING INFORMATION	█	█					
1.3	IDENTIFY GOALS AND OBJECTIVES	█	█					
1.4	LITERATURE SURVEY	█	█					
			◆					
2	GUIDE ALLOTMENT				█	█		
					◆			
3	PROJECT ANALYSIS							
3.1	REQUIREMENT ANALYSIS	█	█					
3.2	SELECTING PROCESS MODEL	█	█					
3.3	FACT FINDING TECHNIQUES	█	█					
3.4	REVIEW	█	█					
3.5.	REPORT TO GUIDE	█	█					
3.6	APPROVAL FROM GUIDE	█	█					
				◆				
4	DESIGN							
4.1	PRELIMINARY DESIGN		█	█				
4.2	APPROVAL		█	█				
4.3	SYNOPSIS COMPLETION		█	█				
4.4	SYNOPSIS SUBMISSION		█	█				
4.5	SYNOPSIS APPROVED		█	█				
				◆				
5	CODING				█	█	█	
					◆			
6	TESTING							
6.1	UNIT TESTING						█	
6.2	INTEGRATION TESTING						█	
6.3	WHITEBOX TESTING						█	
6.4	APPROVAL						█	
				◆				
7	DOCUMENTATION							
7.1	REPORT COMPLETION						█	
7.2	REPORT SUBMISSION						█	
7.3	APPROVAL						█	
				◆				

DATA STRUCTURE

11. DATA STRUCTURE

FOR HENNA WEBSITE:

User details:

Serial no	Field name	Data type	Constraints
1	id	Bigint(20)	Primary key
2	user_id	Bigint(20)	Not Null
3	user_name	Varchar(30)	Not Null
4	password	Varchar(30)	Not Null
5	date	timestamp	Not Null

Services (Bridal, Special, Celebration, Black - Modules) details:

Serial no	Field name	Data type	Constraints
1	id	int(25)	Primary key
2	name	text(25)	Not Null
3	email	varchar(25)	Not Null
4	mobile	varchar(25)	Not Null
5	address	varchar(100)	Not Null
6	date	datetime	Not Null
7	slot	varchar(25)	Not Null
8	design	varchar(25)	Not Null
9	type	varchar(25)	Not Null
10	comment	varchar(500)	Not Null
11	pmode	varchar(50)	Not Null

Product details:

Serial no	Field name	Data type	Constraints
1	id	int(11)	Primary key
2	product_name	varchar(255)	Not Null
3	product_price	varchar(100)	Not Null
4	product_desc	varchar(255)	Not Null
5	product_qty	int(11)	Not Null
6	product_image	varchar(255)	Not Null
7	product_code	varchar(50)	Not Null

Cart details:

Serial no	Field name	Data type	Constraints
1	id	int(11)	Foreign key
2	product_name	varchar(100)	Foreign Key
3	product_price	varchar(50)	Foreign Key

4	product_image	varchar(255)	Foreign Key
5	qty	int(11)	Foreign Key
6	total_price	varchar(100)	Not Null
7	product_code	varchar(10)	Foreign Key

Order details:

Serial no	Field name	Data type	Constraints
1	id	int(11)	Primary key
2	name	varchar(100)	Not Null
3	email	varchar(100)	Not Null
4	phone	varchar(20)	Not Null
5	address	varchar(255)	Not Null
6	pmode	varchar(50)	Not Null
7	products	varchar(255)	Not Null
8	amount_paid	varchar(100)	Not Null

Course details:

Serial no	Field name	Data type	Constraints
1	id	int(25)	Primary key
2	name	text(25)	Not Null
3	email	varchar(25)	Not Null
4	mobile	varchar(25)	Not Null
5	slot	varchar(25)	Not Null
6	design	varchar(25)	Not Null
7	comment	varchar(500)	Not Null
8	pmode	varchar(50)	Not Null

Contact us details:

Serial no	Field name	Data type	Constraints
1	id	int(25)	Primary key
2	name	text(25)	Not Null
3	email	varchar(25)	Not Null
4	mobile	int(25)	Not Null
5	comment	varchar(500)	Not Null

SYSTEM CODING

12.SYSTEM CODING

Login.php

```

<?php
session_start();
include("connection.php");
include("functions.php");
if($_SERVER['REQUEST_METHOD'] == "POST")
{
//something was posted
$user_name = $_POST['user_name'];
$password = $_POST['password'];
if(!empty($user_name) && !empty($password) && !is_numeric($user_name))
{
//read from database
mysqli_select_db($con, 'project');
$query = "select * from users where user_name = '$user_name' limit 1";
$result = mysqli_query($con, $query);
if($result)
{
if($result && mysqli_num_rows($result) > 0)
{
$user_data = mysqli_fetch_assoc($result);
if($user_data['password'] === $password)
{
$_SESSION['user_id'] = $user_data['user_id'];
header("Location: index.html");
die;
}
}
}
echo "wrong username or password!";
}else
{
echo "wrong username or password!";
}
}
?>
<!DOCTYPE html>
<html>
<head>
<title>Login</title>
<link rel="stylesheet" href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css" integrity="sha384-AYmEC3Yw5cVb3ZcuHtOA93w35dYTsvhLPVnYs9eStHfGJvOvKxVfELGroGkvsg+p" crossorigin="anonymous"/>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body style="background:#ffffff; font-family:'Noto Sans', sans-serif;">
<style type="text/css">
#body {
}
#text{

```

```
height: 40px;
border-radius: 20px;
padding: 4px;
border: solid thin #aaa;
width: 100%;
border-radius: 20px;
}
#button{
padding: 10px;
width: 300px;
color: white;
background-color:#ff1a66;
border: none;
overflow: visible;
color: #ffffff;
border-radius: 20px;
height: 45px;
width: 300px;
vertical-align: middle;
-webkit-user-select: none;
-moz-user-select: none;
-ms-user-select: none;
user-select: none;
border: 1px solid transparent;
padding: 0.375rem 0.75rem;
font-size: 1rem;
line-height: 1.5;
}
#box{
background-color: white;
margin: auto;
width: 600px;
padding: 20px;
margin-top: 5px;
margin-bottom:10px;
}
#label {
text-align:left;
font-size: 20px;
font-weight: bold;
}
</style>
<div id="box">
<form method="post">
<p class="text-center">

<div style="font-size:20px;color:#000000;">Login!</div></p>
<label><i style="font-size: 20px;" class="fas fa-user"></i> USERNAME</label>
<input id="text" type="text" pattern="[a-zA-Z\s]{3,20}" title="Enter First Name and Last Name" name="user_name" required><br><br>
<label><i style="font-size: 20px;" class="fas fa-lock"></i> PASSWORD</label>
```

```

<input id="text" type="password" pattern="^(?=.*[0-9])(?=.*[a-z])(?=.*[A-Z])(?=\\S+$).{6,}$"
title="Password must be of minimum 6 characters and at least 1 number and 1 Capital letter"
name="password" required>
<br>
<br>
<p class="text-center">
<input id="button" type="submit" value="Login"><br><br>
<label>Don't have an account?</label>
<a href="signup.php">Click to Signup</a><br><br>
</p>
</form>
</div>
</body>
</html>

