Web development of chaitysbeautyheaven.com at MY SOFT IT

An undergraduate report submitted by,

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ABSTRACT

The report is broadly categorized into five different chapters. At first, there is an introduction followed by the objectives of the study and the scope of the report along with a background of the project and limitations. The second chapter describes the overview of MY SOFT IT. The third chapter focuses on the literature review. Fourth chapter deals on the development phases of MYSOFTIT-Training.com and major works involved in the project, which are categorized in Planning, Designing, Software development models, Implementation, Testing, Deployment, and maintenance. The fifth chapter narrates a concluding summary and recommendation.

In this internship report, the Web Development of Online training module for MY SOFT IT is studied. Here, my team member and I tried to create a robust online beauty website for various services offered. The system is to operate much like any standard online beauty platform found on the internet, namely, Vlccwellness.com, Romoni.com.bd, Sheba.xyz, etc. where users can book an appointment and avail the various offered services of their choice.

As this is teamwork and a very big project, there are several modules of this project like admin module, personalized user dashboard, service management system. My job was to propose and create this entire project with the help of other employees at the company.

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1 INTRODUCTION

This chapter gives an outlook on the project and its features. The web application has become a necessity of any organization which has several members associated with it, along with new members interested in it. The internet is the best way to introduce the organization that provides current and future information to its members. A web presence is also necessary to define the legitimacy of an organization.

1.1 BACKGROUND

Beauty and women are related to each other for ages. A woman always tries to enhance her beauty. Independent online beauty platform in Bangladesh is pretty few and far between is a field that holds quite a promise. Western and European countries like United States, Canada, England, and many others, utilizes this field and have shown its potential to aid the beauty and lifestyle system in general. But nowadays due to heavy work schedules and lack of time they cannot visit the beauty salon and wait for their desired service. The recent pandemic holds testament to this statement. Due to massive lockdown all over the world, almost every country in the world had to resort to an online beauty salon system and have had a brush with this particular format of taking reservations for their desired services, providing a comfortable and pampered beauty salon service.

In our local scene, initiatives like vlccwellness.com, Romoni.com.bd, Sheba.xyz is somewhat known for the valiant effort to establish this field.

The main goal of an online beauty and lifestyle portal is to give the user a platform to be pampered like royalty in the comfort and with all the safety and precautions. An online beauty portal reduces the burden and completely hassle-free and very much convenient and saves precious time and helps to bloom beauty and confidence.

It is certainly a bit different approach compared to the conventional beauty parlor methodology offered by a professional beauty salon, but the main goal remains the same, which is to help distribute beauty service to the customers.

1.2 OBJECTIVES

- **Automating the appointment process:** The main objective of this project is to give users an organized, well-structured lifestyle with a luxurious experience that leaves them feeling relaxed and stress-free, which is available anywhere for convenience.
- **Saving time and cost:** Manual system takes much time to manage the data. This system is easy to use and saves time to manage data. Having an always online beauty portal gives the user the convenience of eradicating transportation costs, as well as valuable time from the busy schedule of their everyday routine.
- **Economic value:** Of course, there is an economic value to this system. We make this web Application for the salon owner. They will pay for it. This is another objective of us. To make a profit from it. And if we think about who will buy this web app, it will save their lot of money because in previous time they need some people to take or manage this appointment process but using this web app only one people can manage this process.

1.3 SCOPE OF THE PROJECT

Features available to user and administrator after developing the web application are:

- Home/Main page about booking an appointment.
- Admin Login page.
- Admin panel page includes edit, create, delete functionality of specific data.
- The service list page includes services provided and cost-related information.
- About page includes information about the website and the quality of the services.
- Contact page.

1.4 OUT OF SCOPE OF THE PROJECT

For the time being, the development of the following features is on hold for further notices.

- Taking masterclass feature where user can know all about beauty and health from their home.
- Live chat features among users like audio/video calling modules.
- Live class taking module with a detailed online drawing/typing module.
- Live comment functionality.
- Adding more detailed Image and Video gallery for every service.

2 COMPANY PROFILE

2.1 OVERVIEW OF MYSOFT IT

MYSOFT IT is one of the well-known web development and design companies in Bangladesh. It is a company where your ideas count, where your determination can create a new world of opportunity for you, where your talent and hard works are rewarded and noticed. In MYSOFT IT, we always endeavor to lead towards development and creating a flexible, dynamic, and cooperative organizational culture. MYSOFT IT is one of the promising software, web application companies of Bangladesh that aims at creating a new standard in the era of software technology.

MYSOFT IT is the brainchild of some fresh youth brains. These young minds not only dreamt about something big, but they also chased it and still going strong at it. The birth of MYSOFT IT happened when a bunch of dream seekers planned for something extraordinary in the web development scene, recruited efficient workers, and paved the way for making the dream come true, and at the time of this report, quite adamant that the best is yet to come.

2.2 COMPANY PROFILE OF MYSOFT IT

MYSOFT IT [1]started as a start-up web and software development company in 2012. We are growing up a Software Development and Web design company in Uttara, Dhaka, Bangladesh. Our teams are highly experienced, creative, and Professionals talented, to provide software development and Web solution. We are pervasive information, extended in performance, progressive in style. Our service is designed to give complete end-to-end solutions for our clients. Our specialized team builds software products with a creative and innovative system for customers. We are entirely provided with Software development, web designing and e-commerce website development, Graphics designing, Facebook marketing, online marketing and SEO, Domain Registration, and web hosting. We take responsibility for the client's satisfaction and also believe in our quality and deadline. Client relationships are more valuable for us than create mutual respect. Also, we give essential of our and clients time as well as money. We believe our responsibilities extend beyond business and work to assist people in every sector by using innovative software. Our talented and professional team quickly grave client requirements and consult them. We always trust in our quality and deadlines. We never lose our and our clients time as well as money. We value our client's ideas and creativity which help us improve our knowledge and experience also. We have a separate expert for a particular service and always give the best support and assistance to our clients. [1]

2.3 MISSION, VISION, VALUE

We work in mission-critical environments with large volumes of sensitive data, so our highly experienced team strives to reduce risk, improve performance, and promote sustainable business. Government and state agencies rely on us in designing and implementing end-to-end ID management solutions. We bring innovation not only in our technologies but also in the way we manage our projects and deliver our solutions. Our expertise in consultancy, project management, training, and support combined with our relentless quest for customer satisfaction through on-time, on-budget, and on-spec delivery of complex turnkey solutions has earned MYSOFT IT an enviable reputation in the web development industry.

MYSOFT IT builds on its experience and specialized skills to provide national-scale IT solutions. With dynamic partnerships, MYSOFT IT provides turnkey solutions that are sustainable and meet international standards. MY-SOFT IT wishes to be the one of largest IT companies in the history of Bangladesh by providing outstanding services to global clients.

At MYSOFT IT, we are highly ethical, genuine, honest, and trustworthy. We keep our promises and commitments. We do things that are right for our stakeholders, both internal and external. We act responsibly, and always hold ourselves accountable for our work and how it is achieved. [1]

2.4 PRODUCTS AND SERVICES

- ✓ **Web Application**
  We develop customized web applications, Responsive websites, WordPress theme development, Dynamic websites, E-commerce solutions, and so on.

- ✓ **App Development**
  We also develop iPhone and Android apps suitable for our client's needs. Our professional team of android and iPhone app developers research and analysis to meet your requirements and expectations.

- ✓ **UX/UI Design**
  Need improvement to your website? Complete redesign and build? Or need a brand-new website with a great user experience? Our team of skilled experts can help as we have done it hundreds of times.

✓ **Online Marketing**

Our expert team can help clients stay focused on their operations, and market your product online and on social platforms. We help our clients to enter the business world and making the top in search engines.

✓ **Online training (new)**

We have the reputation of delivering quality web development courses to our students over the years as a sub-section of the company and now we are trying to transport that section completely online and manage as well as deliver our quality online web development training online.

✓ **Cyber Security**

Be the witness to the unmatched experience of our cybersecurity strategies, who will assess your risks and help you protect your website.

✓ **Great Support**

We handle all updates, security, and monitoring for you. You will know your systems are running smoothly all the time.

3 LITERATURE REVIEW

3.1 INTRODUCTION

Beauty is commonly described as a feature of objects that makes these objects pleasurable to perceive. One difficulty for understanding beauty is since it has both objective and subjective aspects: it is seen as a property of things but also as depending on the emotional response of observers. Because of its subjective side, beauty is said to be "in the eye of the beholder". The word "beauty" is often used as a countable noun to describe a beautiful woman.

The characterization of a person as "beautiful", whether on an individual basis or by community consensus, is often based on some combination of inner beauty, which includes psychological factors such as personality, intelligence, grace, politeness, charisma, integrity, congruence, and elegance, and outer beauty (i.e., physically attractiveness) which includes physical attributes which are valued on an aesthetic basis. [2]

A beauty salon or beauty parlor is an establishment dealing with cosmetic treatments for men and women. Usually, a beauty parlor concentrates on a specific treatment or beauty features such as styling either for men, women or for both. Beauty salons may offer a variety of services including professional hair cutting and styling, manicures, and pedicures, and often cosmetics, makeup, and makeovers. They do offer both sets of treatments; provide extended services related to skin health, facial aesthetics, foot care, nail manicures, aromatherapy — even meditation, oxygen therapy, mud baths, and many other services. [3]

It is unexpected for us at the age of technology. So, if there is a system that can manage to reserve for the services from home, it will be very helpful and also it will save much time.

