

# Womanzi: Ultimate Women's One-Stop Hub

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## ABSTRACT:

*Womanzi is a sanctuary for women seeking comprehensive support and guidance on their journey to health and wellness. In a world where women's health needs are often overlooked or misunderstood, Womanzi stands as a beacon of empowerment, offering a wealth of resources on skincare, haircare, menstruation, and pregnancy—all under one digital roof. We recognize that women's health is multifaceted, encompassing not only physical well-being but also emotional, social, and psychological dimensions. That's why Womanzi takes a holistic approach, addressing the diverse needs and concerns of women at every stage of life.*

## 1. INTRODUCTION

In today's rapidly evolving digital landscape, the need for platforms that cater to specific audiences has never been more pressing. Women, who make up a significant portion of global digital users, often seek reliable and comprehensive resources to address various aspects of their lives. However, the scattered availability of such information makes it challenging to find a one-stop solution that truly meets their diverse needs. Enter Womanzi: Ultimate Women's One-Stop Hub, a project designed to bridge this gap and redefine the way women access personalized care and information.

Womanzi is not just a platform but a vision—a space created to simplify, empower, and enhance the daily lives of women. With a focus on four critical domains—Skincare, Haircare, Pregnancy, and Menstruation—the platform provides tailored solutions, valuable insights, and practical tools that cater to women of all ages and backgrounds.

The foundation of Womanzi lies in its user-first approach. Recognizing that every woman is unique, the platform integrates personalization into its core functionality. For example, the Skincare and Haircare sections feature interactive questionnaires designed to understand individual preferences, lifestyles, and concerns. These inputs are analyzed to recommend products that are not only effective but also aligned with the user's specific needs. This personalized approach ensures that every user feels seen, understood, and cared for.

The Pregnancy section takes on a more educational and supportive role, offering detailed, trimester-wise guidance. Expectant mothers can access accurate and organized information about the physical, emotional, and nutritional changes they might experience, empowering them to navigate this transformative journey with confidence and ease.

The Menstruation section addresses another vital aspect of women's health by featuring a reliable and user-friendly period tracker. This tool helps users monitor their cycles, predict upcoming periods, and stay informed about their reproductive health. In a world where women's health issues are often stigmatized or overlooked, Womanzi takes a step forward in normalizing and supporting discussions around menstruation.

Requirements Analysis

## 2-Design

Architecture

Project architecture represents the number of components we are using as a part of our project and the flow of request processing i.e., what components

in procession the request and in which order. An architecture description is a formal description and representation of a system organized in a way that supports reasoning about the structure of the system.

Architecture is of 2 types. They are:

1. Software Architecture
2. Technical Architecture

### Software Architecture

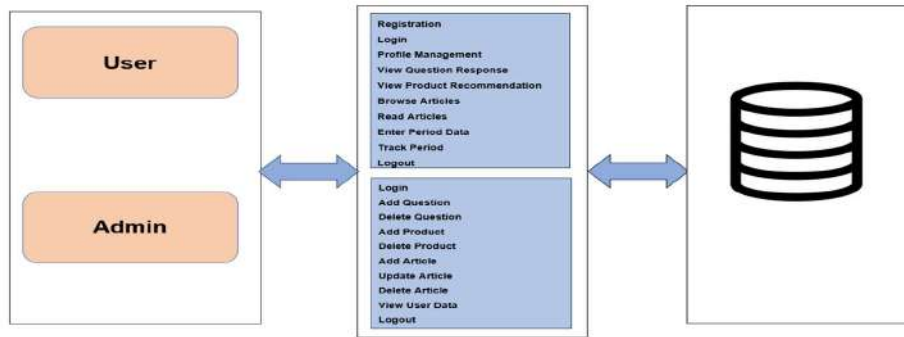


Figure 1 Software Architecture

The system follows a three-tier architecture, ensuring modularity and scalability. Each layer has distinct responsibilities to streamline operations and maintain clear separation of concerns.

- **Presentation Layer:** This layer interacts directly with the users, providing the interface for features like questionnaires, trackers, and articles. It handles user input, displays information, and ensures a smooth and engaging user experience.
- **Application Layer:** This layer processes user requests, executes business logic, and facilitates

communication between the presentation and database layers. It manages tasks like product recommendations, period tracking, and information retrieval.