```

signup.php

```

<?php
session_start();
include("connection.php");
include("functions.php");
if($_SERVER['REQUEST_METHOD'] == "POST")
{
//something was posted
$user_name = $_POST['user_name'];
$password = $_POST['password'];
if(!empty($user_name) && !empty($password) && !is_numeric($user_name))
{
mysqli_select_db($con, 'project');
//save to database
$user_id = random_num(20);
$query = "insert into users (user_id,user_name,password) values ('$user_id','$user_name','$password')";
mysqli_query($con, $query);
header("Location: login.php");
die;
} else
{
echo "Please enter some valid information!";
}
}
?>
<!DOCTYPE html>
<html>
<head>
<title>Signup</title>
<link rel="stylesheet" href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css"
integrity="sha384-AYmEC3Yw5cVb3ZcuHtOA93w35dYTsvhLPVnYs9eStHfGJvOvKxVfELGroGkvsg+p
" crossorigin="anonymous"/>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
</head>
<body>
<style type="text/css">
#body {

```

```
}

#text{
height: 40px;
border-radius: 20px;
padding: 4px;
border: solid thin #aaa;
width: 100%;
border-radius: 20px;
}
#button{
padding: 10px;
width: 300px;
color: white;
background-color:#ff1a66;
border: none;
overflow: visible;
color: #ffffff;
border-radius: 20px;
height: 45px;
width: 300px;
vertical-align: middle;
-webkit-user-select: none;
-moz-user-select: none;
-ms-user-select: none;
user-select: none;
border: 1px solid transparent;
padding: 0.375rem 0.75rem;
font-size: 1rem;
line-height: 1.5;
}
#box {
background-color: white;
margin: auto;
width: 600px;
padding: 20px;
margin-top: 5px;
margin-bottom:10px;
}
#label {
text-align:left;
font-size: 20px;
font-weight: bold;
}
</style>
<div id="box">
<form method="post">
<p class="text-center">

<div style="font-size:20px;color:#000000;">Join us now!</div></p>
<label><i style="font-size: 20px;" class="fas fa-user"></i> USERNAME</label>
<input id="text" type="text" pattern="[a-zA-Z\s]{3,20}" title="Enter First Name and Last Name" name="user_name" required><br><br>
```

```

<label><i style="font-size: 20px;" class="fas fa-lock"></i> PASSWORD</label>
<input id="text" type="password" pattern="^(?=.*[0-9])(?=.*[a-z])(?=.*[A-Z])(?=\\S+$).{6,}$"
title="Password must be of minimum 6 characters and at least 1 number and 1 Capital letter"
name="password" required><br><br>
<p class="text-center">
<input id="button" type="submit" value="Signup"><br><br>
<label>Already have an account?</label>
<a href="login.php">Click to Login</a><br><br>
</p>
</form>
</div>
</body>
</html>

```

Gallery.html(Gallery 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, shrink-to-fit=no">
<title>Photo Gallery page</title>
<link rel="stylesheet" type="text/css" href="main.css">
<link rel="stylesheet" href="https://unpkg.com/aos@next/dist/aos.css" />
<script src="https://unpkg.com/aos@next/dist/aos.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
<link href="https://maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css"
rel="stylesheet" id="bootstrap-css">
<link href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css" rel="stylesheet" id="bootstrap-css">
<link href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/animate.min.css" rel="stylesheet" id="animate-css">
<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css" rel="stylesheet" id="font-awesome-css">
<link href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/css/bootstrap.min.css" rel="stylesheet" id="twitter-bootstrap-css">
<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.9.0/css/all.min.css" rel="stylesheet" id="font-awesome-all-css">
</head>
<body>
<!-- Navbar start -->
<nav class="navbar navbar-expand-md fixed-top">
<a class="navbar-brand" href="#"></a><button class="navbar-toggler
navbar-dark" type="button" data-toggle="collapse" data-target="#main-navigation">
<span class="navbar-toggler-icon"></span></button>
<div class="collapse navbar-collapse" id="main-navigation">
<ul class="navbar-nav">
<li class="nav-item">
<a class="nav-link" href="index.html"> HOME </a></i></li>
<li class="nav-item">
<a class="nav-link" href="gallery.html"> GALLERY </a></li>
<li class="nav-item dropdown">
<a class="nav-link dropdown-toggle" data-toggle="dropdown" href="getappointment.html"> SERVICES
</a>

```

```

<div class="dropdown-menu">
<a class="dropdown-item" href="getappointment.html">ALL</a>
<a class="dropdown-item" href="bridal.php">BRIDAL</a>
<a class="dropdown-item" href="celebration.php">CELEBRATION</a>
<a class="dropdown-item" href="special.php">SPECIAL</a>
<a class="dropdown-item" href="black.php">BLACK HENNA</a>
</div>
</li>
<li class="nav-item">
<a class="nav-link" href="index2.php"> SHOP </a>
</li>
<li class="nav-item">
<a class="nav-link" href="course.html"> COURSE </a>
</li>
<li class="nav-item">
<a class="nav-link" href="contactus.php"> CONTACT </a>
</li>
<a button type="button" style="font-size:18px" class="nav-link" href="cart.php" ><i class="fas fa-shopping-cart" ></i><span id="cart-item" class="badge badge-danger"></span></a>
<a button type="button" style="font-size:18px" class="btn btn-outline-dark" href="logout.php">Logout</a>
</ul>
</div>
</nav>
<div id="demo" class="carousel slide" data-ride="carousel">
<!-- Indicators -->
<!-- The slideshow -->
<div class="carousel-inner">
<div class="carousel-item active animate__backInDown">

<div class="carousel-caption" style="color:black">
<h3>Khaleeji Design</h3>
<p>arabic flower design!</p>
<button type="button" onclick="window.location.href='getappointment.html'" class="btn btn-info" style="margin-bottom:10px;">Book now</button>
</div>
</div>
<!-- Left and right controls -->
</div>
</div>
<style>
* {box-sizing: border-box}
.mySlides1, .mySlides2 {display: none}
img {vertical-align: middle;}
/* Slideshow container */
.slideshow-container {
max-width: 1000px;
position: relative;
margin: auto;
}
/* Next & previous buttons */
.prev, .next {
cursor: pointer;
position: absolute;
}

```

```

top: 50%;
width: auto;
padding: 16px;
margin-top: -22px;
color: white;
font-weight: bold;
font-size: 18px;
transition: 0.6s ease;
border-radius: 0 3px 3px 0;
user-select: none;
}
/* Position the "next button" to the right */
.next {
right: 0;
border-radius: 3px 0 0 3px;
}
/* On hover, add a grey background color */
.prev:hover, .next:hover {
background-color: #f1f1f1;
color: black;
}
</style>
<div class="jumbotron animate__animated animate__backInDown">
<div id="fromthis" style="text-align: center; color:#000000; background:#f2f2f2; font-family:'Brush Script MT',Cursive">
<h1>Bridal and Celebration Designs:</h1>
<p></p>
</div>
</div>
<div class="slideshow-container" data-aos="zoom-in">
<div class="mySlides1">

</div>
<a class="prev" onclick="plusSlides(-1, 0)">=❮</a>
<a class="next" onclick="plusSlides(1, 0)">=❯</a>
</div>
<p style="text-align: center; font-size:25px;" data-aos="slide-right">Slide to see more</p>
<div class="jumbotron" data-aos="slide-up" style="margin-top:30px;">

```