3.2 HOW THE WORK IS RELATED TO THE UNDERGRADUATE COURSES?

Most of the 300 and 400 level senior courses at Independent University, Bangladesh like Database management, System analysis, and design, Software Engineering these courses helped me to document my task in the internship program. And courses like Web Application and Network Management helped me to implement my task in the internship program.

3.3 ONLINE BEAUTY AND HEALTH WEBSITE OVERVIEW

As mentioned above, there are many online beauty and health websites available, recognized both nationally and internationally, below a brief overview of those websites are given,

I.   **Vlccwellness.com**: VLCC is widely recognized for its wellness, weight loss management solutions, and therapeutic approach to beauty treatments. Guided by our motto 'Shaping Your Confidence', we seek to spark self-transformation, spread happiness, and imbibe every individual with wellness for life. Founded by Mrs. Vandana Luthra in 1989, these three mantras stand tall as the organization's pillars of strength. Till today, they remain the firm foundation of VLCCs continuing success story.

VLCC has among the largest scale and breadth of operations within the beauty and wellness services industry in India, serving consumers in over 290 locations in 105 cities and across 12 countries in South Asia, Southeast Asia, the GCC Region, and East Africa. It operates 175 Wellness Centers & Beauty Clinics in India and 26 in 10 other countries and runs VLCC Institutes of Beauty & Nutrition that have grown to become India's largest chain of skill development academies in the beauty and nutrition segment with 93 campuses, training over 25,000 students annually and offering entry-level as well as skill enhancement courses in multiple disciplines. [4]

II.   **Lakmesalon.in:** Lakme Salon, India's first and leading chain of beauty salons offers expert services in hairstyling, skin, and beauty care. It is dedicated to the contemporary Indian woman's exploration of the fine art of beauty.

Lakme Absolute salon was launched in 2012, which offers bespoke services defining the ultimate facets of hair and beauty. The state-of-the-art salon is currently present in the 3 cities- Delhi, Bengaluru, and Mumbai. In 2015, Lakme Lever formalized a strategic alliance with Aptech – a global leader in vocational training to set up 80 Lakme beauty academies to train 50,000 stylists across India, over five years. Lakme Academy powered by Aptech offers both foundation and advanced level training in skin, hair, and make-up. [5]

III. **Persona.com.bd:** Persona has proudly been one of the pioneers of beauty-related services in Bangladesh since it was first established in 1998 and has since come a long and joyful way. In these past 24 years, Persona has experienced immense growth and is now home to over 1,00,00,000 valuable customers who have availed over 1,70,00,000 of Persona's premium services. The high-quality services and achievements have not been

bound to its 11 ladies beauty outlets only but have expanded and reached out to receive an opportunity to serve the men through the 6 Men outlets too.

The Persona family has invested in multiple sister concerns apart from the ladies' and men's beauty outlets including Persona Health, Persona Academy, Spring Spa, and Canvas Magazine to cater to the beauty, fashion, and health needs of all of the precious clients with utmost sincerity. [6]

IV.   **Romoni.com.bd:**   With more than 500 women professionals, Romoni is the biggest beauty and lifestyle destination in Bangladesh. The Romoni ecosystem comprises a complete customer-facing service marketplace ("Romoni Customer" app) that enables customers to search, compare, book, and review services available from Romoni's verified network of professionals and micro-entrepreneurs, who, in turn, can reach out to three times as many customers and double their revenues. The ecosystem is designed to support women micro-entrepreneurs in the boutique service and product industries. Any woman with any kind of skill or product can start a business using the "Romoni Partner" app, which lets them create their online profile, keep track of their orders, assign work to resources, build a digital financial footprint and hence, enhance their creditworthiness in the long run. [7]

V.   **Sheba.xyz:** Sheba.xyz is an online service marketplace from Bangladesh. Sheba.xyz was officially launched on July 29, 2016. Chief Executive Officer (CEO) of Sheba.xyz is Adnan Imtiaz Halim and Chief Operating Officer (COO) is Ilmul Haque Sajib- who is also the CO-founder of Sheba.xyz. The operation grew bigger over 1 year, spreading all over Dhaka City and subsequently in Chittagong in 2019. Sheba.xyz has more than 86 services with 3.3 million subscribers. It is an online platform that connects the users to the on-demand specialized and verified service providers on various home services such as Electricians, Plumbers, Beauticians, Carpenters, Pest Control, Home Cleaning, Home & Office Shifting, etc. Any Bangladeshi users can avail their services through their app which is available on both Google Play Store and Apple App Store along with the website. [8]

All of these aforementioned websites follow a completely online-based beauty and health-related system, they can all run in traditional PC format to any handheld device format. The international ones have their beauty and lifestyle service while the local ones only in for beauty services.

4 DEVELOPMENT PHASE OF MYSOFT IT ONLINE BEAUTY AND HEALTH WEBSITE

4.1 SOFTWARE DEVELOPMENT OF PROCESS chaitysbeautyheaven.com

➢ **Book appointment**
- It is the main part of the development of the software.
- Users should be able to access all the interactivity aspects of the website.
- The user should be able to make an appointment upon providing all the required information.
- User should be able to select any services of their choice and able to see the assigned services and be officially considered as a customer.
- Upon successful reservation, the user should be able to save the appointment number.

➢ **Contact administrator.**
- The user should be able to contact the administrator via the given credentials.

➢ **Manage profile.**
- Specialized user (admin) can be able to access the dashboard and monitor the status of the workspace services.
- Specialized user (admin) can be able to update his/her personal information.
- Specialized user (admin) can be able to change the password of his/her profile.

➢ **Overview appointments**
- Specialized user (admin) can be able to manage the appointments by adding/accepting/rejecting them or make new appointments to a customer.
- Specialized user (admin) can also search for an appointment with a designated appointment number.

➢ **Appoint services.**
- Admin can view the customer lists and can edit their information also can assign services of their choice.
- Admin can also add or manage services that are offered to serve.

> ➢ **Manage pages.**
>> ▪ Admin has the access to view the About Us page and Contact Us page and can be able to manage those pages for the workspace.

4.2 SOFTWARE DEVELOPMENT ACTIVITIES OF chaitysbeautyheaven.com

This website will have 2 types of users. Namely, Administrator and Customer.

Admin Activities

- Log in to the system.
- Access dashboard.
- Manage profile.
- Add services.
- Manage services.
- Overview of all appointments.
- Add new appointment.
- Accept or reject any appointment.
- Add customer.
- View regular customer.
- Edit information of a customer.
- Assign service to a customer.
- Overview of the report.
- Manage pages.
- Search appointment
- Search invoices.

Customer Activities

- View website.
- See the service list along with the price.
- Make an appointment.
- Providing general information about themselves.
- Contact administrator.

4.2.1 METHODOLOGY

A software development methodology or system development methodology in software engineering is a framework that is used to structure, plan, and control the process of developing an information system. [9]

There are several software development methodologies. Such as

- Waterfall Model

- Prototype Methodology

- Rapid Application Development

- Dynamic System Development Model Methodology

- Agile Software Development Methodology

- Spiral Model

We choose the agile process as the methodology for this project.

The Agile Methodology is based on iterative and incremental development instead of a linear approach. It does not build an entire system at once but rather develops incrementally. Less time is invested upfront for documentation and analysis, as clients are constantly seeing and testing the product and providing feedback. The development and feedback process adds accountability (tangible milestones of completed work, not just documentation), and tends to improve client satisfaction by allowing ongoing input. [9]
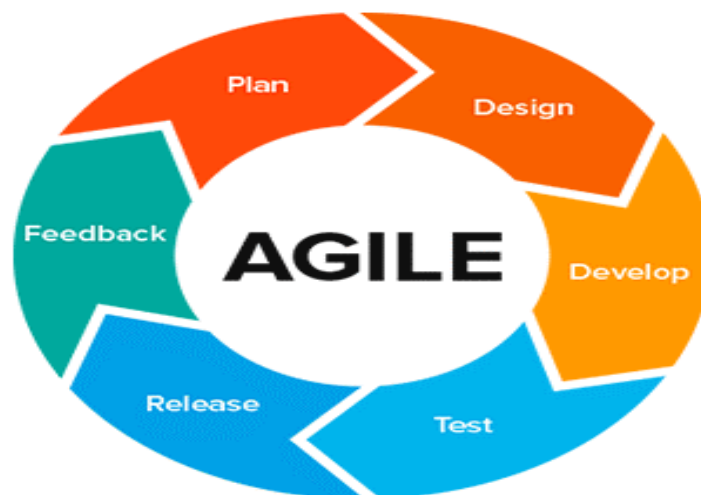

Figure 4. 1: Agile software development methodology.

There are several reasons for choosing the agile process.

Better product quality: Agile methods have excellent safeguards to make sure that quality is as high as possible by

❖ Embracing technological excellence, good design, and sustainable development.
❖ Defining and elaborating on requirements just in time so that knowledge of product features is as relevant as possible.
❖ Incorporating continuous integration and daily testing into the development process, allowing the development team to address issues while they are fresh.
❖ Taking advantage of automated testing tools to develop during the day, test overnight, and fix bugs in the morning.
❖ Conducting sprint retrospectives, allowing the scrum team to continuously improve processes and work.
❖ Completing work using the definition of done; developed, tested, integrated, and documented.