- **Database Layer:** This layer stores and retrieves all system data, such as user profiles, questionnaire responses, and tracking information. It ensures data consistency, security, and organized management of information.

### Technical Architecture

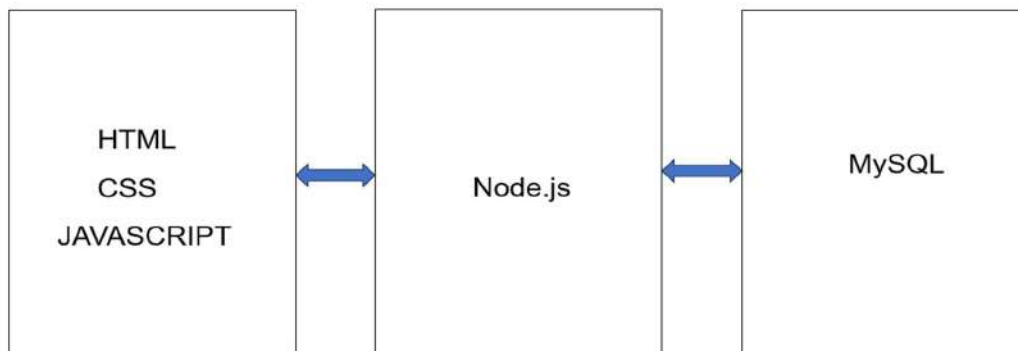


Figure 3.2 Technical Architecture

The system is built using a combination of technologies that ensure a dynamic, scalable, and efficient platform:

- **HTML, CSS, and JavaScript:** These technologies form the front-end layer, responsible for creating the user interface. They provide the structure, styling,

and interactivity of the website, ensuring an engaging and responsive experience for users.

- Node.js: The backend logic is implemented using Node.js. It handles server-side operations, processes user requests, implements business logic, and manages the communication between the frontend and the database.
- Implementation

#### 4.1 Technologies

This project is developed using HTML, CSS, JavaScript as client-side technologies, and Node.js and MySQL as server-side technologies, implemented in a Windows environment. The system ensures optimized resource utilization, improved productivity, and efficient management of resources by being fully computerized with a centralized database for maintenance.

#### HTML:

HTML (Hyper Text Markup Language) is used to design the structure of the web pages in the Womanzi project. It combines Hypertext, which links multiple web pages, and Markup language, which defines the structure of the web pages. HTML allows us to annotate text with tags so machines can interpret and render content effectively. In this project, HTML facilitates the creation of structured web pages, enabling browsers to display text, images, forms, and other multimedia elements for the users.

#### CSS:

CSS (Cascading Style Sheets) is employed to style and enhance the visual presentation of the web pages in Womanzi. It separates content (HTML) from design, making the project easier to maintain. CSS provides control over font styles, colours, layouts, and responsiveness. It ensures that the web pages are user-friendly and aesthetically pleasing, adhering to modern design principles.

#### JavaScript

JavaScript is used as a scripting language for client-side interactivity in the Womanzi

project. It adds functionality to the web pages, such as form validations, dynamic content rendering, and modal handling for user interactions. JavaScript also enables asynchronous operations through AJAX, ensuring seamless user experiences. Its versatility extends to non-browser environments, making it a critical component of the project.

### 3-TESTING

Testing is a critical phase in the software development life cycle that ensures the system functions as intended and meets all specified requirements. For the Womanzi project, testing was conducted to verify the usability, functionality, security, and performance of the system, focusing on its ability to provide seamless user interactions, accurate recommendations, and handle diverse user scenarios effectively.

#### Stages of Testing

##### Unit Testing

Unit testing focuses on validating individual components or units of the software to ensure they function correctly. For the Womanzi project, this involved testing individual modules such as the period tracker calculations, skincare questionnaire functionality, and user authentication (registration and login). Each unit was tested in isolation to verify its correctness and behaviour. Developers utilized automated testing frameworks to re-run these tests whenever a part of the codebase was modified, enabling quick detection and resolution of issues.

