

# **A PROJECT REPORT**

**On**

## **HERWELL**

Submitted to the

Department of Computer Applications

In partial fulfilment of the

### **MASTER OF COMPUTER APPLICATIONS**

Under the guidance of

**Mrs. Nidhi S**

Project Done by

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**2023**

**MAR ATHANASIOS COLLEGE FOR ADVANCED  
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**BONAFIDE CERTIFICATE**

Certified that the Project Work entitled

**“HERWELL”**

**is a bonafide work done by**

**AMALA JOSEPH**

*In partial fulfilment of the requirement for the Award of*

**MASTER OF COMPUTER APPLICATIONS**

**Degree From**

**Mahatma Gandhi University, Kottayam**

**(2021-23)**

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Project Guide

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**Mrs.Nidhi S**

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Date: 24 – 03 – 2023

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**Mrs. Nidhi S**

Assistant professor

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### **DECLARATION**

I Amala Joseph, hereby declare that this project report entitled “**HERWELL**” is an authenticated work carried out by me under the guidance of **Mrs.Nidhi S**, Assistant Professor, Department of Computer Applications, MACFAST for the partial fulfilment of the course **MASTER OF COMPUTER APPLICATIONS**. This work has not been submitted for similar purpose anywhere else except to **Mar Athanasios College for Advanced studies Tiruvalla** .

I understand that detection of any such copying is liable to the punishment in any way the school deems fit.

Place: Tiruvalla

Amala Joseph

Date: 24– 03 - 2023

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I am highly indebted to Mrs. Nidhi S, Assistant Professor, Department of Computer Applications, MACFAST for her guidance and constant supervision as well as for providing necessary regarding the project. I would like to express my gratitude towards my parents for their kind co-operation and encouragement which helped me in completing this work.

The project would not have been completed without the support of my friends. I whole heartedly thank each one who supported me throughout this endeavor.

## **ABSTRACT**

The women reproductive health portal, “HERWELL” is a comprehensive online resource dedicated to providing women with easy access to accurate and up-to-date information on all aspects of reproductive health. The portal covers topics such as teenage health, menstrual health, sexual health, fertility, pregnancy, childbirth, and menopause,pcod/pcos,abortion, postpartum etc. It offers a range of blogs and youtube video link that make informed decisions about their reproductive health. The portal also provides access to ask their doubts and questions , thus getting answers published. With its user-friendly interface and reliable information, the women reproductive health portal is a valuable resource for women of all ages and backgrounds.

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# **CHAPTER 1**

## **INTRODUCTION**

# **1.INTRODUCTION**

## **1.1 INTRODUCTION**

Health is an important factor that contributes to human wellbeing and economic growth. Currently, women in India have to face numerous health issues, which ultimately affect the aggregate economy's output. Addressing the gender, class or ethnic disparities that exist in healthcare and improving the health outcomes can contribute to economic gain through the creation of quality human capital and increased levels of savings and investment. The factors and facts which make women's health care crucial are many.

The reproductive and maternal health of each woman in India should be discussed and given importance. Even when the medical facilities are up to date, India stands to be the top among breast cancer issues and maternal mortality rate. The lack of knowledge about reproductive health leads to unwanted pregnancies and health issues. The areas like periods, pregnancy, abortion, post-partum, pcod/pcos, breast cancers are a major concern that should be taken care.

### **1.1.1 Introduction to project**

The knowledge about sexual health is so rare in Indian adults and teenagers. It points out that the education system in India fails to convey sexual education in the right way. The embarrassment to ask out questions and doubts about their own body seems really pathetic. The religious and cultural belief makes the children in India not know about sex and teaches them it is a sin. Even menstruation is impure to many people.

The web application HerWell focuses on providing sexual and reproductive health care information for women. The blogs will cover almost all types of queries and give a wide range of information about each stage of women. The project also gives the facility to ask doubts or questions even without asking for their identity or login.

## **1.2 PROBLEM STATEMENT**

Women Empowerment is something which should cover the much wider sections like health care. The lack of sex education and the importance of a reproductively-healthy body is not much concern even to the educated women of our country. The problem is actually, they don't have a good platform where these issues are all covered. The periods, pregnancy, abortion, postpartum etc are never discussed or shared altogether in a platform or website.

Here we find a solution to this problem by introducing a web application, Herwell. This application gives out blogs about reproductive health of a woman and the provision to ask questions, even if it feels embarrassing to you.

### **1.3 SCOPE AND RELEVANCE OF THE PROJECT**

The scope and relevance of HerWell is very high in the present day as it provides easy access to accurate and reliable health information for women. Here are some of the reasons why:

Access to Reliable Information: HerWell provides women with a reliable source of information on a wide range of health topics such as reproductive health, sexual health fitness. This information is written and reviewed by medical professionals and is updated regularly.

Convenience: HerWell provides an easy and convenient way for women to access health information and resources from the comfort of their homes. This saves time and makes it easier for women to manage their health.

Empowerment: By providing women with access to reliable health information, it empowers women to take control of their health and make informed decisions about their bodies and health.

Increased Awareness: HerWell can help increase awareness about various health issues and promote preventive measures that can help reduce the risk of health problems.

Overall, HerWell is highly relevant in today's world as it provides women with easy access to reliable health information, empowers them to take control of their health, and creates a sense of community and support for women facing health challenges.

### **1.4 OBJECTIVES**

The objective of HerWell is to share blogs about OBGYN health of women. The users can read and comment about the blogs. They can also ask any question regarding their reproductive health. The answer will be published with the question in the portal as soon as possible. This publishing can help users with the same doubts even without asking.

# **CHAPTER 2**

## **SYSTEM ANALYSIS**

## **2.SYSTEM ANALYSIS**

### **2.1. INTRODUCTION**

System analysis is a logical process; the objective of this phase is not actually to solve the problem but to determine what must be done to solve the problem. The basic objective of the analysis stage is to develop the logical model of the system using tools such as the data flow diagram and elementary data description of the elementary algorithm. The logical model is Subject to review by both the management and the user who agree that the model does in fact reflect what should be done to solve the problem.

### **2.2 EXISTING SYSTEM**

The existing system regarding women reproductive health care is all about websites which give incomplete and insufficient information. Many websites take health care as a whole and give very limited information about women reproductive health. Whenever a woman faces a health issue related to reproductive and sexual health, she always searches google and finds some random answers. The answers may not be trustworthy and finally leads to major issues. The information is all around us, but not in one portal.

#### **2.2.1 Limitations of Existing System**

- Lack of Privacy
- Need for extensive searching
- Time-consuming
- Unsure data
- Lots of misinformation

### **2.3 PROPOSED SYSTEM**

A portal exclusively for women's sexual and reproductive health. The site consist of blogs which gives insights about different topics like pregnancy, periods, teenage health, abortion, post-partum, PCOD and much more. Furthermore, a person can ask for doubts which relates to the subject. The admin will view the question and publish the answer shortly at the site. This helps many people with the same doubt get answered.

### **2.3.1 Advantages of Proposed System**

- Limited searching
- Straight to the point
- Provides information which are valid and trustworthy
- Not asking for identity verification when asking question
- Less time-consuming

## **2.4 FEASIBILITY STUDY**

The main objective of the feasibility study is to take care of the technical, Operational , logical and economic feasibility of developing the computerized system. All systems are feasible, given unlimited resources and infinite time. It is both necessary and useful to evaluate the feasibility of the project at System study phase itself.

The feasibility study to be conducted for this project involves:

- Technical Feasibility
- Operational Feasibility
- Economic Feasibility
- Logical Feasibility

### **2.4.1 Technical Feasibility**

Technical feasibility includes Risk Resources availability and technologies. The management provides latest hardware and software facilities for the successful completion of the projects. With these latest hardware and software support the system will perform extremely well.