Higher customer satisfaction: Agile project teams satisfy customers by

❖ Keeping customers involved and engaged throughout projects.
❖ Having a product owner who is an expert on product requirements and customer needs.
❖ Keeping the product backlog updated and prioritized to respond quickly to change.
❖ Demonstrating working functionality to customers in every sprint review.
❖ Delivering products to market quicker and more often with every release.
❖ Possessing the potential for self-funding projects.

Customized team structures: Self-management puts decisions that would normally be made by a manager or the organization into scrum team members' hands. Because of the limited size of development teams — five to nine people — agile projects can have multiple scrum teams on one project. Self-management and size-limiting mean that agile projects can provide unique opportunities to customize team structures and work environments.

More relevant metrics: The metrics agile project teams use to estimate time and cost, measure project performance, and make project decisions are often more relevant and more accurate than metrics on traditional projects. On agile projects, you provide metrics by

- ❖ Determining project timelines and budgets based on each development team's actual performance and capabilities.
- ❖ Having the development team that will be doing the work provide effort estimates for project requirements Using relative estimates, rather than hours or days, to tailor estimated effort to an individual development team's knowledge and capabilities.
- ❖ Refining estimated effort, time, and cost regularly, as the development team learns more about the project.
- ❖ Updating the sprint burn-down chart every day to provide accurate metrics about how the development team is performing within each sprint.
- ❖ Comparing the cost of future development with the value of that future development, which helps project teams determine when to end a project and redeploy capital to a new project.

Improved performance visibility: On agile projects, every member of the project team has the opportunity to know how the project is going at any given time. Daily scrum meetings, daily sprint reviews, and visible progress charts offer concrete ways to see progress.

Increased project control: The many opportunities to inspect and adapt throughout agile projects allow all members of the project team — the development team, product owner, scrum master, and stakeholders — to exercise control and ultimately create better products.

Improved project predictability: Agile project management incorporates several practices, artifacts, and tools for improved predictability:

- ❖ Keeping sprint lengths and development team allocation the same throughout the project allows the project team to know the exact cost for each sprint.
- ❖ Using individual development team speed allows the project team to predict timelines and budgets for releases, the remaining product backlog, or any group of requirements.
- ❖ Using the information from daily scrum meetings, sprint burn-down charts, and task boards allows the project team to predict performance for individual sprints.

Reduced risk: Agile techniques virtually eliminate the chance of absolute project failure:

- ❖ Developing in sprints, ensuring a short time between initial project investment and either failing fast or knowing that a product or an approach will work.
- ❖ Always having a working product, starting with the very first sprint, so that no agile project fails.
- ❖ Developing requirements to the definition of done in each sprint so that project sponsors have completed, usable features, regardless of what may happen with the project in the future.
- ❖ Providing constant feedback on products and processes through daily scrum meetings and constant development team communication, sprint reviews and retrospectives, and releases in which the end-user can see and react to new features regularly.
- ❖ Generating revenue early with self-funding projects, allowing organizations to pay for a project with little up-front expense.

4.2.2 PLANNING

Planning is one of the important parts of the software development life cycle. In this stage, a software development plan is decided. For our online beauty and health module, we prepare a plan. Our plan is first we perform a feasibility study that will tell us this project is feasible or not. Then we will gather requirements. We will gather both functional and non-functional requirements which will help us to find the scope and out of scope of the project. To gather requirements, we plan to survey different groups of people like admin, and general user of this project. Moreover, we will try to prepare a Business Requirement Document (BRD) for this project. Finally, we will go for design and coding.

4.2.2.1 Feasibility Study

In case the system proposal is acceptable to the management, the next phase is to examine the feasibility of the system. The feasibility study is the test of the proposed system in the light of its workability, meeting user's requirements, effective use of resources, and of course, cost-effectiveness. These are categorized as technical, operational, economic, schedule, and social feasibility. The main goal of a feasibility study is not to solve the problem but to achieve the scope. In the process of the feasibility study, the cost and benefits are estimated with greater accuracy to find the Return on Investment (ROI). This also defines the resources needed to

complete the detailed investigation. The result is a feasibility report submitted to the management. This may be accepted or accepted with modifications or rejected.

In short, the following decision is taken in the different feasibility study:

Economic feasibility: This is an automated software for online beauty and lifestyle. Usually, customers who require services of any sort, have to go to a beauty parlor physically to avail their desired service. But having an online portal eliminates the redundancy to traveling to and from a beauty center, hence saves the transportation cost for customers as well as other costs that may come with it.

Operational feasibility: To run any beauty parlor system manually takes a lot of bookkeeping and costs on the managerial side. Having an online system ready to make a reservation reduces that hassle and keeps the system clean and well stored.

Organizational feasibility: MY SOFT IT is mainly a web development company but having an IT training center helps to earn a passive income as well as a way to give back to the community, helping society in general.

Technical feasibility: MY SOFT IT is a reputed software company in Bangladesh. It has a technical expert system developer team. They are highly qualified to make any software and reach any requirement goal. As well as the company has a lot of resources to create this kind of software. Making this software is technically feasible. Although at the time of writing this report, the development process is very much in the early steps, all the necessary steps have been considered very carefully from the beginning with a keen technical vision.

Social feasibility: As mentioned before, giving the knowledge of web development to an eager student, MY SOFT IT is helping the community, especially the younger demographic by keeping them off the streets and engaging them with an activity that may help them build a career later in life. This is considered socially feasible.

4.2.2.2 Requirement

Requirements Analysis is the process of defining the expectations of the users for an application that is to be built or modified. Requirements analysis involves all the tasks that are conducted to identify the needs of different stakeholders. Therefore, requirements analysis means to analyze, document, validate and manage software or system requirements. High-quality requirements are documented, actionable, measurable, testable, traceable, helps to identify business opportunities, and are defined to facilitate system design.

We prepare some survey questioner for both general users. Based on the answers we find out the Functional requirements for this project.

4.2.2.2.1 Functional Requirement

A functional requirement defines what a website and its component are and what these components are supposed to accomplish. The following functional requirements were gathered, and their inputs, behavior, and output are discussed below.

Table 4. 1 Compatibility

Name of the function: *Must be compatible with all devices such as computers, tablets, Smartphones.*		
Input: • N/A	**Process:** • Apps must be developed in a common development environment.	**Output:** • The web application will be accessible via every device
Pre-Condition: • The user must have a computer, laptop, tablet, or smartphone which has the ability to run the app.		

Post-Condition:
• Everyone can use the web application.

Alternate Option:
• N/A

Table 4. 2 Login

Name of function: *Login account.*		
Input: • Email, User type, Password	**Process:** • Signing into the web application.	**Output:** • View the main interface in the application.
Pre-Condition: • Must have an internet connection and devices like computers or smartphones.		
Post-Condition: • User can view all the interfaces and can use the web app.		
Alternate Option: • If email or UserID and Password is not correct then show the alert, Email or Password is incorrect.		

Table 4. 3 User Profile

Name of function: *Every user can see an individual profile.*		
Input: • Email, User Type, Password	**Process:** • Go to the profile page.	**Output:** • User can see all of his/her provided information.
Pre-Condition: • Be "Logged In" and access the 'Profile' page.		
Post-Condition: • User can see their all-own information from the database in their web application.		
Alternate Option: • If the user is not logged in, then the user cannot access the profile page.		

Table 4. 4 Change profile information.

Name of function: *User has the ability to edit, update users own information.*		
Input: • Email, User Type, Password.	**Process:** • Change or update existing information.	**Output:** • User can see updated information.
Pre-Condition: • Be "Logged In" and access the 'Profile' page.		

Post-Condition:

- The changed data will be updated in the database.

Alternate Option:

- If any error is found during updating profile information like wrong email format, short password, etc. from the database, the system will show an alert.

Table 4. 5 Make an appointment.

Name of function: *Make an appointment*		
Input: • Email, Name, Select Services, Date and Time, Phone.	**Process:** • Select and book for any available services on a particular date.	**Output:** • Users can make an appointment for a service and see the notice of 'Appointment no.' status.
Pre-Condition: • Every user can book an appointment without login and must have an internet connection.		
Post-Condition: • The status of the appointment will be changed after booking.		
Alternate Option: • If the appointment is not available, should show the error message.		

Table 4. 6 View services list.

Name of function: *Viewing available services*		
Input: • N/A	**Process:** • Going to the web app and see the available service list, if any. Then select the service to book an appointment.	**Output:** • List of services shown in the web app along with the price.
Pre-Condition: • Every user can view the service list without login and must have an internet connection.		
Post-Condition: • Everyone can use the web application.		
Alternate Option: • N/A		

Table 4. 7 Contact.

Name of function: *Contact the webmaster via the contact page.*		
Input: • N/A	**Process:** • Browse to the contact page and fill-up the form to	**Output:** • An email will be sent with a successful message sent promptly.

	send an email to the admin.	

Pre-Condition:

- Must know how to use a computer.

Post-Condition:

- Should get a prompt confirming that the email has been sent to the administrator.

Alternate Option:

- Invalid email should show the error message.