```

<div style="text-align: center; color:#000000; background:#f2f2f2; font-family:'Brush Script MT',Cursive">
<h1>Special and Tattoo Designs:</h1>
<p></p>
</div>
</div>
<div class="slideshow-container" data-aos="zoom-in">
<div class="mySlides2">

</div>
<a class="prev" onclick="plusSlides(-1, 1)">#10094;</a>
<a class="next" onclick="plusSlides(1, 1)">#10095;</a>
</div>
<p style="text-align: center; font-size:25px;" data-aos="slide-down">Slide to see more</p>
<script>
var slideIndex = [1,1];
var slideId = ["mySlides1", "mySlides2"]
showSlides(1, 0);
showSlides(1, 1);
function plusSlides(n, no) {
  showSlides(slideIndex[no] += n, no);
}
function showSlides(n, no) {
  var i;
  var x = document.getElementsByClassName(slideId[no]);
  if (n > x.length) {slideIndex[no] = 1}
  if (n < 1) {slideIndex[no] = x.length}
  for (i = 0; i < x.length; i++) {
    x[i].style.display = "none";
  }
  x[slideIndex[no]-1].style.display = "block";
}
</script>
<div class="jumbotron" data-aos="slide-up" style="margin-top:30px;">
<div style="text-align: center; color:#000000; background:#f2f2f2; font-family:'Brush Script MT',Cursive">
<h1>Photo Gallery of Henna designs:</h1>
<p></p>
</div>

```

```
</div>
<div class="container">
<div class="row">
<div class="col">



</div>
<div class="col">



</div>
<div class="col">



</div>
</div>
</div>
<script src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js'></script>
<script src='https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/js/bootstrap.min.js'></script>
<script type="text/javascript">
$(document).ready(function() {
// Send product details in the server
$(".addItemBtn").click(function(e) {
e.preventDefault();
var $form = $(this).closest(".form-submit");
var pid = $form.find(".pid").val();
var pname = $form.find(".pname").val();
var pprice = $form.find(".pprice").val();
var pimage = $form.find(".pimage").val();
var pcode = $form.find(".pcode").val();
var pqty = $form.find(".pqty").val();
$.ajax({
url: 'action.php',
method: 'post',
data: {
pid: pid,
pname: pname,
pprice: pprice,
pqty: pqty,
pimage: pimage,
pcode: pcode
}
});
```

```

},
success: function(response) {
  $("#message").html(response);
  window.scrollTo(0, 0);
  load_cart_item_number();
}
});
});

// Load total no.of items added in the cart and display in the navbar
load_cart_item_number();
function load_cart_item_number() {
$.ajax({
  url: 'action.php',
  method: 'get',
  data: {
    cartItem: "cart_item"
  },
  success: function(response) {
    $("#cart-item").html(response);
  }
});
}

});

</script>
<div class="container p-3" style="color:#000000; margin-top: 30px; margin-bottom: 30px; margin-right: px; margin-left: 90px;">
<div style="text-align: center;">
<div class="text" data-aos="zoom-in" style="background:#f2f2f2">
<h4><em>What is the purpose of henna?!</em></h4>
</div>
<div class="row" >
<div class="col" data-aos="fade-right" style="font-size:1.5em">
<h5><p>Mehndi, otherwise known as henna, is a paste associated with positive spirits and good luck. Indian Wedding tradition calls for a Mehndi ceremony to be held the night before the wedding as a way of wishing the bride good health and prosperity as she makes her journey on to marriage.</p></h5>
</div>
<div class="col">

</div></div></div></div>
<script>
AOS.init({
  duration: 1200,
})
</script>
<footer class="page-footer">
<div class="container">
<div style="text-align: center;">
<a href="#fromthis" class="btn btn-info"><i class="fa fa-arrow-up w3-margin-right"></i>To the top</a>
<div><a href="#"><i class="fab fa-facebook"></i></a>
<a href="#"><i class="fab fa-twitter"></i></a>
<a href="#" class="fab fa-youtube"></a>
<a href="#" class="fab fa-instagram"></a>
<a href="#" class="fab fa-pinterest"></a>

```

```

<style>
  .fab {
    font-size: 30px;
    width: 30px;
    text-align: center;
    text-decoration: none;
    margin: 5px 2px;
    border-radius: 50%;
  }
  .fa:hover {
    opacity: 0.7;
  }
  .fa-facebook {
    background: #3B5998;
    color: white;
  }
  .fa-twitter {
    background: #55ACEE;
    color: white;
  }
  .fa-youtube {
    background: #bb0000;
    color: white;
  }
  .fa-instagram {
    background: #125688;
    color: white;
  }
  .fa-pinterest {
    background: #cb2027;
    color: white;
  }
</style>
</div>
<div class="row" style="margin-top:10px">
<div class="col-lg-8 col-md-8 col-sm-12">
<h6 class="text-uppercase font-weight-bold">Additional Information</h6>
<p>Henna is a way to express ourself. It is a beauty on it's own. Without henna Bride is never all ready. So include henna your source of happiness through us.</p><p>
</p>
</div>
<div class="col-lg-4 col-md-4 col-sm-12">
<h6 class="text-uppercase font-weight-bold">Contact</h6>
<p>20/03 Aspire Apt, Modern road, Alibaug<br/>nkadri@gmail.com<br/>+ 91 1111100000<br/>+ 91 0000011111</p>
</div>
</div>
<div class="footer-copyright text-center">© henna by namira</div>
</footer>
</body>
</html>

```

Contactus.php(Contact 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, shrink-to-fit=no">
<title>Service page</title>
<link rel="stylesheet" type="text/css" href="main.css">
<link rel="stylesheet" href="https://unpkg.com/aos@next/dist/aos.css" />
<script src="https://unpkg.com/aos@next/dist/aos.js"></script>
<script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script> <link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css" rel="stylesheet" id="bootstrap-css">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/animate.min.css" rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css" rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/css/bootstrap.min.css" rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.9.0/css/all.min.css" rel="stylesheet" />
</head>
<body>
<!-- Navbar start -->
<nav class="navbar navbar-expand-md fixed-top">
<a class="navbar-brand" href="#"></a>
<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#main-navigation">
<span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="main-navigation">
<ul class="navbar-nav">
<li class="nav-item">
<a class="nav-link" href="index.html" href="#"> HOME </a></i>
</li>
<li class="nav-item">
<a class="nav-link" href="gallery.html" href="#"> GALLERY </a>
</li>
<li class="nav-item dropdown">
<a class="nav-link dropdown-toggle" data-toggle="dropdown" href="getappointment.html" href="#"> SERVICES </a>
<div class="dropdown-menu">
<a class="dropdown-item" href="getappointment.html" href="#">ALL</a>
<a class="dropdown-item" href="bridal.php" href="#">BRIDAL</a>
<a class="dropdown-item" href="celebration.php" href="#">CELEBRATION</a>
<a class="dropdown-item" href="special.php" href="#">SPECIAL</a>
<a class="dropdown-item" href="black.php" href="#">BLACK HENNA</a>
</div>
</li>
<li class="nav-item">