### **2.4.2 Operational Feasibility**

In the existing manual system, it is very difficult to maintain and update huge amount of information. The development of the system was started because of the requirement put forward by the management of the concerned entity. This system will handle the request in a better way and make the process easier thus, it is sure that the system developed is operationally feasible.

### **2.4.3 Economic Feasibility**

In the economic feasibility the development cost of the system is evaluated weighing it against the ultimate benefit derived from the new system. It is found that the benefit, from the new system would be more than the cost and time involved in its development.

### **2.4.4 Legal Feasibility**



In the legal feasibility it is necessary to check that the software we are going to develop is legally correct which means that the ideas which we have taken for the proposed system will be legally implemented or not. So, it is also a major step in feasibility study.

## **2.5 SOFTWARE ENGINEERING PARADIGM APPLIED**

The systems development life cycle (SDLC), also referred to as the application development lifecycle, is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing, and deploying an information system. The systems development life-cycle concept applies to a range of hardware and software configurations, as a system can be composed of hardware only, software only, or a combination of both. A systems development life cycle is composed of several clearly defined and distinct work phases which are used by systems engineers and systems developers to plan for, design, build, test, and deliver information systems. Like anything that is manufactured on an assembly line, an SDLC aims to produce high-quality systems that meet or exceed customer expectations, based on customer requirements, by delivering systems which move through each clearly defined phase, within scheduled time frames and cost estimates. Computer systems are complex and often (especially with the recent rise of service-oriented architecture) link multiple traditional systems potentially supplied by different software vendors. To manage this level of complexity, a number of SDLC models or methodologies have been created, such as "waterfall"; "spiral"; "Agile software development"; "rapid prototyping"; "incremental"; and "synchronize and stabilize". The SDLC adheres to important phases that are essential for developers, such as planning, analysis, design, and implementation. It includes evaluation of present system, information gathering, and feasibility study and request approval. A number of SDLC models have been created: waterfall, fountain, spiral, build and fix, rapid prototyping, incremental, synchronize and stabilize. The oldest of these, and the best known, is the waterfall model: a sequence of stages in which the output of each stage becomes the input for the next.

# **CHAPTER 3**

## **SYSTEM DESIGN**

## **3.SYSTEM DESIGN**

### **3.1 INTRODUCTION**

The design phase is the second phase in the system development life cycle. In this phase computer information system is designed in detail from the system specification generated during the study phase the principal activities performed during the design phase are allocation of functions, identification of testing requirements, output screen and report design, input design and file design. In design phase, the analyst has the task of developing a detailed design of the system including layouts for all inputs, file and outputs. In the design phase the detailed design of the system selected in the study phase is accomplished and user-oriented performance specification is converted into a technical design specification. The system design is the process of developing specification for a candidate system that meet the criteria established in system analysis. The principal activities performed during design phase include the allocation of function of between computer programs, equipment, manual operations, design of database used by the computer programs, specification of the requirement for input, processing and output and the definition of system and computer program test requirements. There are many aspects to consider in the design of a piece of software. The importance of each should reflect the goals the software is trying to achieve. Some of these aspects are:

- Extensibility- New capabilities can be added to the software without major changes to the underlying architecture.
- Robustness- The software can operate under stress or tolerate unpredictable for invalid input and perform the required function under stated conditions for a specified period.
- Fault Tolerance-the software is resistant to and able to recover from component failure.
  - Security- the software can withstand hostile acts and influences.
- Maintainability-the software can be restored to a specified condition within a specified period. → Compatibility- the software can operate with the other products that are designed for interoperability with other product.

In HerWell portal, we use Use case diagram, data flow diagram, and Schema Design. A use case describes event sequences for an actor to use the system. Sequence Diagram is an interaction diagram that shows how processes operate with one another and in what order. Schema diagram represents the elements of a system using abstract and graphic symbols during the design phase of the project HerWell, the following design methodologies have been used.

They are:

- Activity Diagram
- Data Flow Diagram
- Use case Diagram

## **3.2 PROCESS DESIGN**

### **3.2.1 Data Flow Diagrams**

A data flow diagram is a graphical technique that depicts information flow and transforms that are applied as data move from input to output. The DFD is used to represent increasing information flow and functional details. A level 0 DFD also called a fundamental system model represents the entire software elements as a single bubble with input and output indicated by incoming and outgoing arrows respectively. Data flow diagrams are the pictorial way of showing the flow of data into, around and out of the system. The users can understand them easily and there is no way to misinterpretation than textual description. With a dataflow diagram, users are able to visualize how the system will operate, what the system will accomplish and how the system will be implemented. A data flow diagram illustrates the processes, data stores, and external entities in a business or other system and the connecting data flows.

The four components of a data flow diagram (DFD) are:

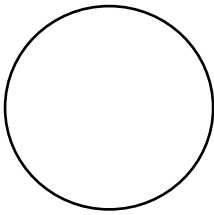
- External Entities/Terminators/Sources/Sinks: Represented by a square
- Processes: Represented by a circle
- Data Flows: Represented by an arrow.
- Data Source: Represented by two parallel lines, connected by a vertical line External

#### **Entities/Terminators**



Terminators represent where information comes from and where it goes. In designing a system, we have no idea about what these terminators do or how they do it.

## Processes



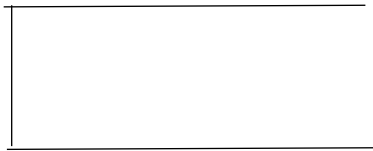
Modify the inputs in the processes of generating the outputs.

## Data flows



How data moves between terminators, processes, and data stores? And what are those data

## Data stores

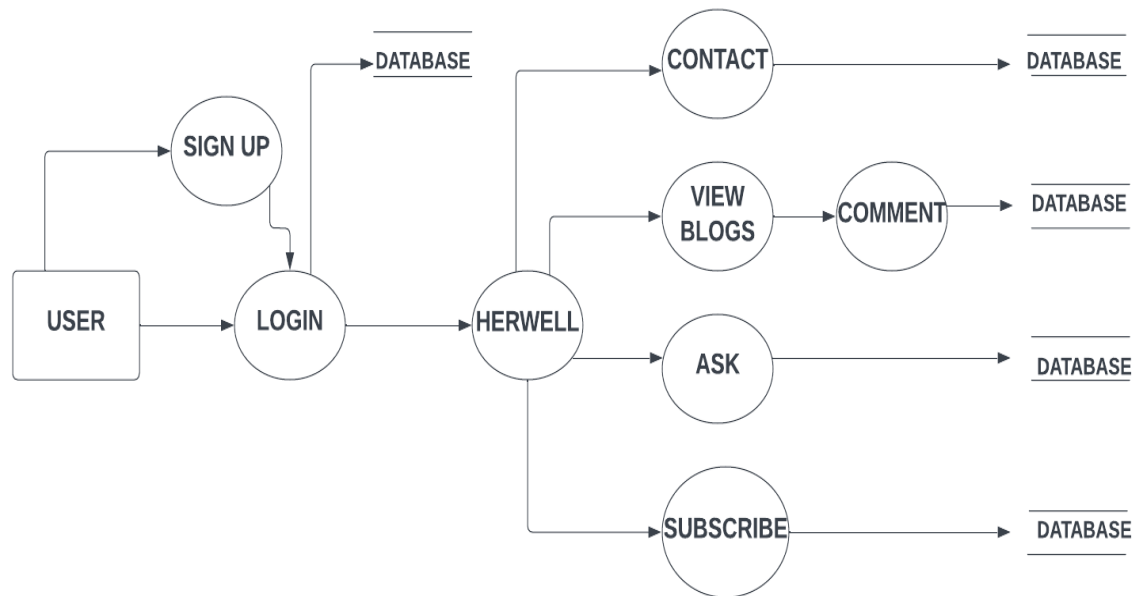


Represent a place in the process where data comes to rest. A DFD does not say anything about the relative timing of the processes, so as data store might be a place to accumulate data over a year for the annual accounting process