##### Integration Testing

Integration testing was conducted to verify the interaction between various modules of the Womanzi project. This included combining the frontend (HTML, CSS, and JavaScript) with the backend (Node.js) and the database (MySQL) to ensure seamless data flow and functionality. For

example, tests were conducted to validate user data transfer during registration and login and to check the integration of APIs for product recommendations and period tracking features. This phase ensured that modules, even if functional independently, worked cohesively as a system.

### System Testing

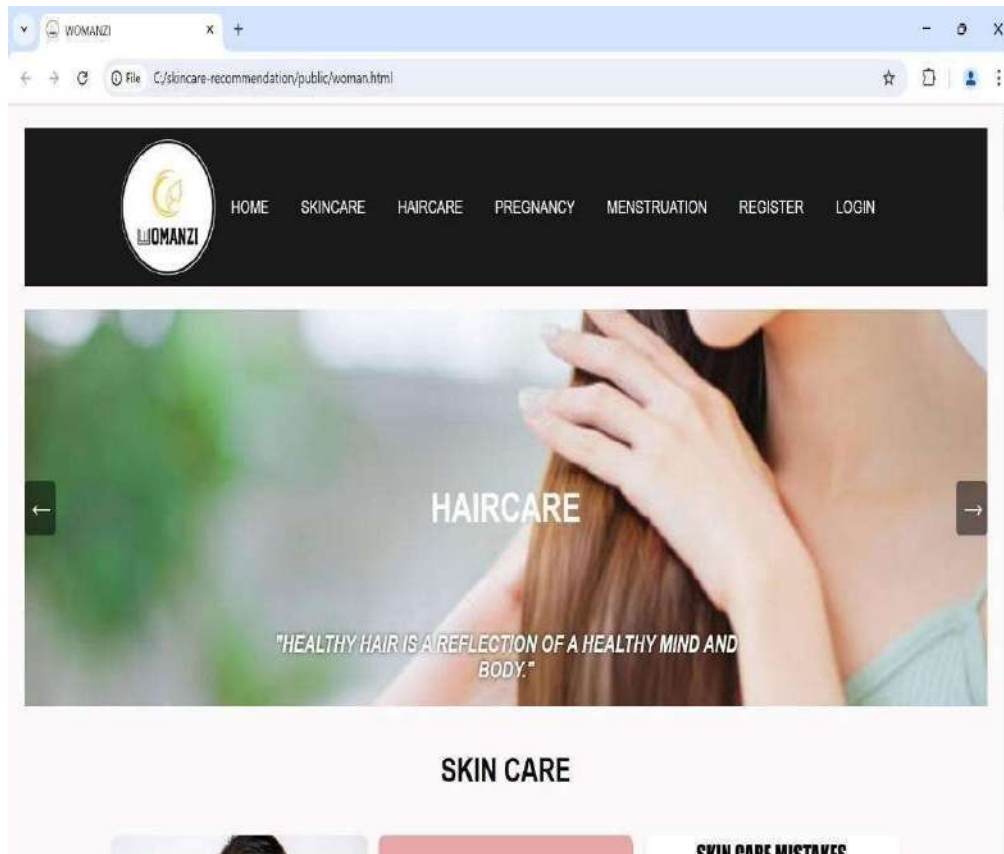
System testing involved evaluating the Womanzi project as a complete system to ensure it met all functional, technical, and business requirements. This was done in an environment simulating the production environment to verify the overall behaviour of the application. Key aspects tested included navigation across the homepage sections (pregnancy, skincare, haircare, and periods), correct

functionality of questionnaires, and secure user authentication. Independent testers conducted these tests to identify issues that may not have been apparent to developers.