Table 4. 8 Admin Panel

Name of function: *Admin Panel.*		
Input: • Email, User Type, and after login clicks the profile button and settings.	**Process:** • After login as Admin, admin can see the admin panel page and can control everything in the system like add or manage user, add/assign services, manage services, etc.	**Output:** • Data will insert, update, delete in the database.
Pre-Condition: • The user must be logged in as Admin in the web app and must have an internet connection.		

Post-Condition:

- Data will be inserted/deleted/updated in the database and reload the page and Amin can see the updated data if any.

Alternate Option:

- If some input field is not filled or given invalid information, then the system will show an alert.

4.2.2.2.2 Nonfunctional requirements

The non-functional requirements are listed in this section to identify the major operations of the system. There are various types of non-functional requirements like performance, security, reliability, maintainability, extensibility, feasibility, economic, operational, technical, which are in this section, and they are often qualities.

PERFORMANCE REQUIREMENTS: This website should be a site providing beauty and health-related services via a structured curriculum to an appointed user. The main reason to build this website is to give an individual exploration of the fine art of beauty. Users or registered customers should get proper beauty-related treatment from the site without any problem.

SECURITY REQUIREMENTS: Security and administration is always a concern. All information on the main website is secured. The only website administrator has access to the dashboard for both blogs and the main website to control the features. This project uses PHP as a backend which has various layers of security, security requirements have been taken care of.

EXTENSIBILITY AND MAINTAINABILITY REQUIREMENTS: There is one standard template used for one look and feel throughout the site. The website can be expanded to accommodate many further modules without making any changes to any existing modules. The web application is created in such a way that the administrator can easily maintain both a server and client-side.

FEASIBILITY STUDY: An important outcome of the preliminary investigation is to determine the feasibility of the project. The main aim of the feasibility study activity is to determine whether it would be financially and technically feasible to develop a project. The feasibility study activity involves analysis of the problem and collection of all relevant information relating to a product such as the different data items which would be input in the system, the processing required to be carried out on these data, the output required to be produced by the system as well as the various constraints on the behavior of the system. During the feasibility study, most of the high-level architecture design decisions are made.

OPERATIONAL FEASIBILITY: The proposed project is beneficial only if it is turned into information systems that will meet the organization's operating requirements. This test of feasibility asks if the system will work when it is developed and installed. A factor considered for operational feasibility is that the proposed project be beneficial to users because it offers greater support to potential members and pin regards interface friendliness, easy access, and ease in understanding the flow of the system. This project meets operational feasibility as it has information that is being continuously updated.

TECHNICAL FEASIBILITY: Technical feasibility involves the software and hardware requirements to develop this website. Hardware is not an issue as it runs on any computer which is connected to the Internet. The proposed technology has to meet all software requirements, by considering factors like the browser support for PHP along with basic web technologies. This web application uses PHP or HTML. All the requirements are successfully meet with open-source technologies.

ECONOMICAL FEASIBILITY: Suitable budget, financial benefits, investment vs. profit are big factors for economic feasibility. This web application needs fewer people than before who can control the Website. Thus, any extra manpower to maintain the site is not required. Also, as this project was developed using open-source technology no additional funding is needed for technology. So, this project is perfectly economically feasible.

LESS RESPONSE TIME: Because of the fast speed of the server people can reach this website without delay.

USER-FRIENDLY INTERFACES: All the interface of this website is easy to understand, clean and user friendly.

4.2.3 DESIGNING

The design provides representations of software that can be assessed for quality. Design is the only way to accurately translate a customer's requirements into a finished software product. Software architecture provides an abstract representation of the overall structure of software. The design has parts, High-Level Design (HLD) and Low-Level Design (LLD).
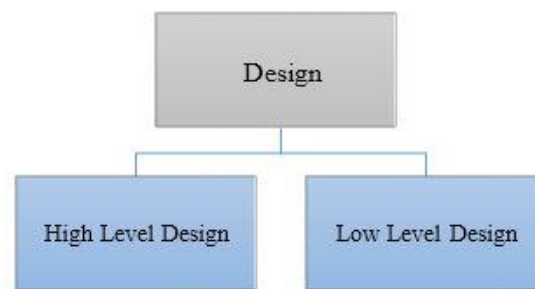
Figure 4. 2: Designing software architecture.

4.2.3.1 High-Level Design

High-Level Design (HLD) involves decomposing a system into modules and representing the interfaces & invocation relationships among modules. An HLD is referred to as software architecture. [10]

Work Breakdown Structure (WBS): Dividing complex projects into simpler and manageable tasks is the process identified as Work Breakdown Structure (WBS). We use a top-down approach to show WBS. Here is WBS for chaitysbeautyheaven.com.

chaitysbeautyheaven.com - Work Breakdown Structure

1. Initiating
- 1.1. Project Background
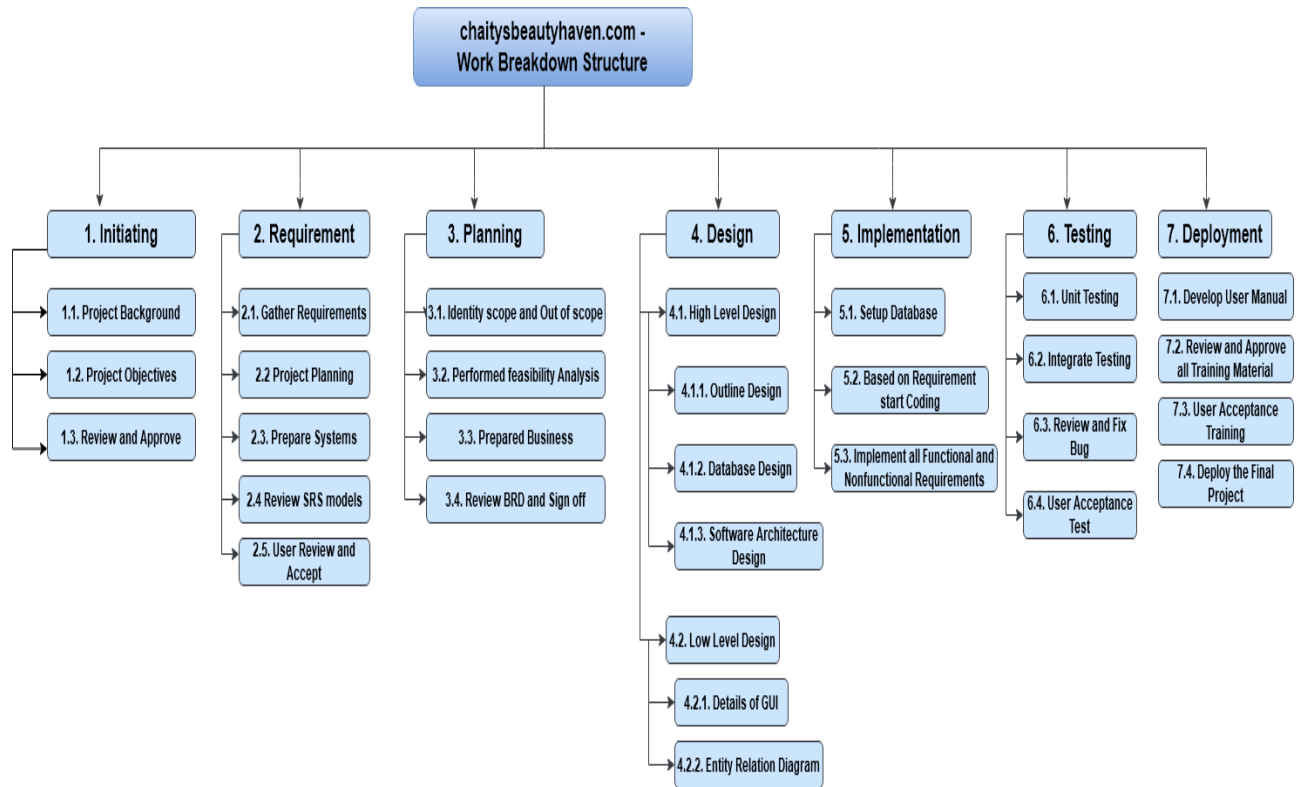- 1.2. Project Objectives
- 1.3. Review and Approve

2. Requirement
- 2.1. Gather Requirements
- 2.2 Project Planning
- 2.3. Prepare Systems
- 2.4 Review SRS models
- 2.5. User Review and Accept

3. Planning
- 3.1. Identity scope and Out of scope
- 3.2. Performed feasibility Analysis
- 3.3. Prepared Business
- 3.4. Review BRD and Sign off

4. Design
- 4.1. High Level Design
- 4.1.1. Outline Design
- 4.1.2. Database Design
- 4.1.3. Software Architecture Design
- 4.2. Low Level Design
- 4.2.1. Details of GUI
- 4.2.2. Entity Relation Diagram

5. Implementation
- 5.1. Setup Database
- 5.2. Based on Requirement start Coding
- 5.3. Implement all Functional and Nonfunctional Requirements

6. Testing
- 6.1. Unit Testing
- 6.2. Integrate Testing
- 6.3. Review and Fix Bug
- 6.4. User Acceptance Test

7. Deployment
- 7.1. Develop User Manual
- 7.2. Review and Approve all Training Material
- 7.3. User Acceptance Training
- 7.4. Deploy the Final Project

Figure 4. 3: WBS for chaitysbeautyheaven.com

Architecture: Client-server architecture, the architecture of a computer network in which many clients (remote processors) request and receive service from a centralized server (host computer). Client computers provide an interface to allow a computer user to request services of the server and to display the results the server returns.