## DFD LEVEL 0



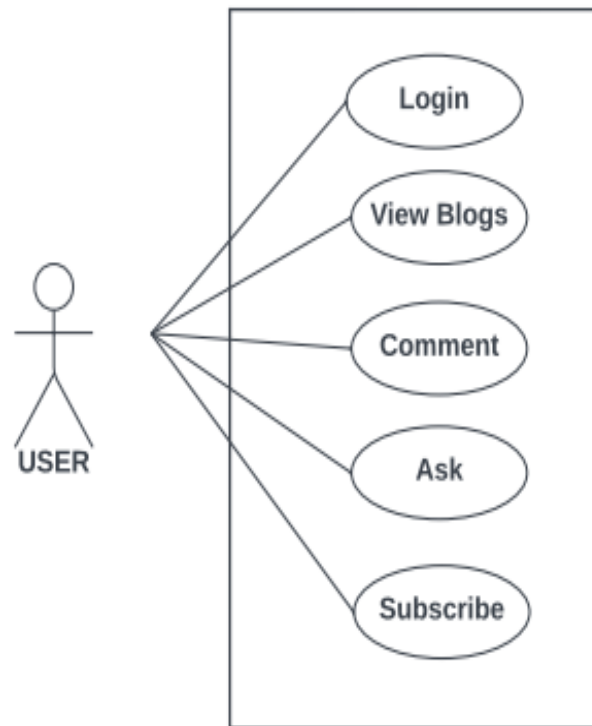
## DFD LEVEL 1



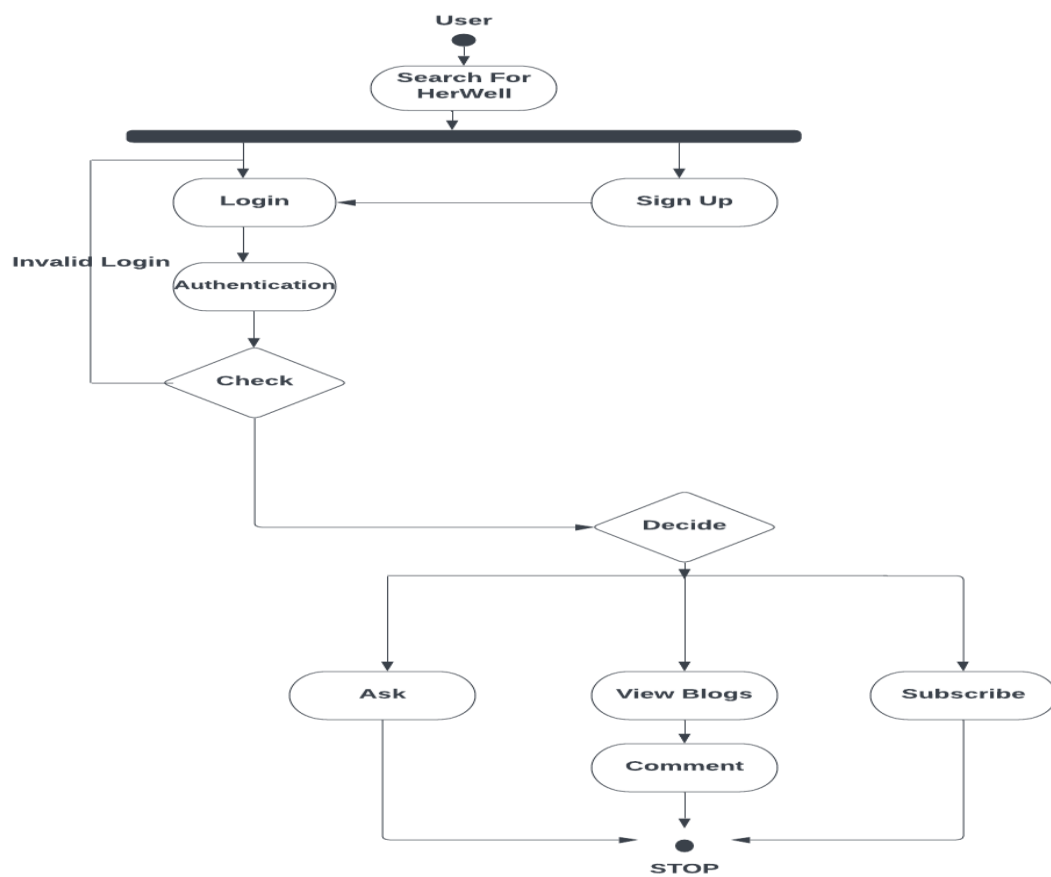
## 3.3 OBJECT ORIENTED DESIGN –UML DIAGRAMS

### 3.3.1 Use Case Diagram

Use cases help to determine the functionality and features of the software from user's perspective. A use case describes how a user interacts with the system by defining the steps required to accomplish a specific goal. Variations in the sequence of steps describe various scenarios. In the diagram the stick figure represents an actor that is associated with one category of user. In the use-case diagram the use cases are displayed as ovals. A use case is a set of scenarios that describing an interaction between a user and a system. A use case diagram displays the relationship among actors and use cases. The two main components of a use case 19 diagram are use cases and actors. The actors are connected by lines to the use cases that they carry out. The use cases are placed in a rectangle but the actors are not. This rectangle is a visual remainder of the system boundaries and that the actors are outside the system



### 3.3.2 Activity Diagram



### 3.4 INPUT DESIGN

Input design converts user-oriented inputs to computer-based format, which requires careful attention. The collection of input data is the most expensive part of the system in terms of the equipment used and the number of people involved. In input design, data is accepted for computer processing and input to the system is done through mapping via some map support or links. Inaccurate input data is the most common cause of errors in data processing. The input screens need to be designed very carefully and logically. A set of menus is provided which help for better application navigation. While entering data in the input forms, proper validation checks are done and messages will be generated by the system if incorrect data has been entered.

### COLLECTIONS

This is one of the major task in designing the database. It is important to realize that the design of the system totally inter-related and so collection design cannot really be considered in isolation from inputs, outputs, procedure, codes and security requirements

### COLLECTION 1-LOGIN

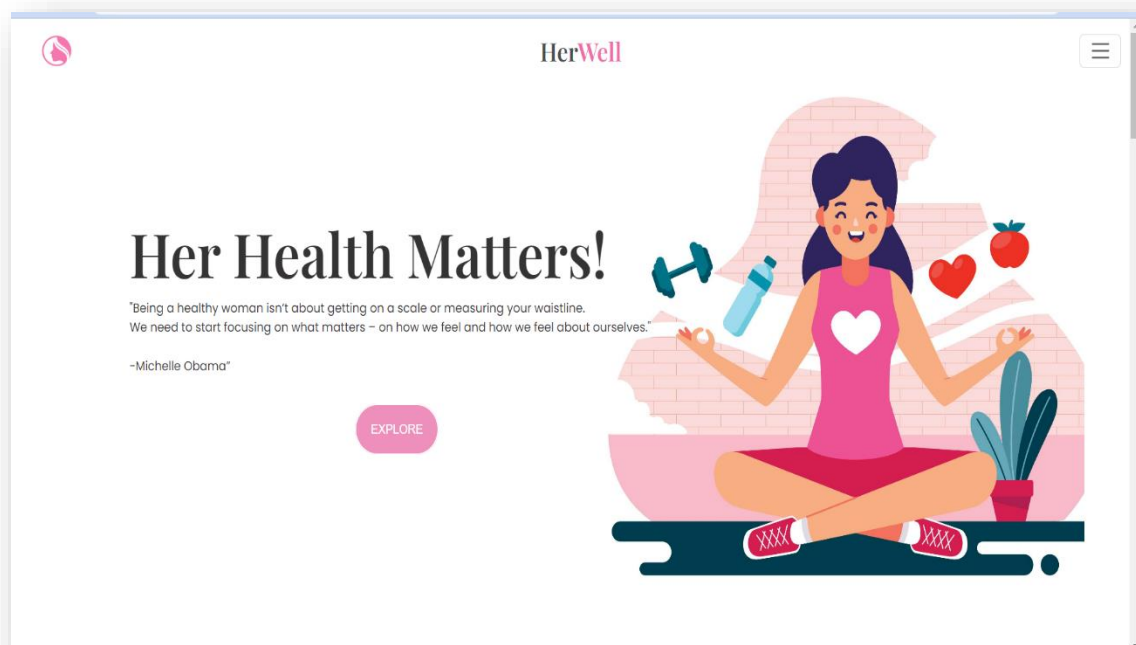
Field	Type	Key	Description
User id	string	PK	Unique User Id
Email	string	Not Null	User email
Password	string	Not Null	User Password



