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Skin Disease identifier
application

Project Proposal Submitted
To

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Project Submitted
By

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PROJECT PROPOSAL

Background Description:

Skin conditions negatively affect people's life and health. In that instance, it calls for awareness and taking the appropriate medication when needed. However, it can be challenging to find the proper disease at the right moment. Therefore, automated techniques must be developed to increase its accuracy. With the use of this application, a variety of skin disorders, such as herpes, acne, eczema, sun burn, and psoriasis, can be recognized. This application will initially take a snapshot of the patient's skin. Additionally, noise and unnecessary background was originally eliminated from skin image utilizing transformation and filtering. Using grey level co-occurrence matrix (GLSM) to segment dermatological images allows for the accurate identification of later texture and color aspects. Finally, the type of skin disease can be identified using the support vector machine (SVM) classification method. This application will help patients and doctors to find new ways and it is a helpful application -based in Bangladesh, we offer a variety of dermatology problem and solution services on an online platform, also any kind of dermatology problems can be found in this application. Although we do provide certain free services for doctors, mostly it is primarily subscription-based.

Target Users:

Given the circumstances, Other countries benefit from such application, but our country is falling behind. Such choices are not yet available for their assistance. As a result, this platform will create a new door for them through which they can discover rational solutions to their own problems and help with others' problems. For this demographic, a new era of using this program will begin in this way.

Problem Define:

In our country, Skin Disease is a big problem. But most people do not think deeply about it. And there a reason, People does not go to the doctors for their skin problem. They think it is a minor problem in their daily life. Also, village people do not know about what skin disease problems are and they do not know what the right treatment for skin is. Herpes, acne, eczema, sun burn, and psoriasis are the main skin diseases in our country, but most people do not know about this disease properly. So, this skin disease increases day by day. Skin Disease also can be a big problem if it is not fixed when it starts. So, this application helps people to identify their disease and they can get solution by using this application.

Problem Solution:

This application indicates that people's satisfaction with skin disease problem was influenced by all the independent variables measured and were noted to have a significant impact on people satisfaction with skin disease problem application. Instead of relay on all over the country, whatever the obstacles are, we want to create a platform where they can have the opportunity to find someone suitable whom they can reach out to anytime with any problem. A

user will have the option to call a doctor to ask questions regarding his/her specific skin problem and our expert doctor will get back to him/her with the solution. Besides, they can get their answer from our application existing solution if it is verified by the doctors. If anyone does not like to go with the available option, they may also interact with a doctor regarding their problem conducting the live consulting session. Having a 24/7-staffed helpdesk or chat service can also help increase engagement and drive user satisfaction with the application.

Project Object:

1. Dermatology based application will provide better, faster, easier and more accurate information about the disease.
2. Enhancing the effectiveness of disease detection.
3. A patient may relax knowing that there is a platform where they can not only receive treatment but also get it anytime they want it, no matter what skin issue they are actually facing.
4. A patient or doctor can use this application Whenever they have need.
5. This application can provide detailed information about various skin diseases to both patients and doctors. Moreover, able to provide the solution.
6. This application is flexible and time consuming.

Functionality:

The basic functionality of the proposal is to help a patient. How this application helped a patient quickly manage their issue and reap benefits.

Problem Solving:

A patient will have the option to ask a question regarding their symptom problem and our expert doctor will get back to him with the solution.

Virtual Collaboration:

If a person prefers not to use the offered option, they can also engage in a live consulting session with a professional to discuss their issue.

Live support:

The level of service can be raised through a helpdesk or chat service that is monitored around-the-clock.