Servers wait for requests to arrive from clients and then respond to them.
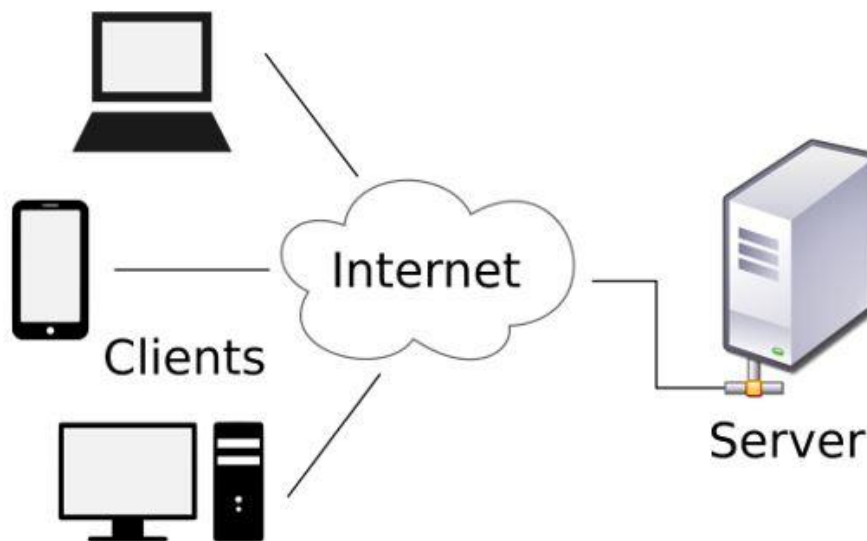

Figure 4. 4: Client-server architecture

Our website chaitysbeautyheaven.com's client connects to a server and gets update data from it. Admin stores updated data to a server. So, we choose client-server architecture. We prefer client-server architecture because of Centralization of control: Access, resources, and integrity of the data are controlled by the dedicated server so that a program or unauthorized client cannot damage the system. This centralization also facilitates the task of updating data or other resources.

Scalability: It has the facility to increase the capacity of clients and servers separately.

4.2.3.2 Low-Level Design

Low-Level Design (LLD) is like detailing the HLD. It defines the actual logic for every component of the system. Class diagrams with all the methods and relations between classes come under LLD. Program specs are covered under LLD. [10]

Use Case Diagram:

Figure 4. 5: Use Case Diagram for chaitysbeautyheaven.com

This is the use case diagram from chaitysbeautyheaven.com. . It specifies how the system interacts with actors without worrying about the details of how that functionality is implemented. Here we can see that there are two actors [general user(customer) and admin]. This diagram also showing that which actor can perform which activity.

Rich Picture: A Rich Picture is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. A rich picture helps to open discussion and come to a broad, shared understanding of a situation.
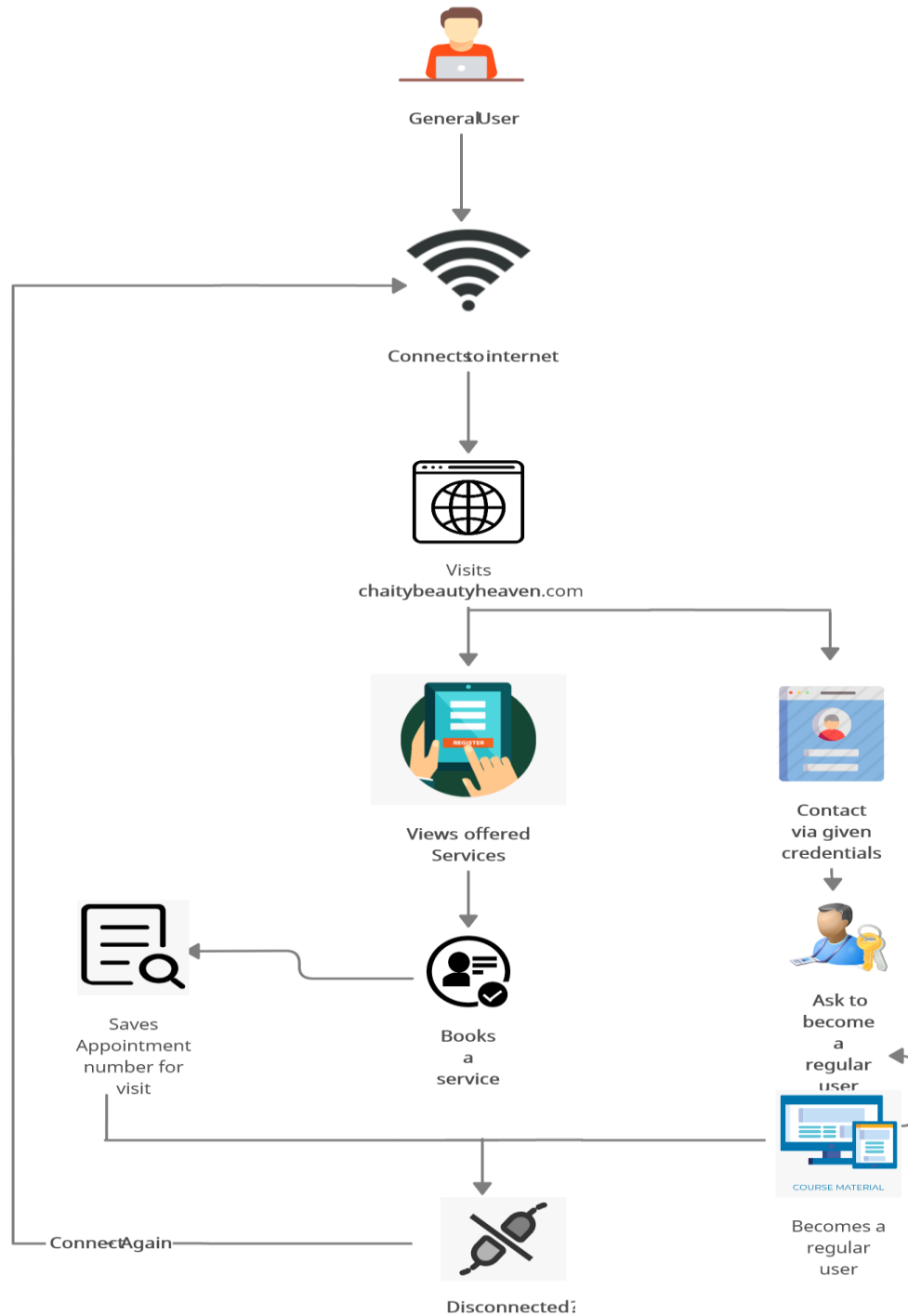

Figure 4. 6: Rich picture for general user

This is the rich picture for chaitysbeautyheaven.com general users. This a big project and group work. The user module is done by me and showing the rich picture for a general user. The rich picture describes that user connects to the internet, visit chaitysbeautyheaven.com website and book an appointment as a guest user or contact the service provider or ask to become a regular user to get access to everything our website has to offer.

Entity Relationship Diagram: An Entity Relationship Diagram (ERD) is a visual representation of different data using conventions that describe how these data are related to each other.
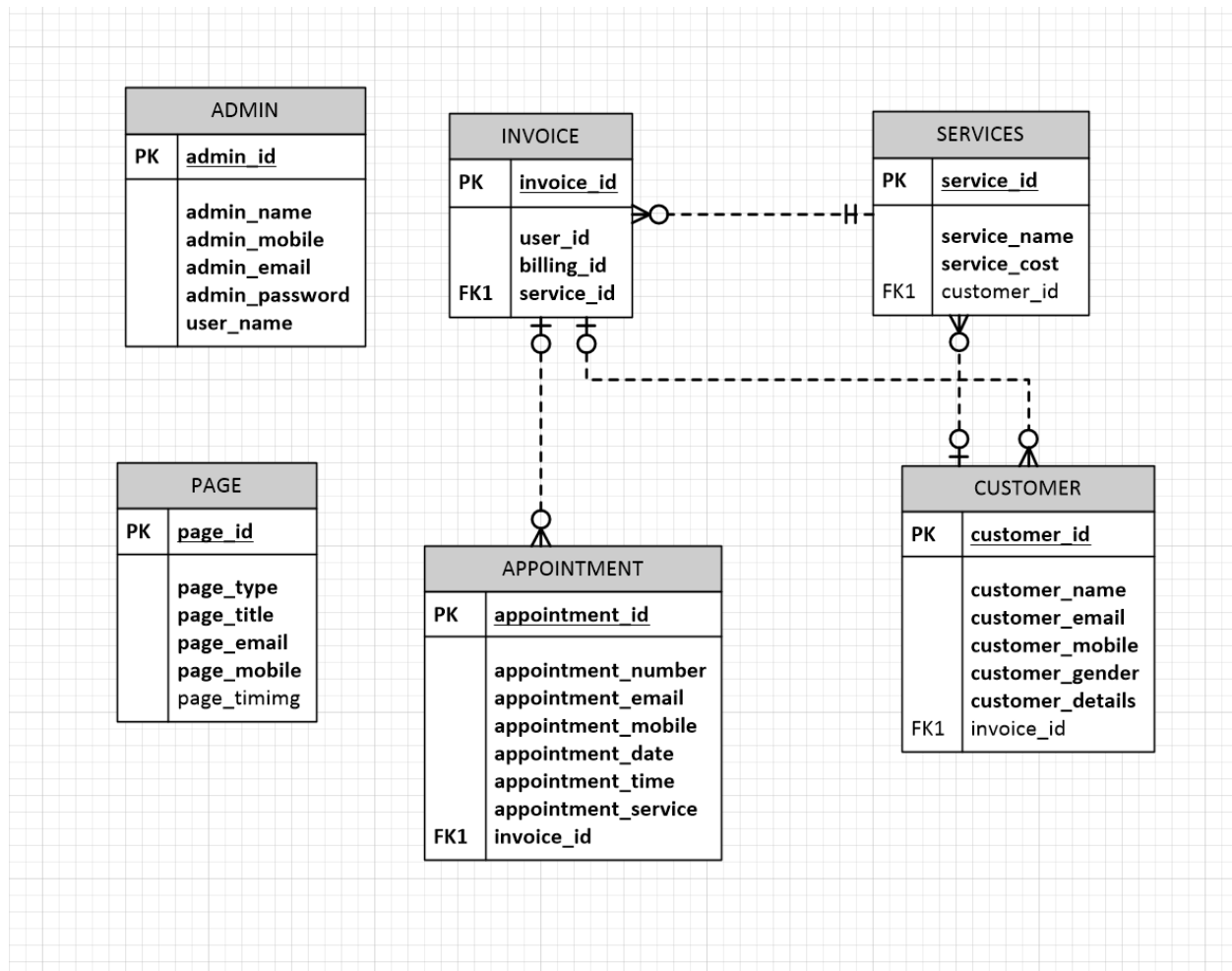