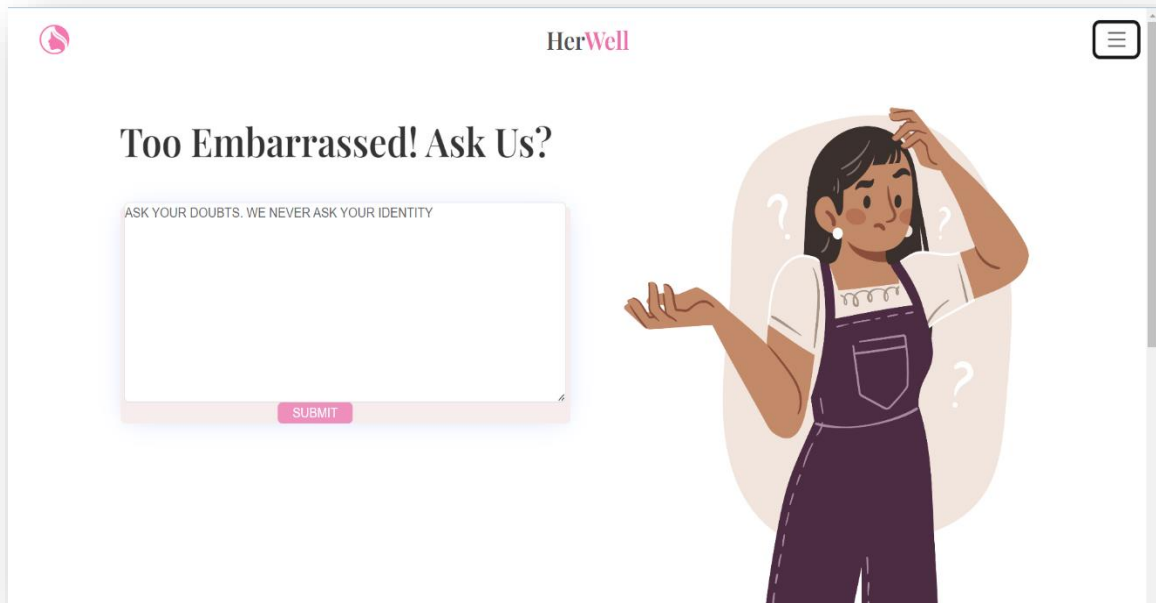
## COLLECTION 2-SIGNUP

Field	Type	Key	Description
User id	String	PK	Unique User Id
Email	String	Not Null	User Email
Password	String	Not Null	Password
C_password	String	Not Null	Confirm Password

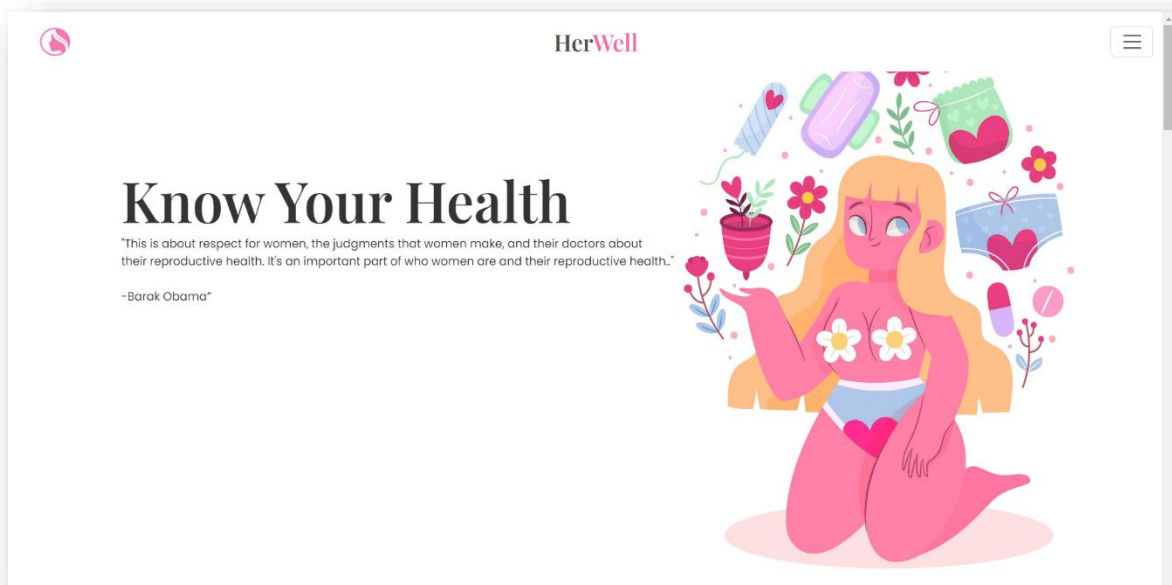
### 3.5 OUTPUT DESIGN



Home Page



### Ask Page



### Blog Page

# **CHAPTER 4**

## **SYSTEM ENVIRONMENT**

## **4.SYSTEM ENVIRONMENT**

### **4.1 INTRODUCTION**

Environment refers to the collection of hardware and software tools a system developer uses to build software systems. As technology improves and user expectations grow, an environment's functionality tends to change. Over the last 20 years the set of software tools available to developers has expanded considerably. The evolution of environments also demands that we distinguish basic operating system facilities fundamental services such as memory, data, and multiple program management—from the enhanced functionality that characterizes state-of-the-art environments.

This enhanced functionality is typically achieved through tools such as browsers, window managers, configuration managers, and task managers. In a sense, environments have evolved in concert with the software engineering community's understanding of the tasks involved in the development of software systems.

Listed here are the languages, methods, and environments discussed in the text. They are grouped into the four categories of the taxonomy. Front End, Back End, Supporting, Documentation.

### **4.2 SOFTWARE REQUIREMENTS SPECIFICATION**

- Platform: Visual Studio Code
- Operating System: Microsoft Windows 11
- Front End: Angular Framework, HTML, CSS, Bootstrap
- Back End: Firebase

### **4.3 HARDWARE REQUIREMENTS SPECIFICATION:**

- Processor: AMD Ryzen-5
- Hard Disk Space: 931 GB
- RAM: 8.00

### **4.4 TOOLS, PLATFORMS**

#### **Front End Tool**

- Angular Framework
- HTML

- CSS
- Bootstrap

## ANGULAR FRAMEWORK

Angular is an open-source, JavaScript framework written in TypeScript. Google maintains it, and its primary purpose is to develop single-page applications. As a framework, Angular has clear advantages while also providing a standard structure for developers to work with. It enables users to create large applications in a maintainable manner. The version used is Angular-15

### Angular-15

With the Angular 14 release, the Angular Team officially mentioned that removing Angular's legacy compiler and rendering pipeline significantly improved the developer experience. Similarly, considering Angular 14 vs Angular 15. The latest Angular 15 New Features include stable standalone APIs, allowing Angular developers to build apps without the Ng Modules. It also offers less boilerplate code, enhanced performance, directive composition API, and many other updates and features for developers in terms of experience and performance

## HTML

HTML (Hyper Text Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation ([CSS](#)) or functionality/behaviour ([JavaScript](#)).

"Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web. By uploading content to the Internet and linking it to pages created by other people, you become an active participant in the World Wide Web.

## CSS

Cascading Style Sheet is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web page and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in

speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

## **Back End Tool**

### **FIREBASE**

It is a mobile application development platform from Google with powerful features for developing, handling, and enhancing applications. Firebase is a backend platform for building web and mobile applications.

Firebase is fundamentally a collection of tools developers can rely on, creating applications and expanding them based on demand. Firebase aims to solve three main problems for developers:

- Build an app, fast
- Release and monitor an app with confidence
- Engage users,

Developers relying on this platform get access to services that they would have to develop themselves, and it enables them to lay focus on delivering robust application experiences. Some of the Google Firebase platform's standout features include databases, authentication, push messages, analytics, file storage, and much more. Since the services are cloud-hosted, developers can smoothly perform on-demand scaling without any hassle. Firebase is currently among the top app development platforms relied upon by developers across the globe.

## **Operating System**

### **WINDOWS**

Windows is a graphical operating system developed by Microsoft. It allows users to view and store files, run the software, play games, watch videos, and provides a way to connect to the internet. It was released for both home computing and professional works

#### **Windows 11**

Windows 11 features major changes to the Windows shell influenced by the cancelled Windows 10X, including a redesigned Start menu, the replacement of its "live tiles"

with a separate "Widgets" panel on the taskbar, the ability to create tiled sets of windows that can be minimized and restored from the taskbar as a group, and new gaming technologies inherited from Xbox Series X and Series S such as Auto HDR and Direct Storage on compatible hardware

# **CHAPTER:5**

## **SYSTEM IMPLEMENTATION**



## **5.SYSTEM IMPLEMENTATION**

### **5.1 INTRODUCTION**

Implementation involves placing the complete and tested system software into actual work environment. Implementation is concerned with translating design specification with source code. The primary goal of implementation is to write the source code to its specification can easily be verified, and so that debugging, testing, and modification can be eased. The goal can be achieved by making the source code clear and straight forward as possible. Implementation means the process of converting a new or revised system design into operational one.

The three types of implementations are:

- Implementation of a complete system to replace a manual system
- Implementation of a new system to replace existing one
- Implementation of a modified application to replace an existing one

### **5.2 CODING**

Coding is the software activity where the detailed design specification is implemented as source code. Coding is the lowest level of abstraction for the software development process. It is the last stage in decomposition of the software requirements where module specifications are translated into a programming language.

Typical tasks for Coding

- Traceability analyses
- Source Code to Design Specification (and vice versa)
- Test Cases to Source Code and to Design Specification
- Source Code and Source Code Document Evaluation
- Source Code Interface Analysis
- Test Procedure and Test Case Generation

### 5.2.1 Sample Codes

#### home.html

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<div class="container-fluid">

  <div class="image-1">

    <h1 style="padding-left: 149px;" >Her Health Matters!</h1>

    <p style="padding-top:99px; padding-left: 149px; text-align: justify;"><br>"Being a healthy
woman isn't about getting on a scale or measuring your waistline.<br> We need to start
focusing on what matters – on how we feel and how we feel about ourselves."<br> <br>-
Michelle Obama"</p>

    <a style="margin-left: 455px" routerLink="bhome">EXPLORE</a> </div></div>

<div class="main" style="background-color:#eddee;">

  <div class="bar" style="margin-top: 70px;>

    <div class="title" style="background-color:#eddee;">

      <div class="bottom-container">

        Meet Our Experts </div> <div class="top-container">

          Meet Our Experts

          </div>

          </div>

          </div>

          </div>

          <div class="container">      <div class="row row" style="margin-left: 50px;"> <div
class="col cols-3 md-4" *ngFor="let data of teen">

            <div class="card" style="width: 18rem;">
```

```



<div class="card-body" style="font-family:'Poppins', sans-serif; color: black;">

    <h5 class="card-title ">{{ data.name }}</h5>

    <p class="card-text" style="font-size: 18px;">{{ data.des }}</p </div> </div></div>

<div class="title1"> <div class="bottom-container1">

```

We Care All Your Stages

```

</div> <div class="top-container1">

```

```

We Care All Your Stages </div> </div> </div> <div class="photo"><div class="container">

```