System features and requirements:

Functional requirements:

1. Login
 - Email
 - Password
2. Registration
 - Full name
 - Gender
 - Date of birth
 - Email
 - Set password
 - Phone number
 - National id number
 - Address
3. Search
 - Search for specialized doctor
 - Herpes specialized
 - Acne specialized
 - Eczema specialized
 - Sun Burn specialized
 - Psoriasis specialized
4. Live chat
5. Live video consulting
6. Profile edit
 - Name
 - Email
 - Password
 - Phone Number
 - Date of birth
7. Progression view
8. Frequently asked question
9. Doctors according to their disease
10. Problem and solution
11. Recent disease news

These functional requirements are application main priority.

Nonfunctional requirements

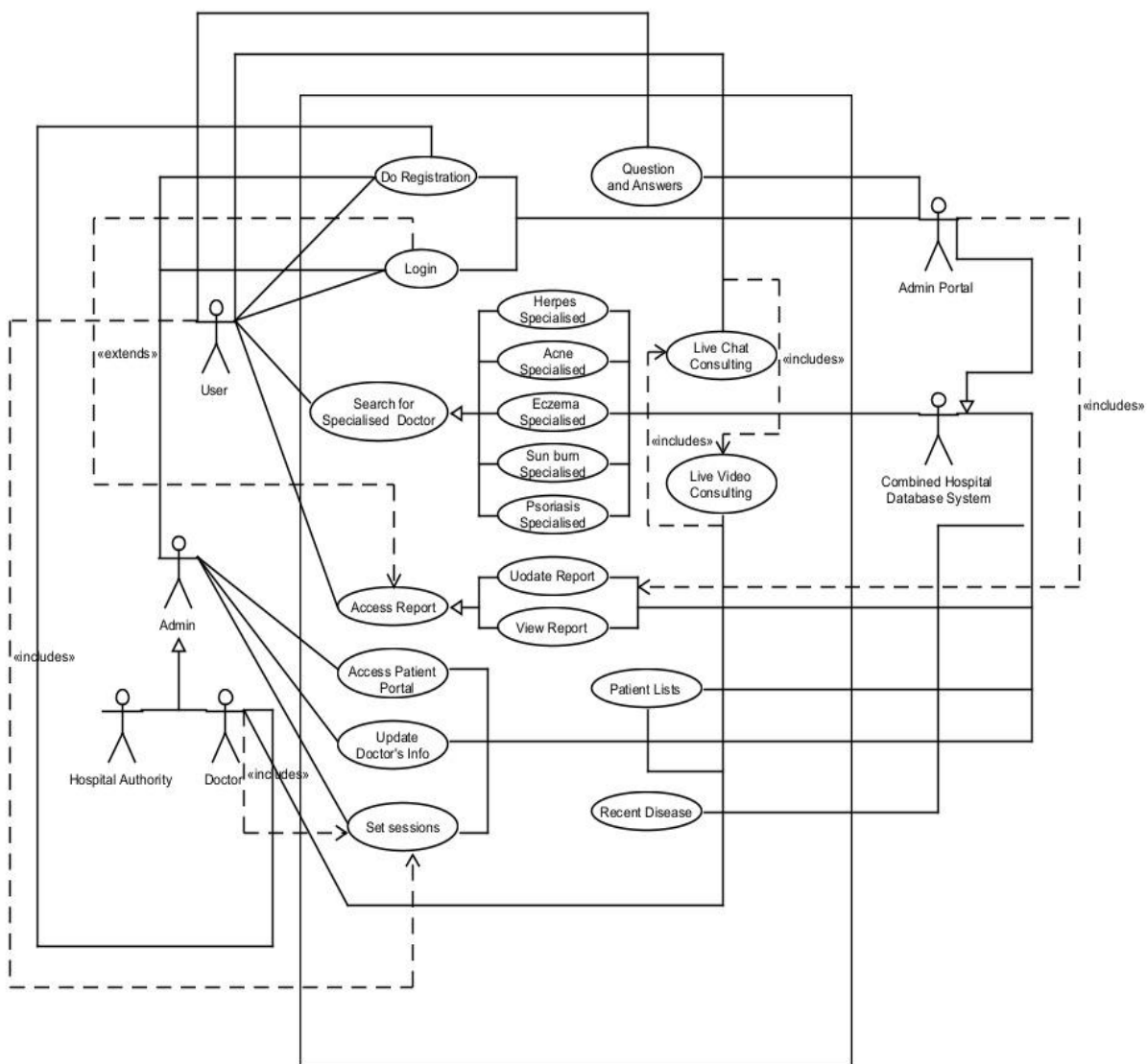
1. The application is very effective.