Figure 4. 7: ERD for chaitysbeautyheaven.com

Activity Diagram: An activity diagram is a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.
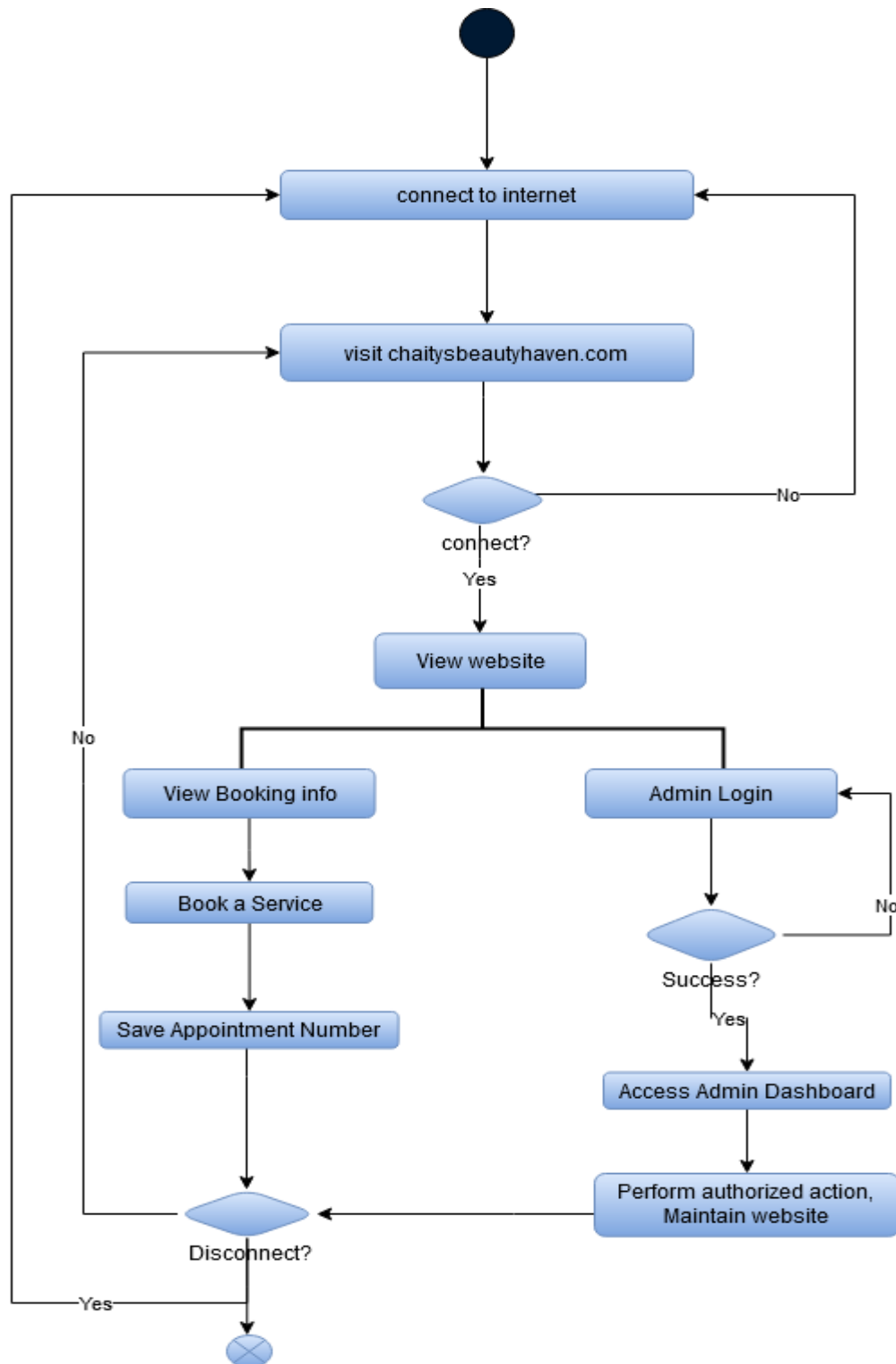

Figure 4. 8: Activity User Diagram for a general user.

Process Flow Diagram: This is the process diagram for chaitysbeautyheaven.com's general user. This diagram is created by using the BPMN standard.

Here we can see the general user pool and activities data flow from the database.
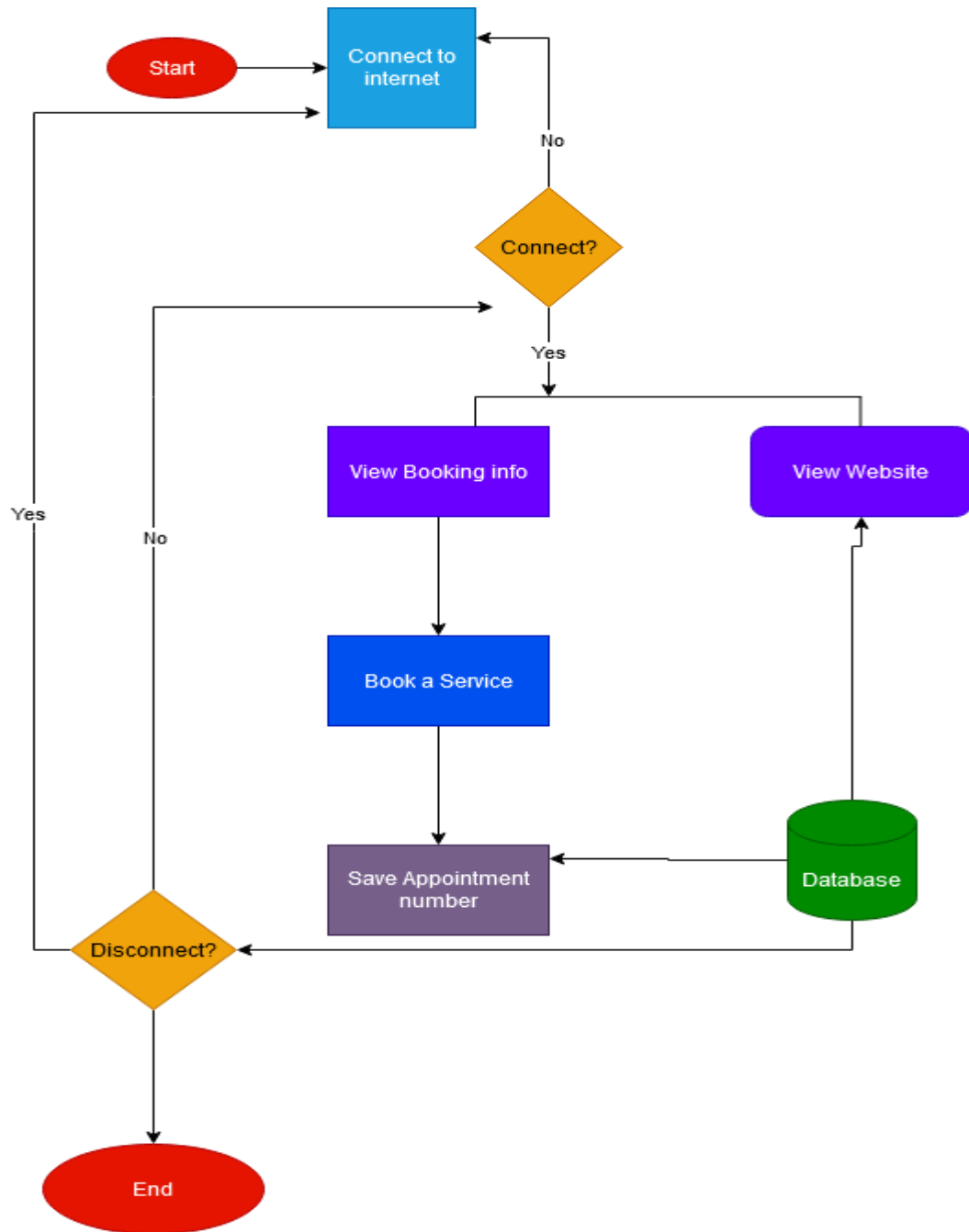

Figure 4. 9: Process Flow diagram for a general user.