```

<div class="gallery-wrap">

```

```

<div class="item item-1"></div>

```

```

<div class="item item-2"></div>

```

```

<div class="item item-3"></div>

```

```

<div class="item item-4"></div>

```

```

<div class="item item-5"></div>

```

```

</div></div> <div class="container-fluid">

```

```

<div class="image-2">

```

```

</div> </div>

```

# **CHAPTER 6**

## **SYSTEM TESTING**

## **6.SYSTEM TESTING**

### **6.1 INTRODUCTION**

The Software Test Plan (STS) describes plans for qualification testing of software "Web in my hand". Generally, system testing involves testing integration of each module in the system. The objective while testing the system is to test the discrepancies between the system and the original objective. The quality of an information system depends on its design, development, implementation, and design. Testing is the most important activity in the development phase. Testing is the process of finding errors or bugs in the system. Testing ensure that the user needs are satisfied. In other words, it is a process by which one detects the defects in the system. The primary goal of test plan is to define testing procedures that will ensure that the software is functionally correct from a document perspective and will verify application scalability limits. It also proves that reliability and fail over aspects of the system can indeed survive instances of system failure. It describes and identifies the tests to be performed, and provide schedules for test activities.

### **6.2 UNIT TESTING**

The modules/components of the project "HerWell" are tested separately. Unit testing focuses verification efforts even in the smallest unit of software design in each module. This is known as "Module Testing". This testing is carried out in the programming style itself. In this testing each module is focused to work satisfactorily as regard to expected output from the module. Unit testing gives stress on the modules of application independently of one another, to find errors.

Unit testing is done for following modules:

- Home component
- Single page component
- Ask component
- Contact us component
- Blog component

### **6.3 INTEGRATION TESTING**

In this, whole modules of the project – “HerWell” are connected and tested. Data can be lost across an interface, one module can have an adverse effect on the other sub-functions, when combined may not produce the desired functions. Integrated testing is the systematic testing to uncover the errors within the interface. This testing is done with simple data and the developed system has run successfully with this simple data. The need for integrated system is to find the overall system performance.

### **6.4 SYSTEM TESTING**

The implementation of a computer-based system requires that test data to be prepared and that the system and its elements be tested in a planned structured manner. The computer program component is a major sub-system of the computer-based information system and particular attention should be given to the testing of this system element as it is developed in a software development project, errors can be injected at any stage during development. Each will discuss different techniques for detecting and eliminating errors that originate in that pulse. In software the use of testing is not limited to the testing phase. Here I have tested all the modules in my project separately and run successfully

### **6.5 PERFORMANCE TEST REPORTS**

In functional testing the structure of the program is not considered. Test cases are decided solely on the basis of the requirements or specifications of the program or module and the internals of the module or the programs are not considered for selection of test cases. Due to its nature, functional testing is also called black box testing. The basis for deciding the test cases in functional testing is the requirements or the specifications of the system or module. In the structural testing, test cases are generated based on the actual code of the program or module to be tested. This structural testing is sometimes called glass-box testing. The intent of the structural testing is not to exercise all the different input or output conditions, but to exercise the different programming structures and data structures used in the program.

# **CHAPTER 7**

## **SYSTEM MAINTENANCE**

## **7.SYSTEM MAINTENANCE**

### **7.1 INTRODUCTION**

During the maintenance stage of the SDLC, the system is assessed to ensure it does not become obsolete. This is also where changes are made to initial software. It involves continuous evaluation of the system in terms of its performance.

### **7.2 MAINTENANCE**

System maintenance is an ongoing activity, which covers a wide variety of activities, including removing program and design errors, updating documentation and test data and updating user support. For the purpose of convenience, maintenance may be categorized into three classes, namely:

- **Corrective Maintenance:** This type of maintenance implies removing errors in a program, which might have crept in the system due to faulty design or wrong assumptions. Thus, in corrective maintenance, processing or performance failures are repaired.
- **Adaptive Maintenance:** In adaptive maintenance, program functions are changed to enable the information system to satisfy the information needs of the user. This type of maintenance may become necessary because of organizational changes which may include:
  - a) Change in the organizational procedures.
  - b) Change in organizational objectives, goals, policies, etc.
  - c) Change in forms.
  - d) Change in information needs of managers.
  - e) Change in system controls and security needs, etc.
- **Perfective Maintenance:** Perfective maintenance means adding new programs or modifying the existing programs to enhance the performance of the information system. This type of maintenance undertaken to respond to user's additional needs which may be due to the changes within or outside of the organization. Outside changes are primarily environmental changes, which may in the absence of system maintenance, render the information system ineffective and inefficient



**CHAPTER 8**

**FUTURE ENHANCEMENT AND  
SCOPE OF FURTHER  
DEVELOPMENT**

## **8.FUTURE ENHANCEMENT AND SCOPE OF FURTHER DEVELOPMENT**

### **8.1 INTRODUCTION**

Future enhancement and scope of further development are critical aspects of software development that can help ensure the long-term success of a project. By defining the goals and objectives of the project, identifying the target audience, staying up-to-date with the latest technologies and trends, collecting feedback from users, and planning for scalability, software developers can create software that is relevant, useful, and scalable. By focusing on future enhancement and scope of further development, software developers can ensure that their software remains competitive and meets the evolving needs of their users

### **8.2 MERITS OF THE SYSTEM**

- Limited searching
- Straight to the point
- Provides information which are valid and trustworthy
- Not asking for identity verification when asking question
- Less time-consuming

### **8.3 LIMITATIONS OF THE SYSTEM**

Even though I put my high efforts in coming up with the projects, it have limitations too. The project have its own limitations due to many reasons

- Admin portal  
An admin portal can make a wide variety of changes in the project. Daily updation, customized solutions can be given with limited time. Not implementing admin is a limitation to the system.
- Limited Data  
Although the projects cover six major categories, the blogs published is limited. The direct access to bloggers in the site can make huge difference in quantity of data.
- Limited customization:  
A women may undergo through some specific conditions, so customizing data is an important area. This system only gives limited customization.

- Limited reliability: Data may not always be reliable. For example, the data may be outdated

#### 8.4 FUTURE ENHANCEMENT

As mentioned above, our system has limitations that should be overcome. The future enhancement focuses on overcoming the current limitations to make it more flexible and functionally strengthen system.

- Adding admin module

This can make the system more data oriented and customized.

- Adding blogger module

Direct access to them help to have more trustworthy and updated data

- More functionalities

It typically means to add some functionalities like connecting with doctors, booking appointments, connecting with other women with similar problems, sharing out tips etc.

# **CHAPTER 9**

# **CONCLUSION**

## **9. CONCLUSION**

HerWell ,just started with an idea to genuinely help and give right awareness about the women sexual and reproductive health. A platform to ask out and open up about the doubts and problems they have. The proposed system is fully computerized. It is designed in order to eliminate all the disadvantages of the existing system.

The system has been developed very efficiently and successfully, which overcomes difficulties of existing system. A good amount of user-friendly features have been distributed to the system and it is possible for any user to exploit these features to get the maximum benefit. All the programs have been tested with sample data entry and found to execute correctly.

# **CHAPTER 10**

## **BIBLIOGRAPHY**

## 10. BIBLIOGRAPHY

- <https://angular.io/docs>
- <https://firebase.google.com/docs>
- <https://github.com/angular/angularfire>
- <https://stackoverflow.com/>

# **APPENDIX**



## APPENDIX

### CODING

#### Home1.html

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<div class="container-fluid">

  <div class="image-1">

    <h1 style="padding-left: 149px;" >Her Health Matters!</h1>

    <p style="padding-top:99px; padding-left: 149px; text-align: justify;"><br>"Being a healthy
woman isn't about getting on a scale or measuring your waistline.<br> We need to start
focusing on what matters – on how we feel and how we feel about ourselves."<br> <br>-
Michelle Obama"</p>

<a style="margin-left: 455px" routerLink="bhome">EXPLORE</a> </div></div>

<div class="main" style="background-color:#eddee;">

  <div class="bar" style="margin-top: 70px;>

<div class="title" style="background-color:#eddee;">

  <div class="bottom-container">

    Meet Our Experts </div> <div class="top-container">

Meet Our Experts

    </div>

    </div>

    </div>

    <div class="container">      <div class="row row" style="margin-left: 50px;"> <div
class="col cols-3 md-4" *ngFor="let data of teen">
```

```

<div class="card" style="width: 18rem;">

  <div class="card-body" style="font-family:'Poppins', sans-serif; color: black;">

    <h5 class="card-title ">{{ data.name }}</h5>

    <p class="card-text" style="font-size: 18px;">{{ data.des }}</p </div> </div></div>

<div class="title1"> <div class="bottom-container1">

```

We Care All Your Stages

```

</div> <div class="top-container1">

```

```

We Care All Your Stages </div> </div> </div> <div class="photo"><div class="container">

```

```

  <div class="gallery-wrap">

    <div class="item item-1"></div>

    <div class="item item-2"></div>

    <div class="item item-3"></div>

    <div class="item item-4"></div>

    <div class="item item-5"></div>

  </div></div> <div class="container-fluid">

    <div class="image-2">

```

```

</div> </div>

```

## Bhome.html

```

<div class="container1">

  <div class="image-1">

    <h1>Know Your Health</h1>

    <p style="padding-top:99px; padding-left: 149px; text-align: justify;"><br>"This is about
respect for women, the judgments that women make, and their doctors about <br>their

```

reproductive health. It's an important part of who women are and their reproductive health.."<br> <br>-Barak Obama"</p>

</div>

<div class="main" style="background-color: #eddee;">

<div class="bar" style="margin-top: 120px; z-index:100px;">

<app-cat-navbar></app-cat-navbar>

</div>

<br><br>

<!-- <div class="container mt-5 "> -->

<div class="title">

<div class="bottom-container">

Our Featured Blogs

</div>

<div class="top-container">

Our Featured Blogs

</div>

</div>

<div class="row row">

<div class="col cols-3 md-4" \*ngFor="let data of bhome" >

<div style="margin-left: 50px; margin-top:13px;" class="wrapper mb-5">

<div class="card front-face">



```
<h4 style="text-align: center; font-family:'Nunito', 'sans-serif'; color:
black;">{{ data.title }}</h4>
```

```
</div>
```

```
<div class="card back-face">
```

```

```

```
<div class="info">
```

```
<h4>Author: {{ data.author }}</h4>
```

```
<h4>Published On: {{ data.date }}</h4>
```

```
<p>{{ data.short }}</p>
```

```
</div>
```

```
<a (click)="gotoHere(data.title,data.cat)"><button type="button" class="btn btn-
outline" style="background-color: pink; width: 100px; margin-left: 100px;">View
Blog</button></a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

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