2. The service of the application will be available 24/7.
3. All the conversation will be end to end encrypted.
4. The application is user friendly.
5. The application is really secure.

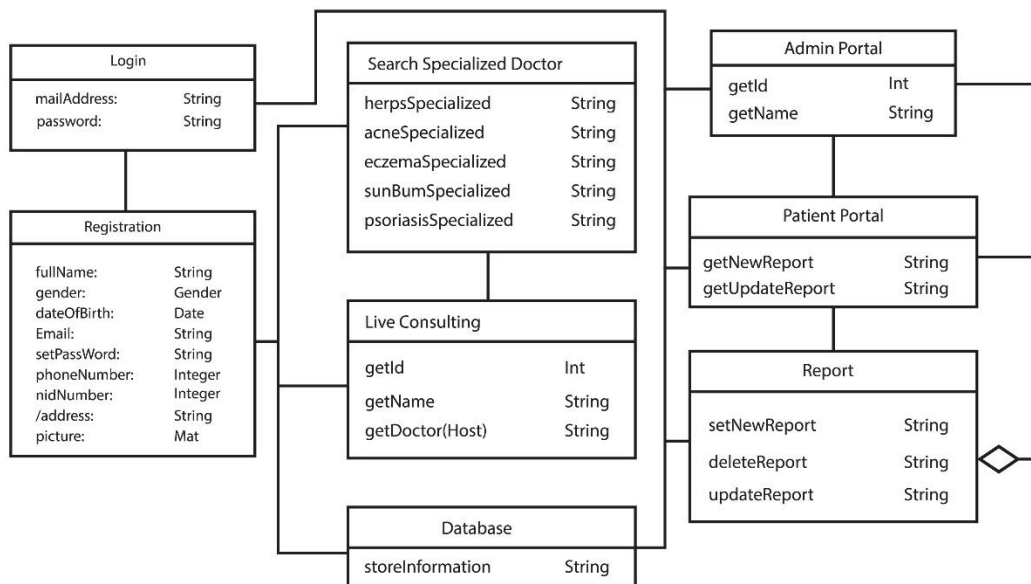
The non-functional requirements demonstrate the quality of the application.