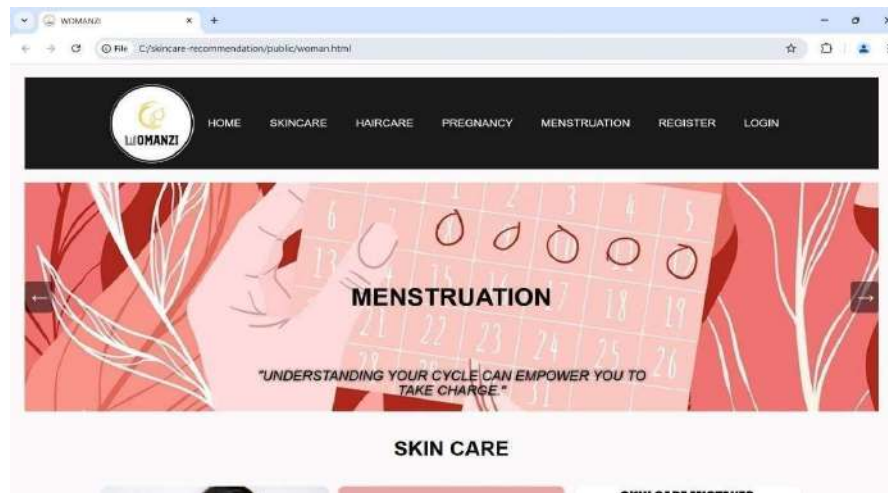
### Acceptance Testing

Acceptance testing was the final phase conducted to ensure that the Womanzi project met the end-user expectations and business requirements. During this phase, the application was tested by end-users to verify whether features like period tracking, personalized skincare recommendations, and pregnancy articles were user-friendly and fulfilled their intended purposes. Feedback from this phase validated that the application was ready for deployment.