```
<div class="image-2">
```

</div>

<h1 style="text-align: center; color: #131314; margin-top: 4px; background-color: #edddee;">Why So special About Women's Health?</h1>

<p style="text-align: justify; padding-right: 20px;padding-left: 20px; padding-top: 5px; font-size: 16px; background-color: #edddee;">

In India, improving women's access to healthcare is essential for achieving gender equality. It's necessary to take into account the facts; according to the World Economic Forum's 2021 Global Gender Gap Report, India now ranks 140th out of 156 nations in terms of gender disparity. This represents how the nation is doing in terms of health and survival, economic opportunity and participation, academic achievement, and political empowerment.

It is crucial to scale up efforts to support girls and women across growth metrics in order to pave the way for gender equality. To enhance women's healthcare is one such strategy, for instance by encouraging women to take ownership of their health and hygiene through programmes that provide equal access to high-quality care.

Women are expected to suffer silently and are taught to do so. She is regarded as a high value woman in the society if she is able to do that. As a result, concerns concerning their health are perpetually ignored and never brought up. It is worse in rural India than in urban areas. Numerous women experience high-risk pregnancies as a result of disregarding their nutritional needs and subtle warning indications of difficulties. The prevalence of menstruation related issues, anaemia and urinary tract infections (UTIs) among women is quite high in this place. However, they frequently forgo treatment and wind up making their difficulties worse. Even for serious issues, women are hesitant to travel great distances for medical examinations. Along with this, lack of awareness on menstruation hygiene and wellness is prevalent in India. With inclusion of latest technology, menstruation cups that are affordable and designed in order to give economical and long lasting solutions given in both rural and urban sectors of India.

However, that requires proper knowledge and awareness in the rural areas so that women start to use them.

To the greatest extent possible, women, girls, and other menstruators can achieve their full potential with the help of effective menstrual hygiene management (MHM). It is time that rural India should adopt a multi-sectoral, holistic strategy to work to enhance menstruation hygiene in its operations domestically because the detrimental effects of poor menstrual health and cleanliness cut across sectors.

</p>

<div class="image-5">

</div>

<p style="text-align: justify; text-align: justify; padding-right: 20px;padding-left: 20px; padding-top: 20px; font-size: 16px; background-color: #edddee;"> Improvement of menstrual health and hygiene depends on access to inexpensive, sustainable menstruation products, but millions of women worldwide cannot afford them.

The best way to promote good menstrual health hygiene and enhance developmental outcomes for women and adolescent girls is through a holistic strategy, which integrates education with infrastructure, products, and initiatives to combat societal taboos and stigma surrounding the issue.

To give women and girls access to affordable menstruation products and knowledge on reproductive health, social entrepreneurs from all over the world are developing innovative new solutions and igniting change in the industry.

Education about women's health is crucial for both patients and healthcare professionals, in addition. This is particularly true for illnesses like endometriosis, other period-related problems, and anaemia that has been incorrectly diagnosed and is not acknowledged. We can increase the base of healthcare professionals' knowledge about current advancements and efficient methods by educating them, for example through training modules.

For instance, being pregnant may be both a joyful and anxious time. established gynaecology anaemia checklists throughout India to assist physicians in managing iron deficiency anaemia in pregnancy and prevent health issues, improve maternal health, and ensure safer childbirths.

The most recent evidence-based recommendations streamline service delivery across the board with such techniques. Scaling access is a crucial component of the overall picture as these healthcare solutions become accessible to help medical professionals and people. Collective action by numerous stakeholders is essential to providing women in underserved areas, such as rural and peri-urban areas, with healthcare options. A sustainable strategy requires the cooperation of national and state governments, business associations, private parties, and public-private partnerships. Additionally, we want to improve treatment alternatives in rural areas by empowering medical experts and rural healthcare workers

</div>

**comment\_form.html**

<div class="card mt-5 shadow-effect">

<div class="card-body">

<h4>LEAVE A COMMENT</h4>

<P>You can leave a comment here</P>

```
<form>

  <div class="form-group">

    <label for=" " >Name</label>

    <input type="text" class="form-control" placeholder="Enter your name here">

  </div>

  <div class="form-group">

    <label for=" " >Comment</label>

    <textarea cols="30" rows="10" class="form-control" placeholder="Add your
comment here" shadow-effect></textarea>