Diagram Design

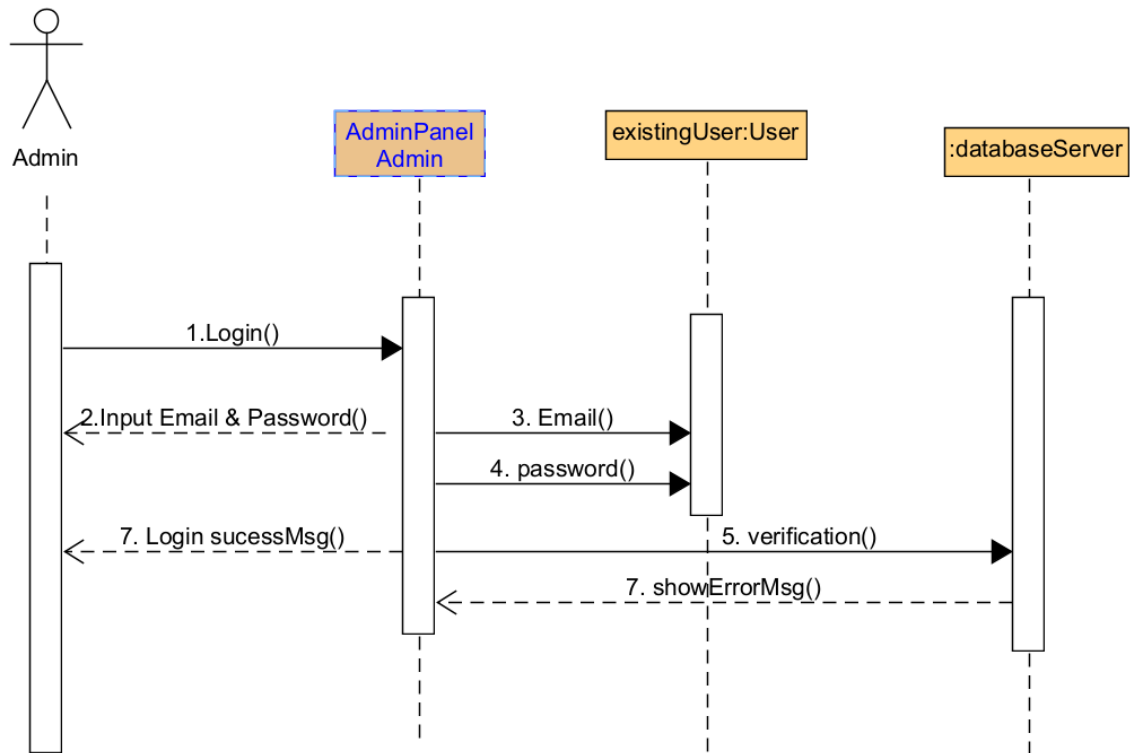
Use Case Diagram:



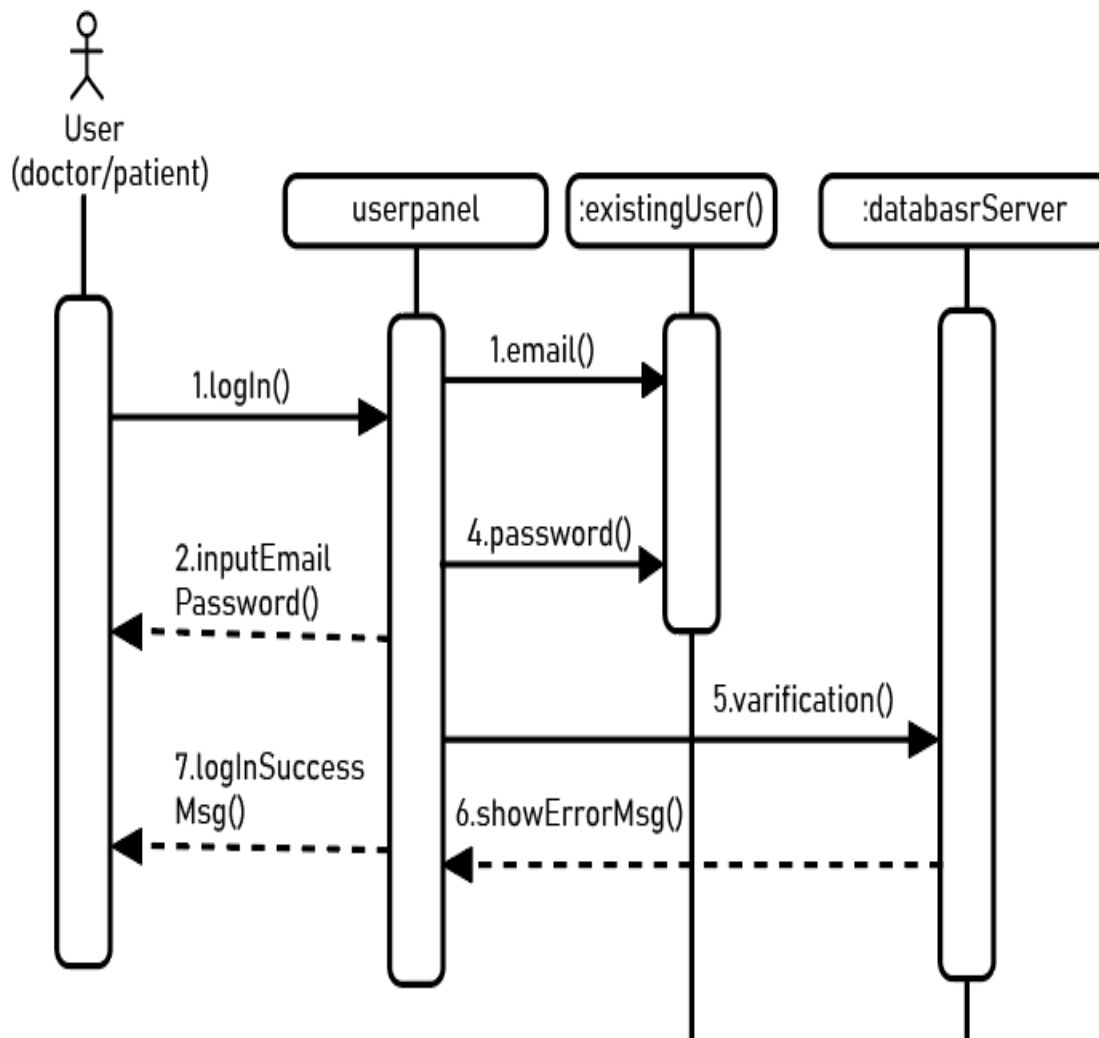
Class Diagram:



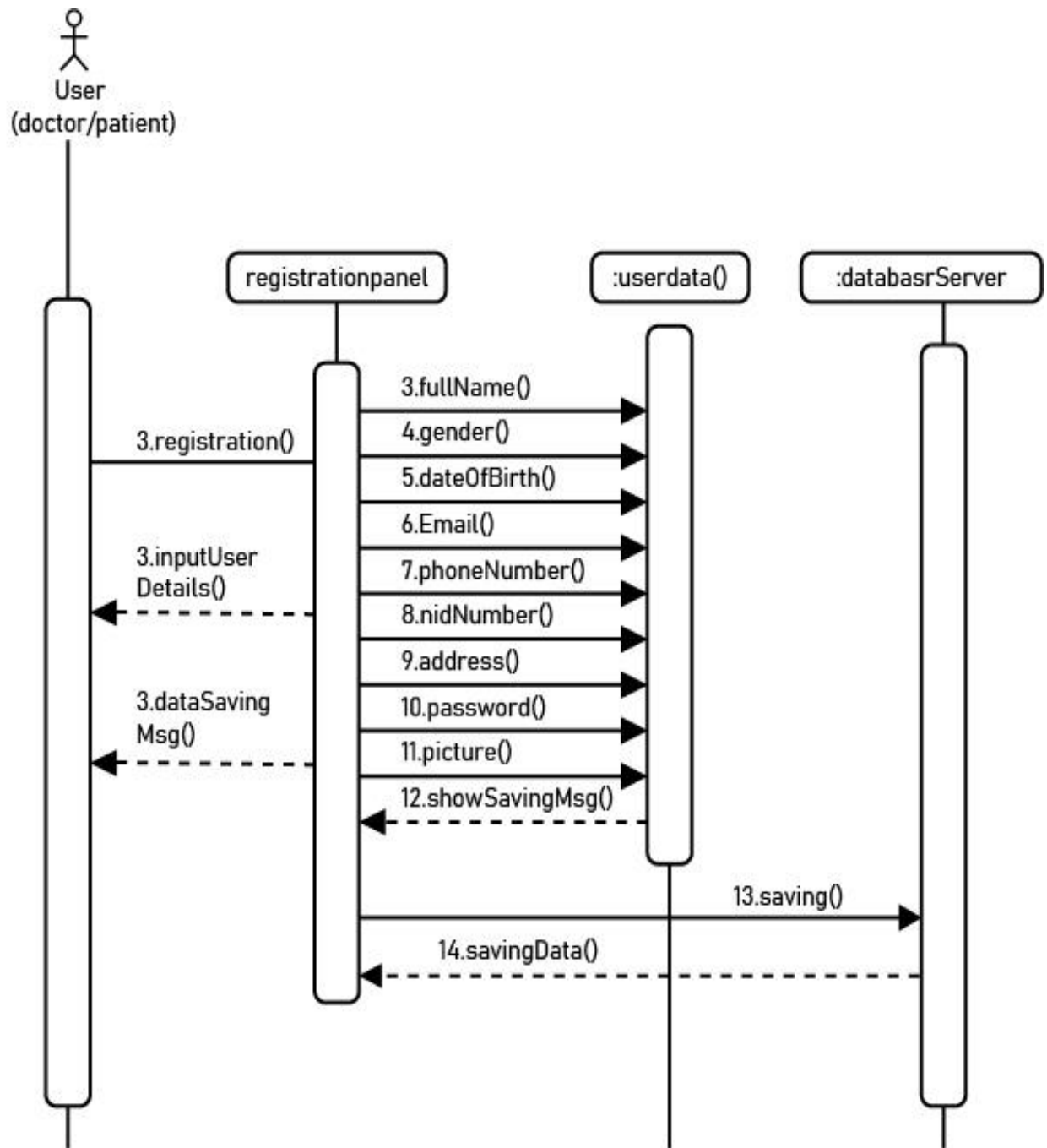
Sequence Diagram



Admin Panel



Login Page



Registration

SOFTWARE DEVELOPMENT LIFE CYCLE

Incremental Model

Incremental Model is a process of application development where requirements divided into multiple standalone modules of the application development cycle. In this model, each module goes through the requirements, design, implementation and testing phases. Every subsequent release of the module adds function to the previous release. The process continues until the complete system achieved.

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

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

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

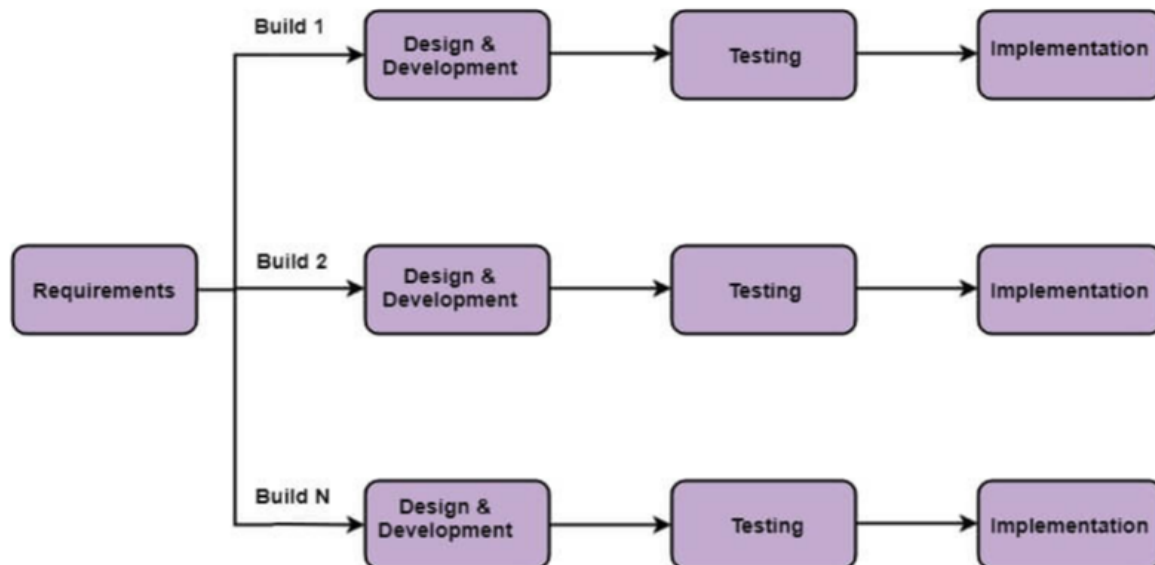


Fig: Incremental Model

Why we use the Incremental Model?