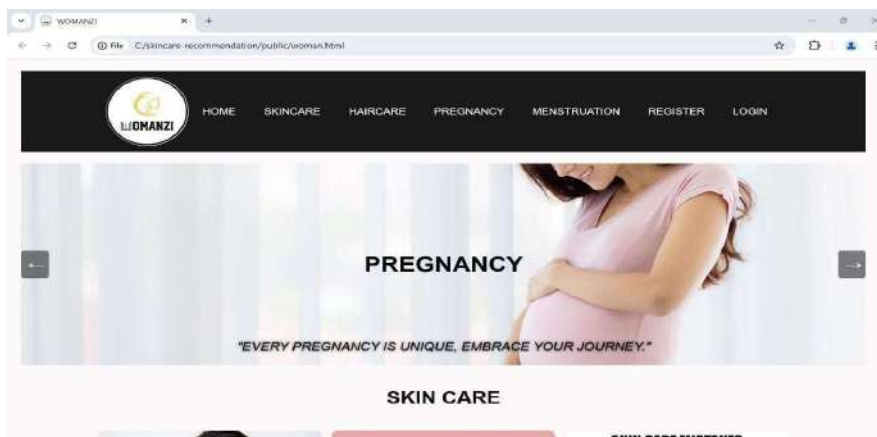
## 4-RESULTS



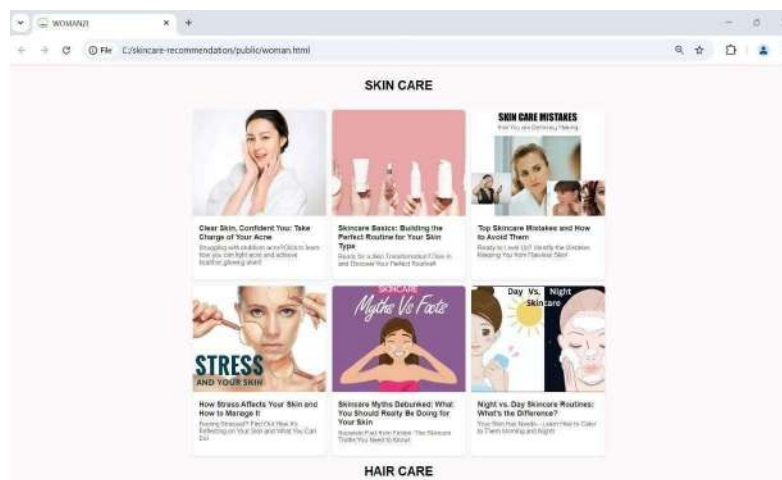
1.Homepage for the website



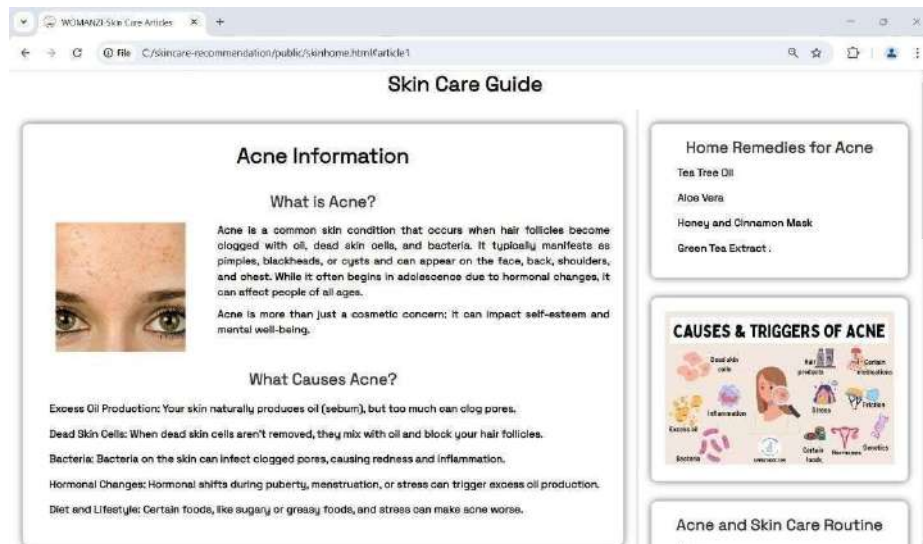
2.Homepage for the website



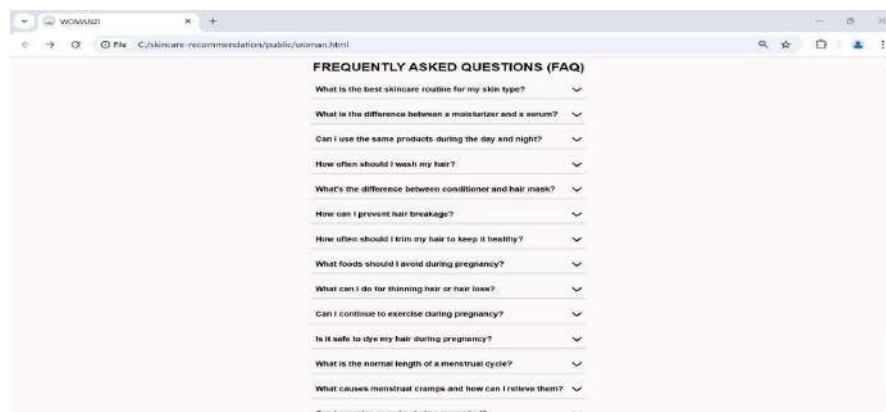
3.Homepage for the website



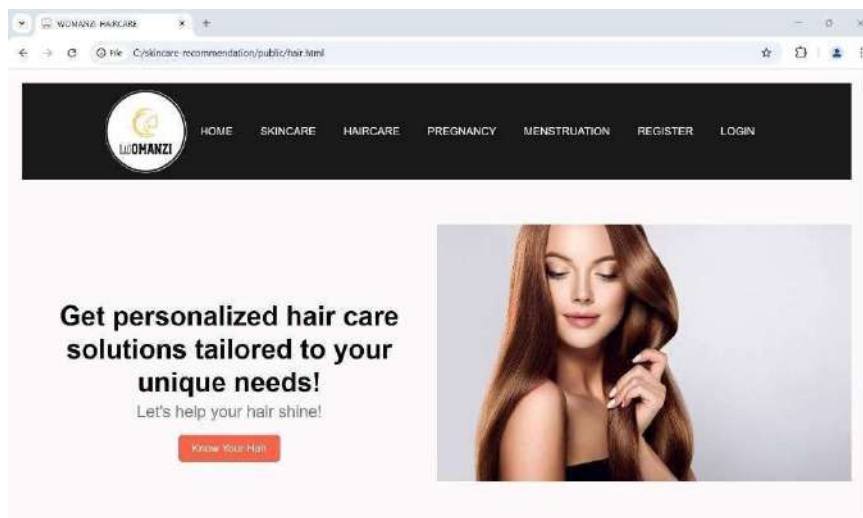
4.Skincare Articles



5.Skincare Article 1



6. Frequently Asked Questions



7.Haircare Section



### Hair Care Questionnaire

What is your hair type?

**Straight**

How would you describe your hair thickness?

**Thin**

How does your scalp usually feel?

**Dry**

Do you experience dandruff or scalp irritation?

**Yes**

How often do you use heat styling tools?

**Rarely/Never**

Do you color or chemically treat your hair?

**Yes**

What is your primary hair concern?

**Hair fall/Thinning**

How often do you wash your hair?

**Every day**

Do you prefer natural/organic hair care products?

**Yes**

What is your hair care goal?

**Strengthen/Repair**

**Get Recommendation**


**Recommended Product: Hair Strengthening Serum**  
Description: Enriched with Keratin and Biotin to strengthen and prevent breakage.

## 8.Haircare Product Recommendation

WOMANLY-PREGNANCY


C:\skincare-recommendation\public\preg.html

### FIRST TRIMESTER OF PREGNANCY




**2 weeks pregnant**

Ovulation may happen about two weeks after your last period began. If egg meets sperm, you're on your way to being pregnant.




**3 weeks pregnant**

At 3 weeks after your last period - about 1 week after fertilization - your baby is a tiny ball made up of several hundred cells that are multiplying quickly.




**4 weeks pregnant**

At 4 weeks, your baby is an embryo made up of two layers, and your primitive placenta is developing.




**5 weeks pregnant**

At 5 weeks, your tiny embryo is growing like crazy, and you may be noticing pregnancy discomforts like sore breasts and fatigue.




**6 weeks pregnant**

At 6 weeks, your baby's heart has started beating. You may have morning sickness and sore breasts.




**7 weeks pregnant**

At 7 weeks, your baby's eyes, nose, mouth, and ears are taking shape. You may need to pee constantly.



**8 weeks pregnant**

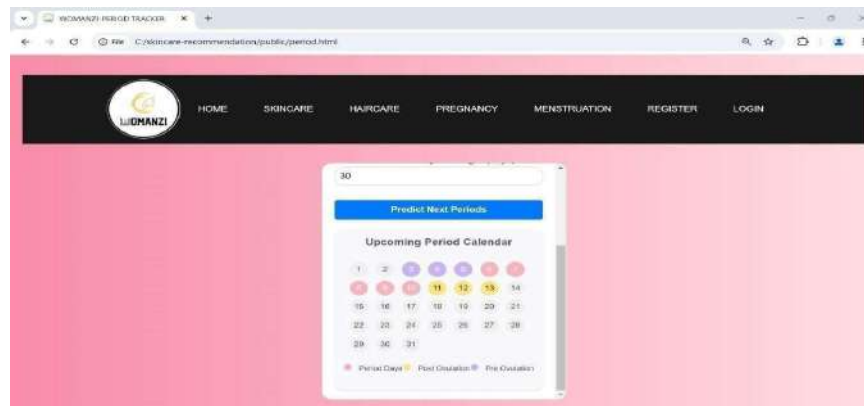
At 8 weeks, your baby's hands and feet are sprouting webbed fingers and toes. You may have nausea and fatigue. And you may make decisions about prenatal tests.



**9 weeks pregnant**

At 9 weeks, your baby is starting to look more like a tiny human. You may have morning sickness and mood swings.

## 9. Pregnancy Section



10.Period Tracker

## 5.Conclusion and Future Scope

### Conclusion

Womanzi is a one-stop solution dedicated to addressing various aspects of women's personal health and well-being. It features an accurate and user-friendly period tracker to help manage menstrual cycles, in-depth pregnancy articles providing essential guidance and information, and personalized skincare and haircare recommendations based on user inputs to ensure tailored solutions. By combining technology and personalized care, Womanzi empowers women to take control of their health, offering practical tools, reliable resources, and a supportive platform to meet their unique needs effectively.

### Future Scope

The future scope of our project includes enhancing user experience with AI-driven personalization for skincare, haircare, and health recommendations. Develop a mobile app to ensure greater accessibility and engagement. Expand global reach by incorporating multilingual support to serve diverse audiences worldwide.

## 6.REFERENCES

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