4.2.4 IMPLEMENTATION

Implementation is the coding part of the project. For development in this website, we use Basic JavaScript, Bootstrap, HTML, CSS, PHP, MySQL, etc. We use PHP because it is a server-side scripting language that is embedded in HTML. Moreover, it has sob functionality that makes our tasks very easier. Such functionalities are used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. PHP performs system functions, i.e., from files on a system it can create, open, read, write, and close them. It can handle forms, i.e., gather data from files, save data to a file, through email you can send data, return data to the user. It can also encrypt data.

In dbconnection.php where it shows the connection with database table with PhpMyAdmin to connect to SQL database:

```php
<?php
$con=mysqli_connect("localhost", "root", "", "bpmsdb");
if(mysqli_connect_errno()){
echo "Connection Fail".mysqli_connect_error();
}

    ?>
```

Front-end Design:

To design the pages, we used a powerful front-end framework named Bootstrap 4 and basic SCSS. It includes HTML and CSS-based design templates that give you the ability to create flexible and responsive web layouts with much less effort. Sass helps keep large stylesheets well-organized and makes it easy to share design within and across projects. Since it is an open-source framework, it is completely free to download and use.
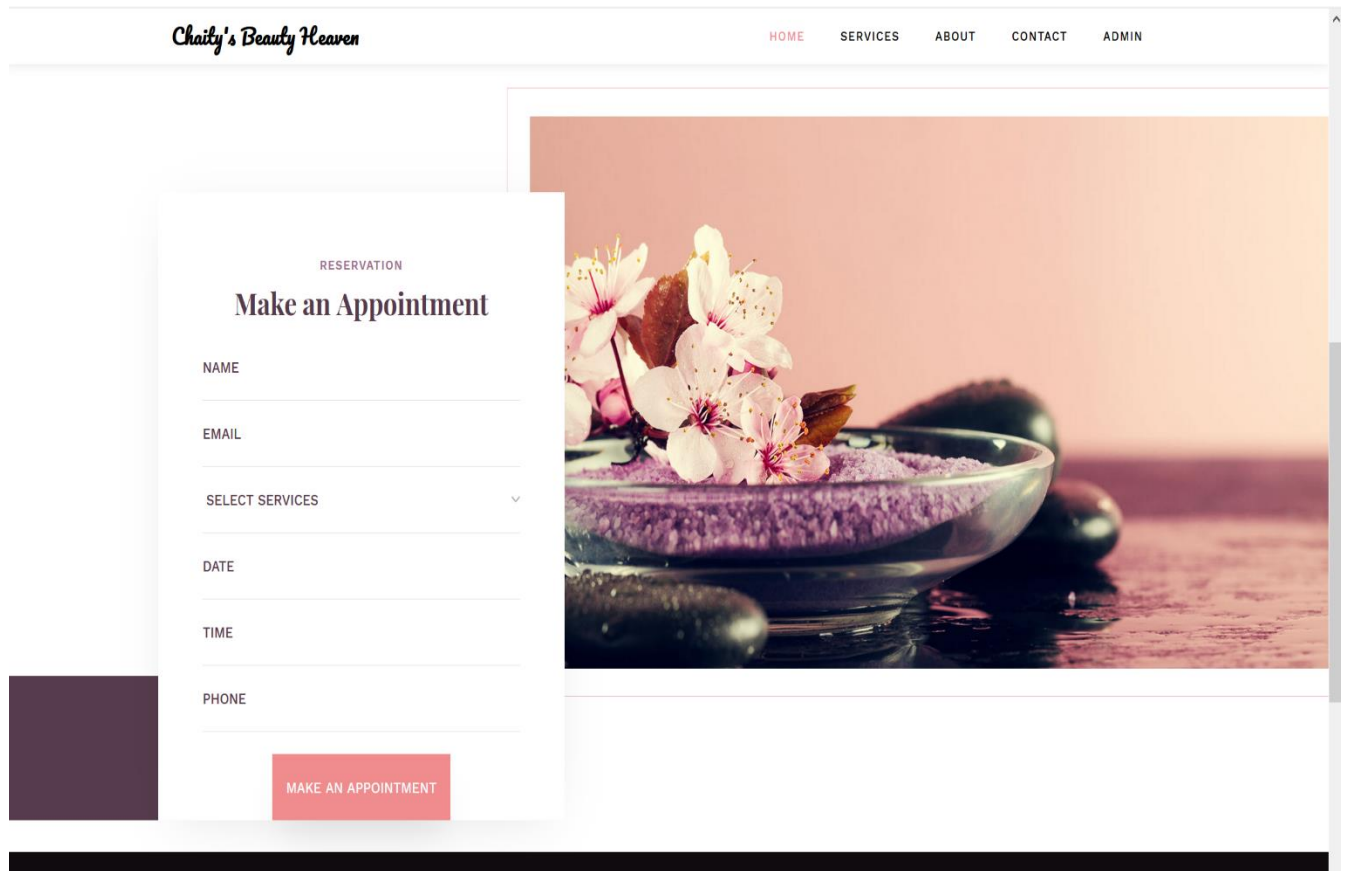
Figure 4. 10: index.php page of chaitysbeautyheaven.com

PhpMyAdmin:

PhpMyAdmin is a web-based open-source tool to control the administration of the MySQL database. It is a tool popular with most web servers including HostGator. Most frequently used operations like managing databases, tables, fields, relations, indexes, and user permissions are supported by the user interface. PhpMyAdmin also provides the ability to directly execute any SQL statement. Other features of phpMyAdmin include import and export of data from CSV, SQL, XML, PDF, ISO/IEC 26300 - Open Document Text and Spreadsheet, Word, LATEX, and other formats phpMyAdmin can create complex queries using Query-by-example (QBE).

Creating tables in the database using DDL statement

CREATE TABLE `tbladmin` (

 `ID` int(10) NOT NULL,

 `AdminName` char(50) DEFAULT NULL,

 `UserName` char(50) DEFAULT NULL,

 `MobileNumber` bigint(10) DEFAULT NULL,

 `Email` varchar(200) DEFAULT NULL,

 `Password` varchar(200) DEFAULT NULL,

 `AdminRegdate` timestamp NULL DEFAULT current_timestamp());

CREATE TABLE `tblappointment` (

 `ID` int(10) NOT NULL,

 `AptNumber` varchar(80) DEFAULT NULL,

 `Name` varchar(120) DEFAULT NULL,

 `Email` varchar(120) DEFAULT NULL,

 `PhoneNumber` bigint(11) DEFAULT NULL,

 `AptDate` varchar(120) DEFAULT NULL,

 `AptTime` varchar(120) DEFAULT NULL,

 `Services` varchar(120) DEFAULT NULL,

 `ApplyDate` timestamp NULL DEFAULT current_timestamp(),

 `Remark` varchar(250) NOT NULL,

 `Status` varchar(50) NOT NULL,

 `RemarkDate` timestamp NOT NULL DEFAULT '0000-00-00 00:00:00' ON UPDATE current_timestamp());

CREATE TABLE `tblcustomers` (

 `ID` int(10) NOT NULL,

 `Name` varchar(120) DEFAULT NULL,

`Email` varchar(200) DEFAULT NULL,

`MobileNumber` bigint(11) DEFAULT NULL,

`Gender` enum('Female ','Male ','Transgender') DEFAULT NULL,

`Details` mediumtext DEFAULT NULL,

`CreationDate` timestamp NULL DEFAULT current_timestamp(),

`UpdationDate` timestamp NULL DEFAULT NULL ON UPDATE current_timestamp());

CREATE TABLE `tblinvoice` (

 `id` int(11) NOT NULL,

 `UserID` int(11) DEFAULT NULL,

 `ServiceId` int(11) DEFAULT NULL,

 `BillingId` int(11) DEFAULT NULL);

CREATE TABLE `tblpage` (

 `ID` int(10) NOT NULL,

 `PageType` varchar(200) DEFAULT NULL,

 `PageTitle` mediumtext DEFAULT NULL,

 `PageDescription` mediumtext DEFAULT NULL,

 `Email` varchar(200) DEFAULT NULL,

 `MobileNumber` bigint(10) DEFAULT NULL,

 `UpdationDate` date DEFAULT NULL,

 `Timing` varchar(200) NOT NULL);

CREATE TABLE `tblservices` (

 `ID` int(10) NOT NULL,

 `ServiceName` varchar(200) DEFAULT NULL,

 `Cost` int(10) DEFAULT NULL);

4.2.5 TESTING

Test Plan for chaitysbeautyheaven.com

Introduction

4.2.5.1 **Project Leads:** MD Omar Faruq

I.	**Project Manager**: MD Omar Faruq
II.	**Project Developer**: Zahid Hasan, Farzana Chaity
III.	**Test Manager**: Farzana Chaity, Zahid Hasan

4.2.5.2 **Test Project Task**

I.	**Test Case Design**: Farzana Chaity
II.	**Test Personnel**: Farzana Chaity

4.2.5.3 **Defect tracking and reporting system**

- Unit tests of each module will be done by the developer and the unit test report will be shared with the test team.
- The testing will be start middle of the development that means after developing some features/modules we start testing till to end of the UAT according to the testing schedule.
- Bug fixing will start from 15th June 2021 and continue till the end of the testing.
- Without fixing the bug of any particular module/feature testing will not be completed.
- Normally 2 cycles of testing will be conducted but it depends on bugs, priority, severity, and chaitysbeautyheaven.com's team.
- All test cases will be prepared before the start of the testing.
- Tech lead the review and approved the test cases.
- Test cases may be added during the test conducted.
- System tests will be performing after full development.
- Test environment, hardware, and testable feature/module need to be ready before testing in the test server.
- The test report will be provided after the end of the full testing in the tracking tool. If any changes are made to the requirements, design, and schedule then immediately need to be informing to the test lead.
- Based on the changes the test plan may be changed.