- When the requirements are superior.
- A project has a lengthy development schedule.
- When application team are not very well skilled or trained.
- When the customer demands a quick release of the product.
- You can develop prioritized requirements first.

Advantage of Incremental Model

- Errors are easy to be recognized.
- Easier to test and debug
- More flexible.
- Simple to manage risk because it handled during its iteration.
- The Client gets important functionality early.

Disadvantage of Incremental Model

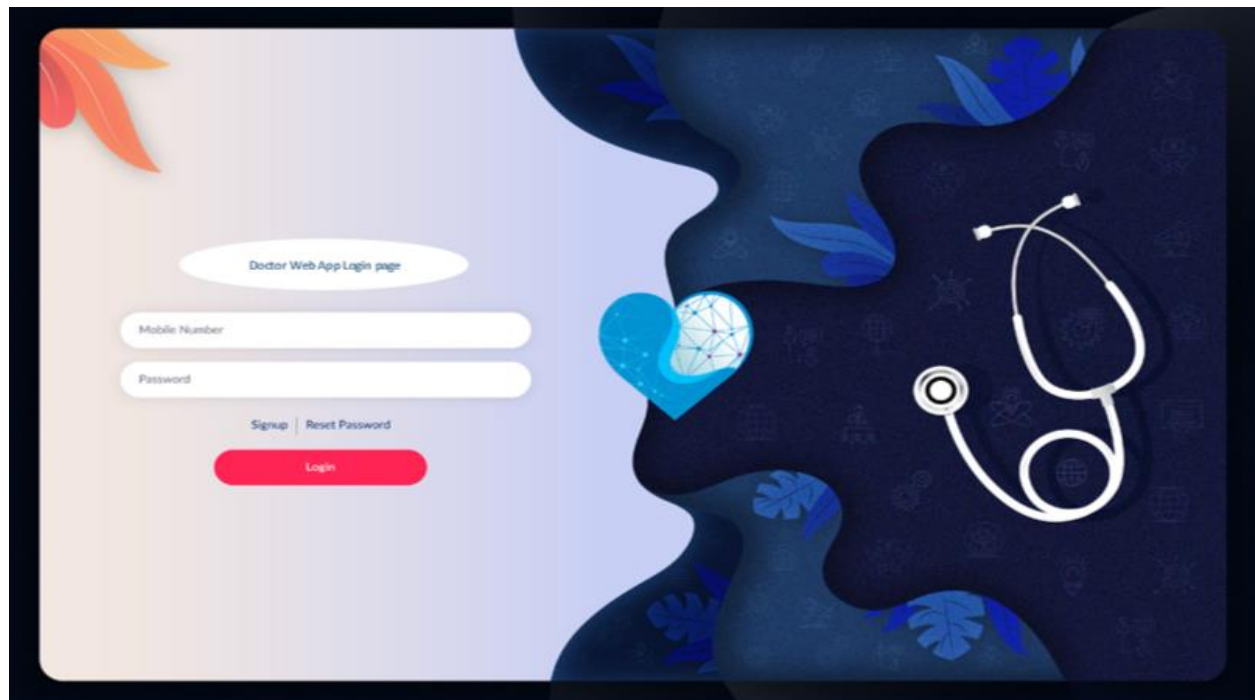
- Need for good planning
- Total Cost is high.
- Well defined module interfaces are needed.

User Interface

System Feature:



Doctor Login Page:



User Login Page:

