

*A Mini Project Synopsis on*  
**Skin Care Product Management System**

**S.E. - I.T Engineering**

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## CERTIFICATE

This to certify that the Mini Project report on **Skincare Product Management System** has been submitted by Anusha Gondhalekar (20104127), Sakshi Balekar (20104103), Mohammed Hamza Ansari (20104058), Maaz Mirza (20104124) who are a Bonafede students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfilment of the requirement for the degree in **Information Technology**, during the academic year **2021-2022** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

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# CHAPTER 1:

## Introduction:

How often have you recommended a skincare product to a friend with the same skin type as yours, but not had her come back to you with the glowing reviews you expected? In fact, it is pretty likely that two people with similar skin types will have different experiences with the same product. This is because understanding your skin type is only the first step to finding the skincare routine and products that are ideal for you. There is a whole gamut of primary and secondary skin concerns to consider, coupled with your diet, fitness routine and even your sleep routine. Nothing says disappointment like a brand new skincare purchase that does nothing—or does all the wrong things—to your skin. While experimentation is fun, especially for beauty aficionados, it comes with a price. If you have problematic skin but aren't a fan of an elaborate skincare routine, the healthy skin dream can seem like, well, a dream. This is where personalized skincare comes in.

There are all kinds of skin care startups on the market that promise to deliver some kind of epidermal miracle, particularly on one's face. Sometimes the secret is in the ingredient list. Think of the ingredients in your skincare as “food” for your skin. Your skin needs certain nutrients to function optimally. Ingredients need to be able to penetrate, alter, and improve the function of the skin to enhance collagen production, exfoliation, hydration, and protection. These types of products are considered cosmeceuticals and not typically found in the average over-the-counter product at your local pharmacy or department store. Many skincare products fall short because their amazing “active ingredients” sit on the surface of the skin and can't be delivered to the right layer to work their magic.

Other times the magic is in the routine — K Beauty regimens, for example, aren't just about using the right products, but using a long list of the right product in the right order multiple times a day. To suit your specific needs, there are many products on the market that can be incorporated into your skin care routine. There are products out there aimed at oily, dry, or combination skin. Rather than just blindly pick and choose, it is a good idea to consult a professional to help you determine the products that will benefit your skin the most. You do not want to start too many things at one time, as this can damage the skin and make it difficult to tell what is working and what is not. The younger you are when you start it, the better, but it is never too late to establish healthy habits.

## 1.1. Purpose:

Growing consumer awareness is bringing about a change in the product and marketing approach of skincare brands. The one-size-fits-all approach is now a quick rule-out and most brands are offering some degree of customization. While most beauty brands create products keeping generic skin types and concerns in mind, there's a growing segment of those who can customize your skincare routine for you. Enter: bespoke beauty. In a world where everything from bags and shoes to bath towels can be personalized, why should your beauty routine be left behind? We explored the world of customized skincare to understand why it may be the next big thing in the beauty industry, and spot the names that are doing it right. What sets customized skincare apart from products available over-the-shelf, is that as our knowledge of your skin grows, it becomes easier for us to achieve what you want, since we understand your skin thoroughly and how it responds to different ingredients. This allows us to formulate the right skincare product to precisely target your specific concerns. Skincare personalization is not only a process to know your skin better and suit its needs but it is also a sustainable choice that suits the environment, as it reduces the trial and error method with skincare products that may or may not suit you. Some brands in the market are disrupting the skin care

industry by completely changing the conversation around skin care and carving a new approach of hyper-customization that uses technology and the abundance of data to focus more on the consumer. With technology, unique customer information like skin type, problems, lifestyles, environment, geographic location et cetera, make it possible for dermatologists to offer highly individualized remedies. When it comes to potency and effectiveness, many of the more popular over-the-counter skin care lines just don't make the cut. That's where professional, medical grade, customizable products come in.

The main purpose of this project is to develop an UI based app that can judge the skin characteristics of users, and let users find suitable skin care products for their own use. Product recommendation function mainly uses matching algorithm to achieve the purpose. You're allotted a unique Skin quiz that tracks your progress and also allows you to alter your routine based on a change in any prominent factors. The service does need you to subscribe to their plan, through which you will receive a new set of products on a regular basis, depending on the frequency you pick. In case a certain recommendation doesn't work for you, they will also help you find one that does.

## **1.2. Objective:**

1. The main objective is to develop a UI-based application using Java NetBeans for designing the frontend and PostgreSQL for storing consumer's data and for ordering customized product according to your skin type and issue.
2. The application of intelligent skin detection system is committed to a series of questionnaires. According to the consumer's answers, the system gives the users the correct skin type and give users suggestion about how to take care their face skin, and then the system can provide the users with the correct skin care suggestion.
3. The different classification will be convenient for consumers to find the products what the what in this APP. Users also can find out the information of the products like: pricing plan, dermatologically approved ingredients and whether this product is suitable for consumers.
4. consumers will be provided with a wise pricing plan on monthly basis and each month the entire skincare regime will be delivered to their door step according to their subscribed plan.

## **1.3. Scope:**

It can be applied in cosmetic sector where consumers are moving towards integration of health and wellness. Can offer great deal in Beauty and Personal care market as per consumers demand of enhancing their natural skin. Can be useful to all age groups and is not restricted to any gender.

People have been facing problems as they are unaware about their skin type and they keep experimenting on their skin by blindly opting various products in the market. With the increase in such problems, it has become difficult to know about the skin issues. It has become very tedious to rely on somebody else's advice or vague blogger reviews.

The Skincare Product Management based web-application gives solution to these kind of problems. This system manages complete skincare analysis and allows the consumer to choose a wise pricing plan according to your order in a single application and database. The user will use this system to get information about their skin and the products they require. The programmer will use this system to give a proper skin analysis based on the information given by the user and suggests the user a proper subscription plan of the products provided by the programmer. Requirements statements in this document are both functional and non-functional.