4.2.5.4 **Items to be tested.**

All the features which are discussed in the functional requirement will be tested. According to the detailed features, description, constraints of the website below functionalities will be the scope of the testing-

- Compatibility
- Login
- User Profile
- Updating profile
- Add new appointment.
- Service updating
- Admin Panel

4.2.5.5 **Items not to be tested initially**.

- Middleware Functionality Will Not Applicable.
- Any requirement that is not specifically mentioned in section 4.2.6.4 of the test plan will be out of scope.
- The network portion will not be applicable.
- Based on section: 1.4 will be an application for testing as those are out of scope

Test Environment / System Requirements

ID#	Hardware Component	Requirements
HC-1	Computer/ Laptop/ Smart Phone	1 GB RAM minimum

Table 4.13 Hardware interface requirements

ID#	Hardware Component	Requirements
SC-1	Operating system version (Android)	Any
SC-2	Operating system version (IOS)	Any
SC-3	Windows / Linux / Mac OS	Any
SC-4	Database	MySQL

Table 4.14 Software interface requirements

ID#	Communication Requirements
HC-1	Internet Connection

Table 4.15 Communication interface requirements

4.2.5 Test Tables

Login section

Test Case ID: login14   **Test Designed by:** Farzana Chaity

Test Priority (Low/Medium/High): Med   **Test Designed date:** 4-10-2020

Module Name: Site login screen   **Test Executed by:** Farzana Chaity

Test Title: Cookie storing   **Test Execution date:** 8-10-2020

Description: Storing cookie for session

Pre-conditions: User session should have stored in database.

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Successful login	Correct username/password	Session info gets stored	Session info	Pass

Post-conditions:
A successful login should be prompted to redirect to personal user dashboard.

Book for an Appointment

Test Case ID: appoint1.0	**Test Designed by:** Farzana Chaity
Test Priority (Low/Medium/High): Med	**Test Designed date:** 1-23-2021
Module Name: Site appointment page	**Test Executed by:** Farzana Chaity
Test Title: Book for an appointment test	**Test Execution date:** 1-23-2021
Description: Book for an appointment button testing	

Pre-conditions: General user should be successfully making an appointment.

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	User be in the appointment page	User input	User see the make an appointment button		pass
2	Click the make an appointment button	User input	Should see Thank you for applying status.	Make an appointment button should have "Thank you for applying." status from the default "Make an appointment"	pass

Post-conditions:
   User should be applied from the selected service.

4.2.6 **Deployment and maintenance**

When the testing is done chaitysbeautyheaven.com would be ready to use for the user. Now, first of all, we have to buy hosting for this website. We need some space to upload this website. This hosting space will also use for a website data store. Then we need to buy a domain name. Here we choose .com. Currently, our website is not fully live with all the planned functionality because some of the features are currently developing. As soon as possible it will be uploaded.
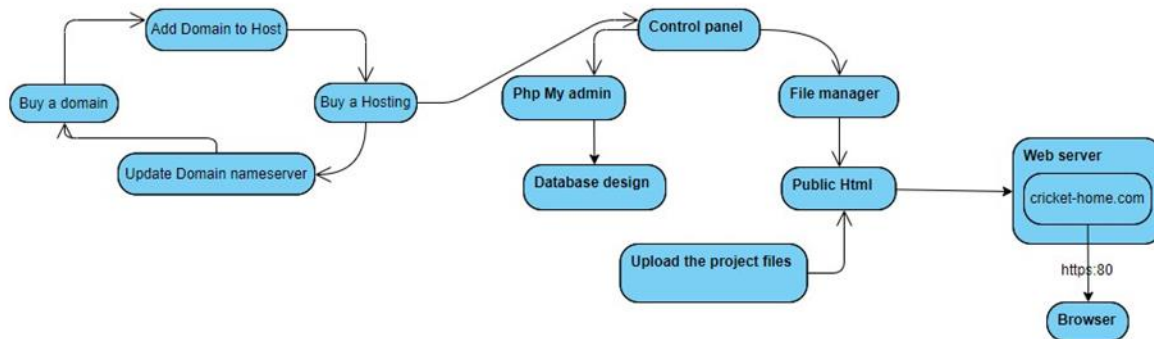

Figure 4. 11: Deployment of chaitysbeautyheaven.com

➢ After deployment chaitysbeautyheaven.com. our team will continue to make improvements and changes to chaitysbeautyheaven.com as users want.
➢ Our team will take feedback from users about this website then we will add features that they want.
➢ I can also train the people who use this website.
➢ If any problem occurs, then I and my team members will fix the problem as soon as possible.

5 CONCLUSION AND RECOMMENDATION

5.1 CONCLUSION

During my time working at MYSOFT IT, we build a few websites, and the latest in development is called chaitysbeautyheaven.com. This website is an ongoing project about providing an online beauty and health platform for every generation's comfort in our community.

It has been a great opportunity for me to work as a web developer during my internship at the reputed software solution company MYSOFT IT. This three months internship/junior application developer program was like a stepping stone to my carrier in the job market. During the internship, I learned much important knowledge about the IT sector. The internship program helped me to gain important knowledge about how the IT sector shaping our country. Internship at MYSOFT IT taught me how to handle different clients, recent software-related technologies, frequently used technologies, and best use of this technology. This program gave me a clear idea about professional life as a web developer, what I must face, and how to handle those situations. During the internship, I tried to overcome my weakness in web development and tried to become a good web developer.

5.2 RECOMMENDATION

Chaitysbeautyheaven.com is developed to automate beauty and health in our current system. It also has some economical value. By making this type of unique website developers can make a profit. Another thing is Monetization is essentially the final piece of a systematic look at a business model, but it is not well planned and organized for monetization. A good Monetization model can influence a user to do in web app purchase. After developed a Web app it is recommended to implements a good monetization model, which will eventually make a Web app successful and create value for the user and profitable for the developers. And MYSOFT IT is a nice company to learn about software development-related things. If CSC program office wants, they can send interns in future but for the company need to select interns who are responsible, have the thirsty to learn new thing and like to welcome challenges. I have some opinions about the company and future interns must follow.

Before joining MYSOFT IT one needs to gather more practical knowledge on web development technology like HTML, CSS, JS, PHP, Laravel, etc. These will be very helpful in return.

5.3 FUTURE WORK

My team and I have some plans for chaitysbeautyheaven.com. These are given below:

- Adding more detailed Image and Video gallery for every service.
- Customer care-related queries.
- Customer profile picture adding.
- Robust payment gateway.
- Report.
- Latest technology news in the related field.
- Develop a mobile version of chaitysbeautyheaven.com (Android and IOS App).

And a few more down the road, hopefully.

6 REFERENCES

[1] "MY-SOFTIT" [n.d]. Company Website. Retrieved 19 January 2021 from URL: https://my-softit.com/.

[2] "beauty," [n.d].In Wikipedia. Retrieved 20 March 2021 from url: https://en.wikipedia.org/wiki/Beauty.

[3] "Beauty-Salon," [n.d]. Company Website. Retrieved 8 February 2021 from URL: https://en.wikipedia.org/wiki/Beauty_salon.

[4] "Vlccwellness.com," [n.d]. Company Website. Retrieved 21 March 2021 from url: https://www.vlccwellness.com/uae/.

[5] "Lakmesalon.in," [n.d]. Company Website. Retrieved 23 March 2021 from url: https://www.lakmesalon.in/.

[6] "Persona.com.bd," [n.d]. Company Website. Retrieved 3 March from url: https://www.persona.com.bd/.

[7] "Romoni.com.bd," [n.d]. Company Website. Retrieved 28 March from url: https://romoni.com.bd/.

[8] "Sheba.xyz," [n.d]. Company Website. Retrieved 20 March 2021 from url: https://www.sheba.xyz/.

[9] Jamsheer, K (2018, 1 June). "Software-Development-Methodologies-Pros-And-Cons,". Retrieved 25 February 2021 from URL: https://acodez.in/12-best-software-development-methodologies-pros-cons/#Pros-3.

[10] "HLD_and-LLD," [n.d]. Code Project. Retrieved 2 April 2021 from url: https://www.codeproject.com/Questions/269049/HLD-and-LLD-Desing-Document-Help