```

```

<a class="nav-link" href="index2.php"> SHOP </a>
</li>
<li class="nav-item">
<a class="nav-link" href="course.php"> COURSE </a>
</li>
<li class="nav-item">
<a class="nav-link" href="contactus.php"> CONTACT </a>
</li>
<a button type="button" style="font-size:18px" class="nav-link" href="cart.php" ><i class="fas fa-shopping-cart" ></i><span id="cart-item" class="badge badge-danger"></span></a>
<a button type="button" style="font-size:18px" class="btn btn-outline-dark" href="logout.php">Logout</a>
</ul>
</div>
</nav>
<div id="demo" class="carousel slide" data-ride="carousel">

<ul class="carousel-indicators">
<li data-target="#demo" data-slide-to="0" class="active"></li>
<li data-target="#demo" data-slide-to="1"></li>
<li data-target="#demo" data-slide-to="2"></li>
</ul>

<div class="carousel-inner">
<div class="carousel-item active">

<div class="carousel-caption" style="color:black">
<h3>Arabic design</h3>
<p>arabic flower design!</p>
<button type="button" onclick="window.location.href='gallery.html'" class="btn btn-info" style="margin-bottom:10px;">See more in Gallery</button>
</div>
</div>
<!-- Left and right controls -->
<a class="carousel-control-prev" href="#demo" data-slide="prev">
<span class="carousel-control-prev-icon"></span>
</a>
<a class="carousel-control-next" href="#demo" data-slide="next">
<span class="carousel-control-next-icon"></span>
</a>
</div>
<div data-aos="fade-up" style="text-align:center; background:#f2f2f2; margin-top: 10px; margin-bottom: 10px;">
<h1 style="color: #000000;">KNOW ABOUT US!</h1>
</div>
<div class="container">
<div class="row">
<div class="col">

</div>
<div class="col">
<div data-aos="fade-left" class="jumbotron" style="background:#ffffff; color:black; margin-top:30px;">
<h1 class="display-4" style="font-size:4em;">Hello, world!</h1>

```

<p class="lead">This is a HENNA PAGE, where you may not just buy henna products but also get appointment and also start learning henna from me by joining our courses.</p>

<hr class="my-4" style="font-size:2em;">

<p>Henna Page is where you'll meet all you're requirements over henna.</p>

</div>

</div>

</div>

</div>

</div>

<div data-aos="fade-up" style="text-align:center; background:#f2f2f2; margin-top: 10px; margin-bottom: 10px;">

<h1 style="color: #000000;">OUR ACHIEVEMENTS!</h1>

</div>

<div class="container">

<div class="row">

<div class="col">

<div class="jumbotron" data-aos="fade-right" style="background:#ffffff; color:black;">

<h1 class="display-4" style="font-size:3em; margin-top:20px;">Over 500+ HAPPY CLIENTS!</h1>

<h1 class="display-4" style="font-size:3em;">Over 200+ PRODUCT SOLD!</h1>

<h1 class="display-4" style="font-size:3em;">Over 100+ COURSE STUDENTS!</h1>

</div>

</div>

<div class="col">

</div>

</div>

</div>

</style>

<script>

AOS.init({

duration: 1500,

)

</script><div data-aos="fade-up" style="text-align:center; background:#f2f2f2; margin-top: 10px; margin-bottom: 10px;">

<h1 style="color: #000000;">GET IN TOUCH WITH US!</h1>

</div>

<div class="container contact" style=" margin-top:20px;">

<div class="row">

<div class="col-md-3">

<div class="contact-info">

<h2>Contact Us</h2>

<h4>We would love to hear from you !</h4>

</div>

</div>

<div class="col-md-9" style="background:#f2f2f2">

<form method="post" id="frmContactus">

<div class="contact-form">

<div class="form-group">

<label class="control-label col-sm-2" for="name"><i class="fa fa-user" style="font-size:20px" aria-hidden="true"></i>Name:</label>

<div class="col-sm-10">

<input type="text" class="form-control" id="name" pattern="[a-zA-Z\s]{3,20}" title="Please enter proper First name and last name in letters" placeholder="Enter name" name="name" required>

```

</div>
</div>
<div class="form-group">
<label class="control-label col-sm-2" for="email"><i class="fa fa-envelope" style="font-size:20px" aria-hidden="true"></i>Email:</label>
<div class="col-sm-10">
<input type="email" class="form-control" id="email" pattern="[a-z0-9._%-]{3,20}+@[a-z0-9.-]+\.[a-z]{2,}" title="Please enter valid email eg: nick123@gmail.com" placeholder="Enter email" name="email" required>
</div>
</div>
<div class="form-group">
<label class="control-label col-sm-2" for="mobile"><i class="fa fa-mobile" style="font-size:25px" aria-hidden="true"></i>Mobile:</label>
<div class="col-sm-10">
<input type="text" class="form-control" id="mobile" pattern="[7-9]{1}[0-9]{9}" title="Enter valid phone number" placeholder="Enter mobile" name="mobile" required>
</div>
</div>
<div class="form-group">
<label class="control-label col-sm-2" for="comment"><i class="fa fa-comment" style="font-size:20px" aria-hidden="true"></i>Comment:</label>
<div class="col-sm-10">
<textarea class="form-control" rows="5" id="comment" name="comment"></textarea>
</div>
</div>
<div class="form-group">
<div class="col-sm-offset-2 col-sm-10">
<button type="submit" class="btn btn-default" name="submit" id="submit">Submit</button>
<span style="color:red;" id="msg"></span>
</div>
</div>
</div>
</form>
</div>
</div>
<script>
jQuery('#frmContactus').on('submit',function(e){
jQuery('#msg').html("");
jQuery('#submit').html('Please wait');
jQuery('#submit').attr('disabled',true);
jQuery.ajax({
url:'submit.php',
type:'post',
data:jQuery('#frmContactus').serialize(),
success:function(result){
jQuery('#msg').html(result);
jQuery('#submit').html('Submit');
jQuery('#submit').attr('disabled',false);
jQuery('#frmContactus')[0].reset();
}
});
});
```

```

e.preventDefault();
});
</script>
<style>
html {
  scroll-behavior: smooth;
}
.col-md-3{
background: #ff9b00;
padding: 4%;
border-top-left-radius: 0.5rem;
border-bottom-left-radius: 0.5rem;
}
.contact-info{
margin-top:10%;
}
.contact-info img{
margin-bottom: 15%;
}
.contact-info h2{
margin-bottom: 10%;
}
.col-md-9{
background: #fff;
padding: 3%;
border-top-right-radius: 0.5rem;
border-bottom-right-radius: 0.5rem;
}
.contact-form label{
font-weight:600;
}
.contact-form button{
background: #25274d;
color: #fff;
font-weight: 600;
width: 25%;
}
.contact-form button:focus{
box-shadow:none;
}
</style>
<script src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js'></script>
<script src='https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.5.2/js/bootstrap.min.js'></script>
<script type="text/javascript">
$(document).ready(function() {
// Send product details in the server
$(".addItemBtn").click(function(e) {
  e.preventDefault();
  var $form = $(this).closest(".form-submit");
  var pid = $form.find(".pid").val();
  var pname = $form.find(".pname").val();
  var pprice = $form.find(".pprice").val();
  var pimage = $form.find(".pimage").val();