  </div>

  <button class="btn">Add a comment</button>

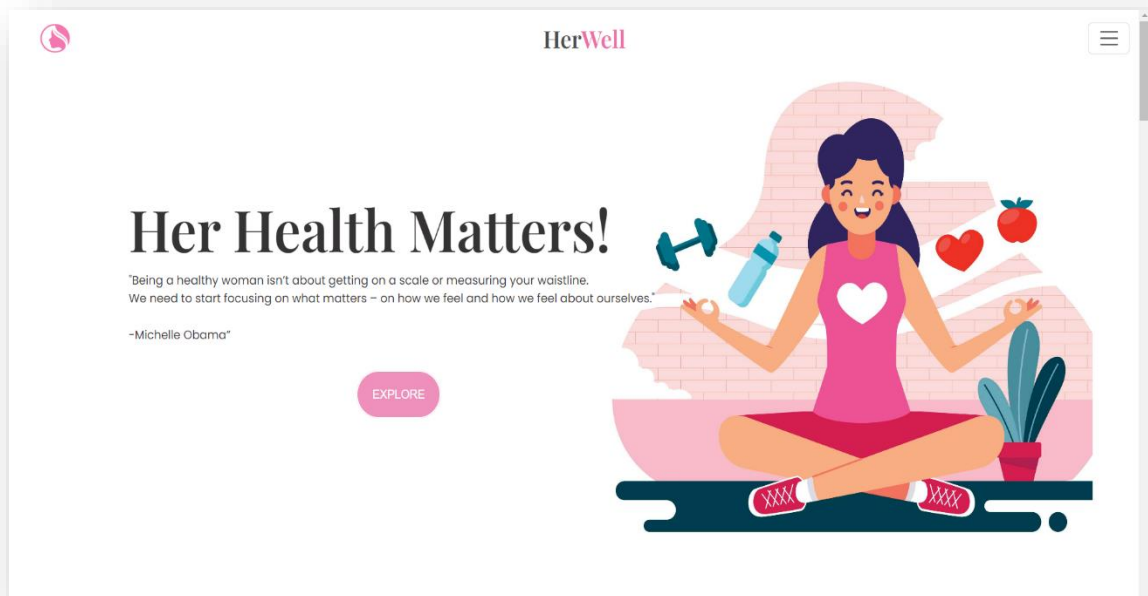
</form>

</div>

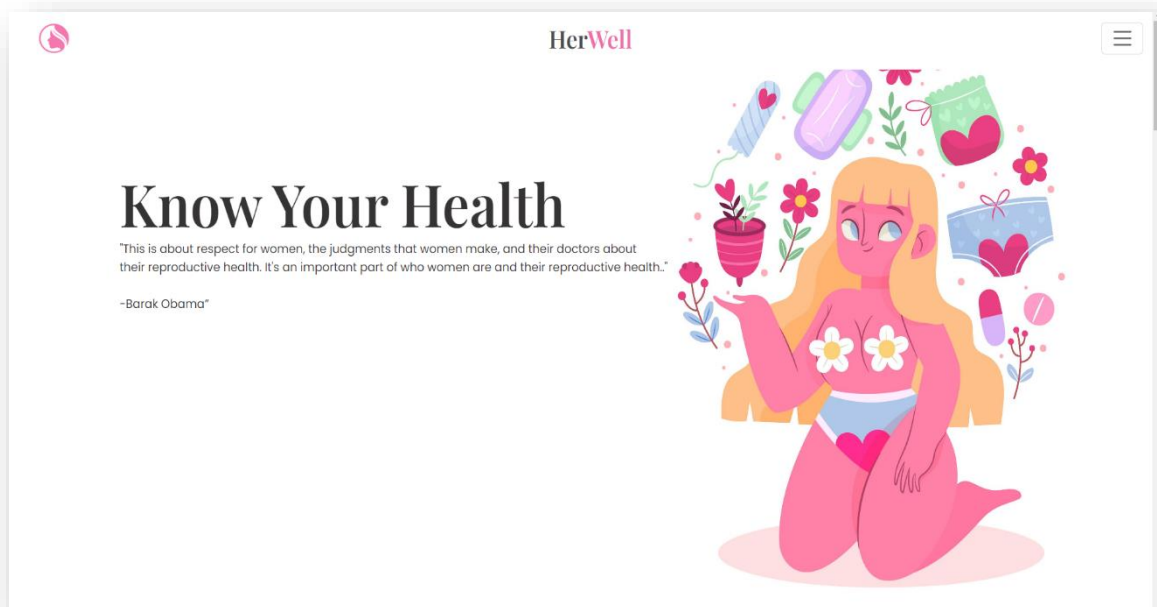
</div>
```



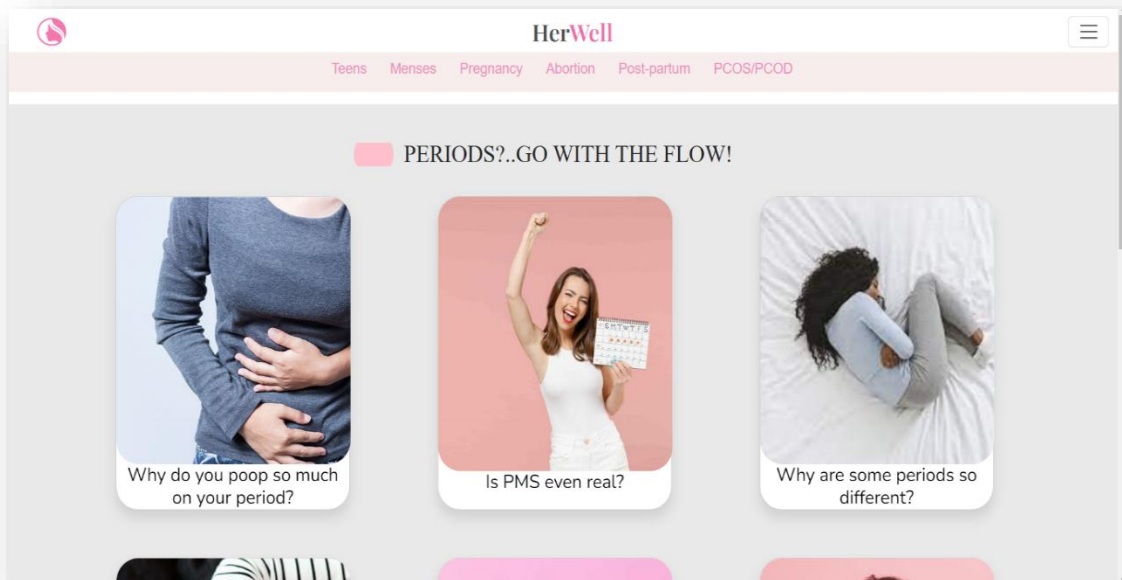
## SCREENSHOTS



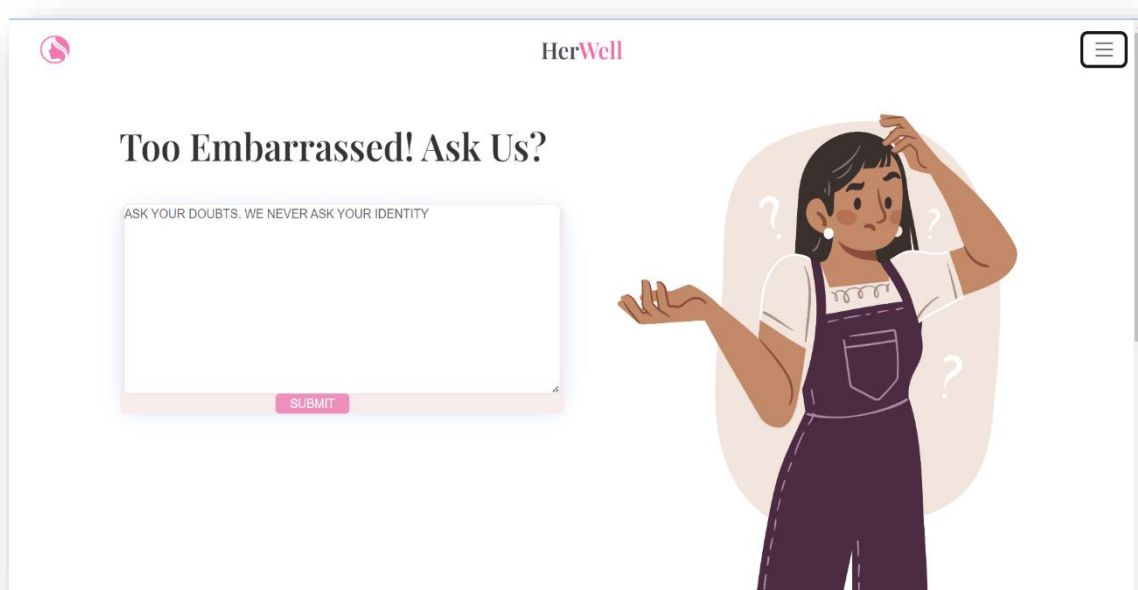
**Fig.1: home**



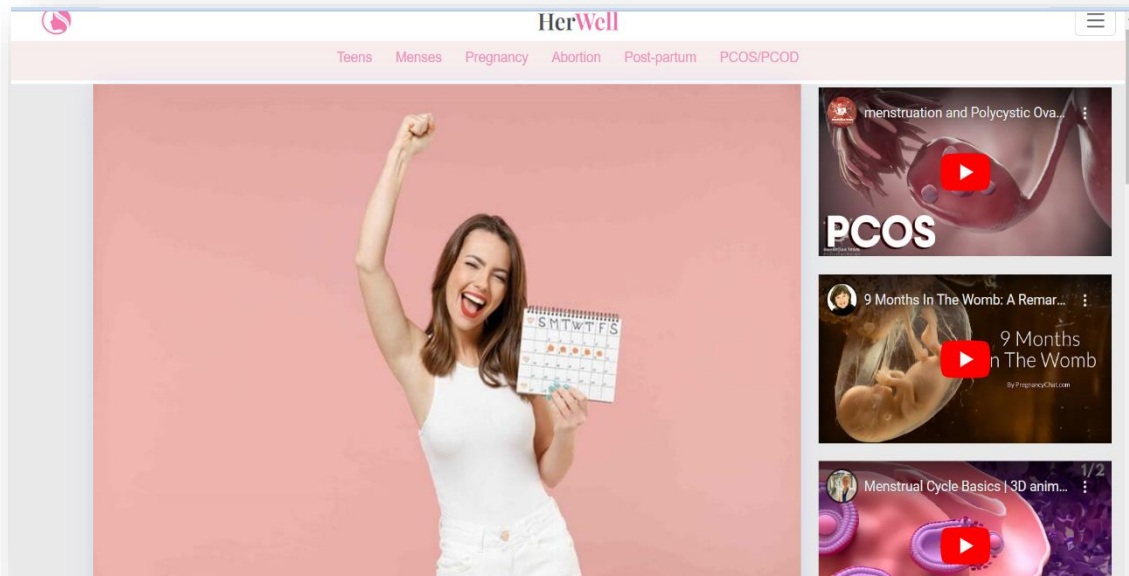
**Fig.2:blog home**



**Fig 3. Blogs**



**Fig 4. Ask**



**Fig 5.SinglePage**