```

```

var pcode = $form.find(".pcode").val();
var pqty = $form.find(".pqty").val();
$.ajax({
url: 'action.php',
method: 'post',
data: {
pid: pid,
pname: pname,
pprice: pprice,
pqty: pqty,
pimage: pimage,
pcode: pcode
},
success: function(response) {
$("#message").html(response);
window.scrollTo(0, 0);
load_cart_item_number();
}
});
});

// Load total no.of items added in the cart and display in the navbar
load_cart_item_number();
function load_cart_item_number() {
$.ajax({
url: 'action.php',
method: 'get',
data: {
cartItem: "cart_item"
},
success: function(response) {
$("#cart-item").html(response);
}
});
}

});

</script>
<div class="container p-3" style="color:#000000; margin-top: 30px; margin-bottom: 30px; margin-right: px; margin-left: 90px;">
<div style="text-align: center;">
<div class="text" data-aos="zoom-in" style="background:#f2f2f2">
<h4><em>What is the purpose of henna?!</em></h4>
</div>
<div class="row" >
<div class="col" data-aos="fade-right" style="font-size:1.5em">
<h5><p>Mehndi, otherwise known as henna, is a paste associated with positive spirits and good luck. Indian Wedding tradition calls for a Mehndi ceremony to be held the night before the wedding as a way of wishing the bride good health and prosperity as she makes her journey on to marriage.</p></h5>
</div>
<div class="col">

</div>
</div>
</div>

```

```
</div>
<script>
AOS.init({
  duration: 1200,
})
</script>
<footer class="page-footer">
  <div class="container">
    <div style="text-align: center;">
      <a href="#fromthis" class="btn btn-info"><i class="fa fa-arrow-up w3-margin-right"></i>To the top</a>
    <div>
      <a href="#"><i class="fab fa-facebook"></i></a>
      <a href="#"><i class="fab fa-twitter"></i></a>
      <a href="#" class="fab fa-youtube"></a>
      <a href="#" class="fab fa-instagram"></a>
      <a href="#" class="fab fa-pinterest"></a>
    <style>
      .fab {
        font-size: 30px;
        width: 30px;
        text-align: center;
        text-decoration: none;
        margin: 5px 2px;
        border-radius: 50%;
      }
      .fa:hover {
        opacity: 0.7;
      }
      .fa-facebook {
        background: #3B5998;
        color: white;
      }
      .fa-twitter {
        background: #55ACEE;
        color: white;
      }
      .fa-youtube {
        background: #bb0000;
        color: white;
      }
      .fa-instagram {
        background: #125688;
        color: white;
      }
      .fa-pinterest {
        background: #cb2027;
        color: white;
      }
    </style>
  </div>
  <div class="row" style="margin-top:10px">
    <div class="col-lg-8 col-md-8 col-sm-12">
```

```
<h6 class="text-uppercase font-weight-bold">Additional Information</h6>
<p>Henna is a way to express ourself. It is a beauty on it's own. Without henna Bride is never all ready. So include henna your source of happiness through us.</p>
<p></p>
</div>
<div class="col-lg-4 col-md-4 col-sm-12">
<h6 class="text-uppercase font-weight-bold">Contact</h6>
<p>20/03 Aspire Apt, Modern road, Alibaug
<br/>nkadri@gmail.com
<br/>+ 91 1111100000
<br/>+ 91 0000011111</p>
</div>
</div>
<div class="footer-copyright text-center">© henna by namira</div>
</footer>
</body>
</html>
```

TESTING PHASE

13. TESTING PHASE

- Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not.
- Testing is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.
- Testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software Implementation.
- Testing is an investigation conducted to provide stakeholders with information about the quality of the product or service under test.
- The essence of testing is to:
 - Catch as many errors as possible.
 - Correct the errors.
 - Track the errors to understand their causes and any patterns that may exist.
 - Revalidate the stability of the solution, including ensuring that the correction of one error does not lead to the introduction of another error somewhere else.

Software testing can be stated as the process of validating and verifying that a program/application/product.

- Meets the requirements that guide its design and development.
- Works as expected
- Can be implemented with the same characteristics.
- And satisfies the needs of stakeholders.

METHODS USED FOR SOFTWARE TESTING:

- Black Box Testing.
- White Box Testing.

13.1 BLACK BOX TESTING:

BLACK BOX TESTING, also known as Behavioural Testing is a method in which the internal structure/design/implementation of the item being tested is not known to the tester. These tests can be functional or none though usually functional.

This method is named so because the software program, in the eyes of the tester, is like a black box; inside which one cannot see. This method attempts to find errors in the following categories:

- Incorrect or missing functions
- Interface errors
- Errors in data structures or external database access
- Behaviour or performance errors
- Initialization and termination errors

13.2 WHITE BOX TESTING:

WHITE BOX TESTING (also known as Clear Box Testing, Open Box Testing, Glass Box Testing, Transparent Box Testing, and Code Testing) is a software testing method structure/design/implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code appropriate outputs. Programming knows essential.

White box testing is testing beyond the user interface and into the nitty-gritty of a system. This method is named so because the software program, in the eyes of the tester, is like a white/transparent box; inside which one clearly sees.

- Testing can be commenced at an earlier stage. One need not wait for the GUI to be available.
- Testing is more thorough, with the possibility of covering most paths.

BOUNDARY VALUE ANALYSIS

The following is the BVA for name. The range extends between 3-20 characters

Equivalence partitions- Name

Sr. No	Valid	Invalid
1. No. of Inputs	1	<1>=2
2. Data type	Characters	Integer , floating point number, special characters
3. Input	>3,<=20	<3,>20

Boundary Value Analysis - (length of the Name field)

Length	Analysis
2	Invalid boundary
3	
4	Valid boundary
11	Nominal value
19	Valid boundary
20	
21	Invalid boundary

Test Cases:

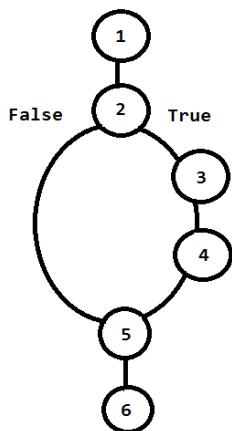
Test case (id)	Input (name)	Remark	Expected Output
1	1	Invalid (Length should be between 3 to 20)	Fail
2	21	Invalid (Length should be between 3 to 20)	Fail
3	2	Invalid (Length should be between 3 to 20)	Fail
4	5	Valid	Pass
5	26	Invalid (Length should be between 3 to 20)	Fail
6	18	Valid	Pass
7	9	Valid	Pass
8	35	Invalid (Length should be between 3 to 20)	Fail
9	12	Valid	Pass
10	3	Valid	Pass

CYCLOMATIC COMPLEXITY

Coding:

1. Print(name)
2. {If ((name>3) && (name<=20))
3. Print("Name is valid")
4. Print(x);
5. Else
6. Print("Name is invalid")}

Control Flow Graph:



Formula: $P + 1 = 1 + 1 = 2$

$$E - N + 2 = 6 - 6 + 2 = 2$$

Path: 1 – 2 – 3 – 4

1 – 2 – 5 – 6

Test Cases:

Test ID	IP/1 (a)	Path traversed	Output	Result
T1D 1	23	1-2-5-6	Name is invalid	Pass
T1D 2	55	1-2-5-6	Name is invalid	Pass
T1D 3	8	1-2-3-4	Name=8	Pass
T1D 4	21	1-2-5-6	Name is invalid	Pass
T1D 5	19	1-2-3-4	Name=19	Pass

T1D 6	11	1-2-3-4	Name=11	Pass
----------	----	---------	---------	------

Statement Coverage

Statement coverage is a white box test design technique which involves execution of all the executable statements in the source code at least once. It is used to calculate and measure the number of statements in the source code which can be executed given the requirements. Statement coverage is used to derive scenario based upon the structure of the code under test.

$$\text{Statement coverage} = \frac{\text{Number of statements exercised}}{\text{Total number of statements}} \times 100\%$$

Coding:

1. Print(name)
2. {If ((name>3) && (name<=20))
3. Print("Name is valid")
4. Print(x);
5. Else
6. Print("Name is invalid")}

Test Cases:

Test ID	Scenarios	IP/1 (a)	Statement Executed	Output	Result	Statement Coverage
T1D 1	Scenarios 1	9	1-2-3-4	Name=9	Pass	66.67%
T1D 2	Scenarios 2	1	1-2-5-6	Name is invalid	Pass	66.67%
T1D 3	Scenarios 3	22	1-2-5-6	Name is invalid	Pass	66.67%
T1D 4	Scenarios 4	14	1-2-3-4	Name=14	Pass	66.67%
T1D 5	Scenarios 5	10	1-2-3-4	Name=10	Pass	66.67%
T1D 6	Scenarios 6	2	1-2-5-6	Name is invalid	Pass	66.67%

Branch Coverage

In the branch coverage, every outcome from a code module is tested. For example, if the outcomes are binary, you need to test both True and False outcomes. It helps you to ensure that every possible branch from each decision condition is executed at least a single time. By using Branch coverage method, you can also measure the fraction of independent code segments. It also helps you to find out which sections of code don't have any branches. The formula to calculate Branch Coverage:

$$\text{Branch Coverage} = \frac{\text{(No. of functional flow implemented and tested)}}{\text{(Total no. of success and failed conditional flow)}} \times 100$$

Test ID	IP/1 (a)	Condition traversed	Path traversed	Output	Result	Branch Coverage
T1D 1	5	If((name>3)&&(name<20))	1-2-3-4	Name=5	Pass	50%
T1D 2	2	else	1-2-5-6	Name is invalid	Pass	50%
T1D 3	25	else	1-2-5-6	Name is invalid	Pass	50%
T1D 4	7	If((name>3)&&(name<20))	1-2-3-4	Name=7	Pass	50%
T1D 5	16	If((name>3)&&(name<20))	1-2-3-4	Name=16	Pass	50%
T1D 6	47	If((name>3)&&(name<20))	1-2-5-6	Name is invalid	Pass	50%

13.3 FUNCTIONAL TESTING:

FUNCTIONAL TESTING is a type of software testing whereby the system is tested against the functional requirements/specifications.

Functions (or features) are tested by feeding them input and examining the output. Functional testing ensures that the requirements are properly satisfied by the application. This type of testing is not concerned with how processing occurs, but rather, with the results of processing. It simulates actual system usage but does not make any system structure assumptions.

During functional testing, Black Box Testing technique is used in which the internal logic of the system being tested is not known to the tester. Functional testing is normally performed during the levels of System Testing and Acceptance Testing.

Typically, functional testing involves the following steps:

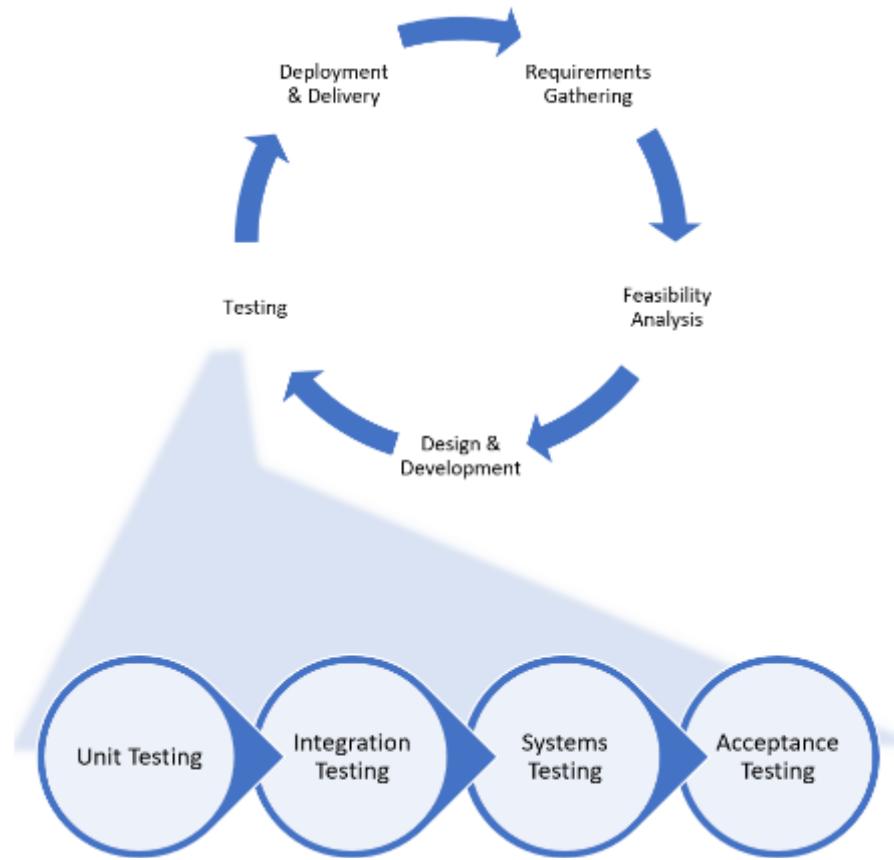
- Identify functions that the software is expected to perform.
- Create input data based on the function's specifications.
- Determine the output based on the function's specifications.
- Execute the test case.
- Compare the actual and expected outputs.

Functional testing is more effective when the test conditions are created directly from user/business requirements. When test conditions are created from the system documentation (system requirements/design documents), the defects in that documentation will not be detected through testing and this may be the cause of end users 'wrath when they finally use the software.

13.4 UNIT TESTING

System testing is a critical phase implementation. Testing of the system involves hardware devise and debugging of the computer programs and testing information processing procedures. Testing can be done with text data, which attempts to stimulate all possible conditions that may arise during processing.

Unit Testing Life Cycle:



Unit Testing Techniques:

- **Black Box Testing** - Using which the user interface, input and output are tested.
- **White Box Testing** - used to test each one of those functions behaviour is tested.
- **Gray Box Testing** - Used to execute tests, risks and assessment methods.

Testing:

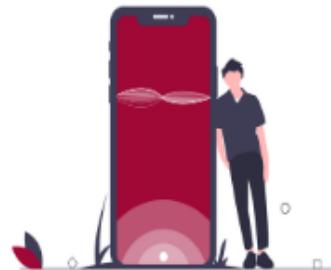
Login Page

Field	Description	Error Message
USERNAME	User correct username only	(if Left out empty) Please Fill up this space
PASSWORD	Password must be of 6 character with 1 capital letter and 1 number	(if unmatched pattern) Please match the requested format.

 **PASSWORD**

 Please match the requested format.
 Password must be of minimum 6 characters and at least 1 number and 1 Capital letter

Don't have an account? [Click to Signup](#)



Login!

 **USERNAME**

Shifa Tole

 **PASSWORD**

.....|

Login

Don't have an account? [Click to Signup](#)

Course Page

Field	Description	Error Message
Name	User must Enter First Name and Last Name	(if typed integers) Enter First Name and Last Name in letters only
Email	Proper Email ID to be inserted	(if “@” is missing) Please enter valid email eg: nick123@gmail.com"
Mobile	Enter valid phone number	(if 9 digits) Enter valid phone number
Time	Select from the given options	(if left unselected) Please Fill up this space
Course	Select from the given options	(if left unselected) Please Fill up this space
Comment	Any queries?	—

Name:

Email:

Mobile:

Time:

Please match the requested format.
Enter valid phone number

Course:

Comment:

Contact Page

Field	Description	Error Message
Name	User must Enter First Name and Last Name	(if typed integers) Enter First Name and Last Name in letters only
Email	Proper Email ID to be inserted	(if “@” is missing) Please enter valid email eg: nick123@gmail.com"
Mobile	Enter valid phone number	(if letters are inserted) Enter valid phone number
Comment	Any queries?	—

Name:

Email:

Mobile:

Comment:

! Please match the requested format.
 Enter valid phone number

Submit

13.5 INTEGRATION TESTING

Integration testing is a level of software testing where individual units / components are combined and tested as a group. The purpose of this level of testing is to expose faults in the interaction between integrated units. Test drivers and test stubs are used to assist in Integration Testing.

Integration Testing is defined as a type of testing where software modules are integrated logically and tested as a group. A typical software project consists of multiple software modules, coded by different programmers. Integration Testing focuses on checking data communication amongst these modules. Hence it is also termed as 'I & T' (Integration and Testing), 'String Testing' and sometimes 'Thread Testing'.

Module	Why?	Desired Output	Observed Output
Sign Up	To test whether new user can register or not	The system should allow user to sign up	All the new users were allowed to sign up
Login	To test whether it is already signed up user	To allow registered user to get log in	All the registered user were allowed to login
Service	To test whether users fill form properly according to the requirement	To have users fill in right information	All users applied for the appointment with right information as per the requirement
Order	To test whether users are able to add products to their cart	To let products get added in the cart	Products get added into the cart
Course	To test whether users registers properly according to the requirement	To accept the input of the users information	All users register with right information as per the requirement
Contact	To let users get in touch with the admin by inserting their queries	The system should allow the user to submit their query	All contact submission are shown in the database

SCREENSHOTS

14. SCREENSHOTS

Sign Up Page



Join us now!

USERNAME

PASSWORD

Signup

Already have an account? [Click to Login](#)

Login Page



Login!

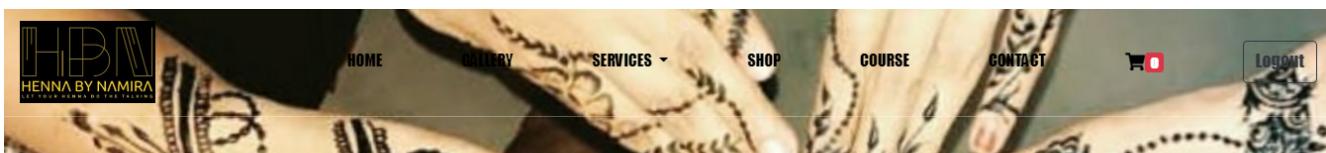
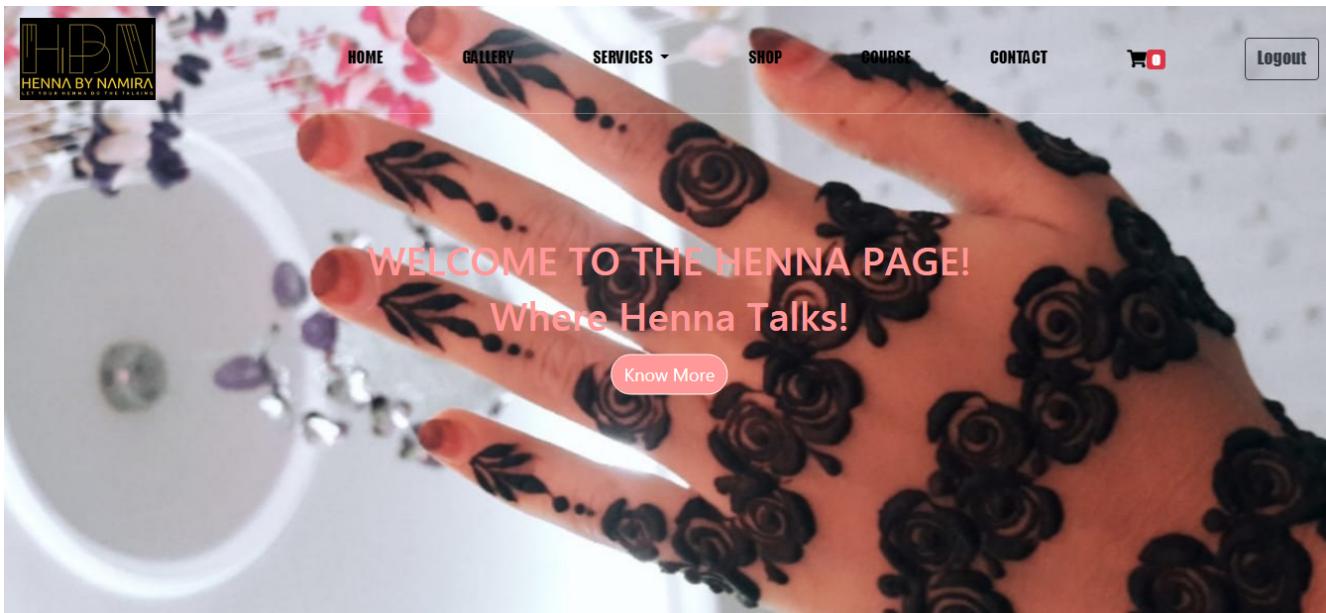
USERNAME

PASSWORD

Login

Don't have an account? [Click to Signup](#)

Home Page



Henna Page

Henna Page welcomes you. In experience of henna for the past 8 years, we promise to provide you with the best services. Our services include all types of henna booking, you can join our Henna learning program and lastly order our organic henna products Henna art form has been in practice for several years in the all over asian countries such as India, UAE , Africa etc. It is a form of good will as well used for the cooling purposes.



GET SET AND GLAM! [Services](#)



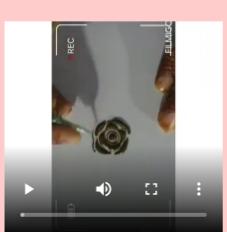
Providing variety of services like Bridal, Party and alot more!

SHOP TILL YOU DROP! [Shop](#)



Get organic henna related products Hand Made with love!

JOIN CLASS NOW! [Course](#)



Learn from basic to professional. Join our course Today!

Gallery Page

HBN
HENNA BY NAMIRA
LET YOUR HENNA DO THE TALKING

- [HOME](#)
- [GALLERY](#)
- [SERVICES](#) ▾
- [SHOP](#)
- [COURSE](#)
- [CONTACT](#)
- [Logout](#)



Slide to see more

HBN
HENNA BY NAMIRA
LET YOUR HENNA DO THE TALKING

- [HOME](#)
- [GALLERY](#)
- [SERVICES](#) ▾
- [SHOP](#)
- [COURSE](#)
- [CONTACT](#)
- [Logout](#)



Services Page

SPECIAL
[HOME](#) [GALLERY](#) [SERVICES](#) ▾ [SHOP](#) [COURSE](#) [CONTACT](#) [Logout](#)

Make yourself feel more Special with the unique design.
Be it Hindi or Gulf, We can do it all.

Click to know more about the design rates and book for yourself now.

[Book Now!](#)



CELEBRATION!!

Bridal Page

(There are also celebration, special and black Pages similar)

MAHARANI
Intricate hendi design!
[See more in Gallery](#)

Bridal booking for 2021-2022 open now!

Feel beautiful on you're D-Day!

Getting a bridal henna is an intimate part of your wedding preparations and HennaPage will be with you from start to finish. By listening to your wishes, HennaPage will create a henna design that will tell your love story. HennaPage would make your wedding extra special.

All of this innovates the artwork from being purely tradition, to something uniquely yours. Your henna might fade quickly after your wedding celebrations are over, but the memories and wedding pictures will last a lifetime. Your special day, customized to the last detail.

Get you're Bridal booking with booking fee Rs.300 only!

MAHARANI!
Intricate Hindi designs that purely aspires to the Indian Tradition making you look nothing less than a Maharani.
[Take a look at more images of the maharani designs in the gallery.](#)

[Gallery!](#) [Book Now!](#)

MALLIKA!
Get us style you with the unique Arabic designs representing Arab culture the origin of Henna, feel like a Malika.
[Take a look at more images of the malika designs in the gallery.](#)

[Gallery!](#) [Book Now!](#)

The screenshot shows a website for "HENNA BY NAMIRA". At the top, there's a navigation bar with links for HOME, GALLERY, SERVICES (with a dropdown menu), SHOP, COURSE, CONTACT, and a shopping cart icon. A "Logout" button is also present. Below the navigation is a banner titled "SERVICES FOR BRIDAL!". Under this, there are three main service categories: PACKAGE, HAND, and FEET, each with a list of designs and their prices.

PACKAGE	HAND	FEET
Package provide services for both hands and feet together.	Hand provides service for bridal henna design for hands only.	FEET provides service for bridal henna design for feet only.
Maharani ₹Rs.9000	Maharani ₹Rs.6000	Maharani ₹Rs.4000
Mallika ₹Rs.13,000	Mallika ₹Rs.8,500	Mallika ₹Rs.5,500
Book Now!	Book Now!	Book Now!

Booking Form

(form for bridal, special, celebration and black page is different)

The booking form is titled "REQUEST TO BOOK!" and includes a sidebar with promotional text and icons.

Book Now

Be the happiest bride with the best designs !

Name:
Enter name

Email:
Enter email

Mobile:
Enter mobile

Address:
Room.No,Building/App,Road,Area,City,State,Country,Pin Code

Date:
Please enter from the available dates.
Please make sure you have entered the date you want your henna done.

Time:
-- Select--Time--

Design:
-- Select Your Booking--

For :
-- Select Your Booking--

Comment:
[Large text area]

Total Amount Payable : Rs.300

-Select Payment Mode-

Submit

Shop Page

The Shop Page displays four products in a grid:

- Henna Cone**: ₹ 160.00/- (Pack of 5 organic Henna cones). Quantity: 1. Add to cart button.
- Henna Powder**: ₹ 150.00/- (Organic Henna Powder 500gm per pack). Quantity: 1. Add to cart button.
- Henna Paste**: ₹ 250.00/- (Organic Henna Paste 200gm per pack). Quantity: 1. Add to cart button.
- Essential oil**: ₹ 200.00/- (Essential oil for dark color 100ml). Quantity: 1. Add to cart button.

Navigation links include HOME, GALLERY, SERVICES, SHOP, COURSE, and CONTACT. A Logout button is also present.

Cart Page

ID	Image	Product	Price	Quantity	Total Price	Action
6		Henna Powder	₹ 150.00	1	₹ 150.00	
7		Henna Cone	₹ 160.00	1	₹ 160.00	
8		Henna Paste	₹ 250.00	1	₹ 250.00	
9		Essential oil	₹ 200.00	1	₹ 200.00	
10		Bridal kit	₹ 1,100.00	1	₹ 1,100.00	

[Continue Shopping](#)
Grand Total
₹ 1,860.00
[Checkout](#)

Checkout Page

The Checkout Page shows the following details:

Complete your order!

Product(s) : Henna Powder(1), Henna Cone(1), Henna Paste(1), Essential oil(1), Bridal kit(1)

Delivery Charge : Free

Total Amount Payable : 1,860.00/-

Form fields for delivery information:

- Enter Name
- Enter E-Mail
- Enter Phone
- Enter Delivery Address Here...

Select Payment Mode

Course Page



KHALEEJI DESIGN

Basic to Professional

starting from 01/05/2021

Tuesday Thursday Saturday

Duration: 2 Months



HINDI DESIGN

Basic to Professional

starting from 01/05/2021

Monday Wednesday Friday

Duration: 2 Months

Register Form

(form for khaleeji, hindi, tattoo and package page is different)

REQUEST TO BOOK!

Join Now
Smiley icon

Bring out the creative person in you!

Name:	<input type="text"/>
Email:	<input type="text"/>
Mobile:	<input type="text"/>
Time:	<input type="text"/>
Course:	<input type="text"/>

Comment:

Submit

Contact Page

KNOW ABOUT US!



Hello, world!

This is a HENNA PAGE, where you may not just buy henna products but also get appointment and also start learning henna from me by joining our courses.

Henna Page is where you'll meet all your requirements over henna.

Contact Form

GET IN TOUCH WITH US:


Contact Us

We would love to hear from you !

HOME
GALLERY
SERVICES ▾
SHOP
COURSE
CONTACT
5
Logout

Name:

Email:

Mobile:

Comment:

Submit

LIMITATIONS AND

FUTURE SCOPE

15. LIMITATIONS AND FUTURE SCOPE

15.1 LIMITATION:

- The Henna Website cannot work without internet.
- The website cannot mark unavailable dates automatically.
- The website does not have order tracking for the buyer
- The website does not have order history for the user

15.2 FUTURE SCOPE:

- The dates for booking appointment if can be disabled on its own, it will have fewer loads on the website owner.
- A tracking order feature would let users rest assure of their product reaching them also becomes a plus point.
- In order to keep a track of their previous order the addition of Order History feature for the users would be an attraction for getting more users.

CONCLUSION

16. CONCLUSION

- The website will give artist and exposure of expanding their business through this platform.
- There will be more demand over the website as a user will get to explore various facility provided by the artist/owner of the website.
- Various facilities like booking services example: Bridal, Special, Celebration and Black designs are available for the users, course registration and as well as shop where in the users get to fill their cart of henna products.
- A direct mail to the artist will also ease the load of maintaining the data and looking for new order becomes easier.