## **CHAPTER 2:**

### **Problem Definition:**

Usually, people are unaware about their skin type and keep experimenting on their skin by blindly opting various products in the market. They end up wasting their time and money in search for a proper skincare and sometimes rely on their friend's advice or vague blogger reviews. As consumers increasingly seek solutions targeted to their specific needs, there has never been a greater demand for personalization in the beauty category. Consumers want to be involved and not passively rely on anyone to dictate what products to buy. The emotional pull of beauty products (right brain) is every bit as powerful as the left brain logic and, in most cases, more so. We believe we need these products. We believe they are life changers. We want to be engaged with the products and the brands that produce and sell them. The more the consumer is engaged in the creation of the products, the more likely they are to return, repurchase and tell their friends and family. Consumers are not looking for more products. They are looking for the right products. Many brands are therefore listening to their consumer base in order to make decisions about the products they create, which ingredients they include and which names they adopt. The desire for customized beauty products is here to stay. While scaling is challenging, it is imperative that we in the beauty industry sort out how to make this happen in a meaningful, affordable, profitable way.

Personalizing products can involve ingredients, textures, fragrances and packaging. The options are endless. Listening to and focusing on consumers and their shopping and use habits is critical. As we have learned during COVID-19, old patterns and models can be changed. Our industry has proven to be extremely creative and resourceful. It is time to put those skills to work on this category.

There are two undeniable truths about the current skincare industry. First, consumers trying to find even basic skincare products are often caught in an unrewarding cycle of experimentation; and second, despite growing levels of frustration among their consumers, skincare brands continue to churn out generic formulations catering to the mass market. The promise of personalization is appealing to customers looking to avoid decision fatigue, but the granular information collected by many brands may raise some concern — many privacy policies of these upstart consumer beauty brands allow them to sell such information to other companies at will.

But the benefits of personalization, including serving those missed in mass-market product offerings, will push brands to strike a balance between preserving privacy and innovating for new revenue streams. Look for brands to continue to develop hyper-personalized offerings in order to differentiate themselves from competitors and cater to consumers more effectively.

## **CHAPTER 3:**

### **Proposed system:**

The purpose of the project is to solve these complications by providing customized skincare products based on your skin type and issue. We have planned a perfect subscription plan which consists of five products with decent pricing for best results. consumers will be provided with a wise pricing plan on monthly basis and each month the entire skincare regime will be delivered to their door step according to their subscribed plan.

During the skin test, the user will be asked to complete a dermatologically approved skin test. Mainly divided into Dry/oily, Sensitivity/tolerant, Pigment/Non - Pigment, Aging/Firming skin test. Each question is formulated efficiently to know the consumer's skin which will have multiple options, the user can choose according to their own skin condition, the system can determine the user's skin type, there will be four different skin types data firebase, subsequent skin recommendations are based on the user's skin type accordingly recommended.

Users also can find out the information of the products like: price, ingredients used in each product of the entire skincare routine. It will also give the information of how these safe to use, hand-picked ingredients will help to cure their skin concerns and make their skin younger looking and healthier and whether this product is suitable for users.

### **3.1 Features and Functionality:**

For skincare that will suit your skin, customization is what you need. So here we have come up with the best solution of dermatologically tested, safe to use and hand-picked ingredients. The key feature of our app is the skin analysis and knowledge provided about the ingredients used for a particular skin-type. We have also provided a proper guided instructions of how and when to use each product out of the suggested skincare routine for maximum benefits. It is not necessary for all the consumers to subscribe to a plan. The skin quiz is well researched and designed in such a way that will help our consumers to know their skin so that we can formulate customized skincare routine. This is not similar to any ordinary online shopping application to place one time order. We have planned a perfect subscription plan which consists of five products with decent pricing for best results. The products will be orders monthly at their doorstep as per their subscribed plan. Consumers can be a part of our family by renewing their subscription plan.

## **CHAPTER 4:**

### **Project Outcome:**

With a custom regimen, your skin care routine will be able to tell you if the products you are using will interact negatively together. Instead of having to find out the hard way that using your toner and your acne treatment together is proving too harsh for your skin, you will be able to choose one or the other to use right away. Start with mild products and, as your skin acclimates, move up to more aggressive products. If your skin is extremely oily, you may be able to start with the stronger products, especially if you have acne on the back or chest. It will provide the proper moisture balance and protection level for your skin. Proper skin protection prevents sun damage, which is the major factor in younger-looking skin. Not to mention that all the products you'll be using will be customized based on your skin's unique needs, which will keep your face looking fresh and beautiful. Most products in a custom regimen are made to keep skin clear and acne-free so that you can avoid breakouts and other skin problems. When you follow the regimen as you should, it can keep breakouts at bay and reveal the clearer, smoother skin that you have been looking for. Do not spot treat. Conditions such as acne are in different stages of formation and therefore, you need to treat the entire area. How many times have you tried a new product only to find out that it didn't work for your skin, caused breakouts or other problems, or was just simply unnecessary? With a custom regimen, you won't waste your money on products that you don't need or that won't benefit your skin over time. Contrary to popular belief that a custom regimen is more expensive, it may actually save you money because you will only buy what you really need.

Some other benefits of this project are:

1. Consumer can give out skin analysis test.
2. Consumer can know more about their skin based on their skin analysis and then will be provided with a proper skincare routine.
3. Consumer can opt for a suitable pricing plan and accordingly place their order.
4. Consumers can just give out the skin test to know about their skin type and condition and get acknowledged with the key ingredients to be used in any other brands.



## **CHAPTER 5:**

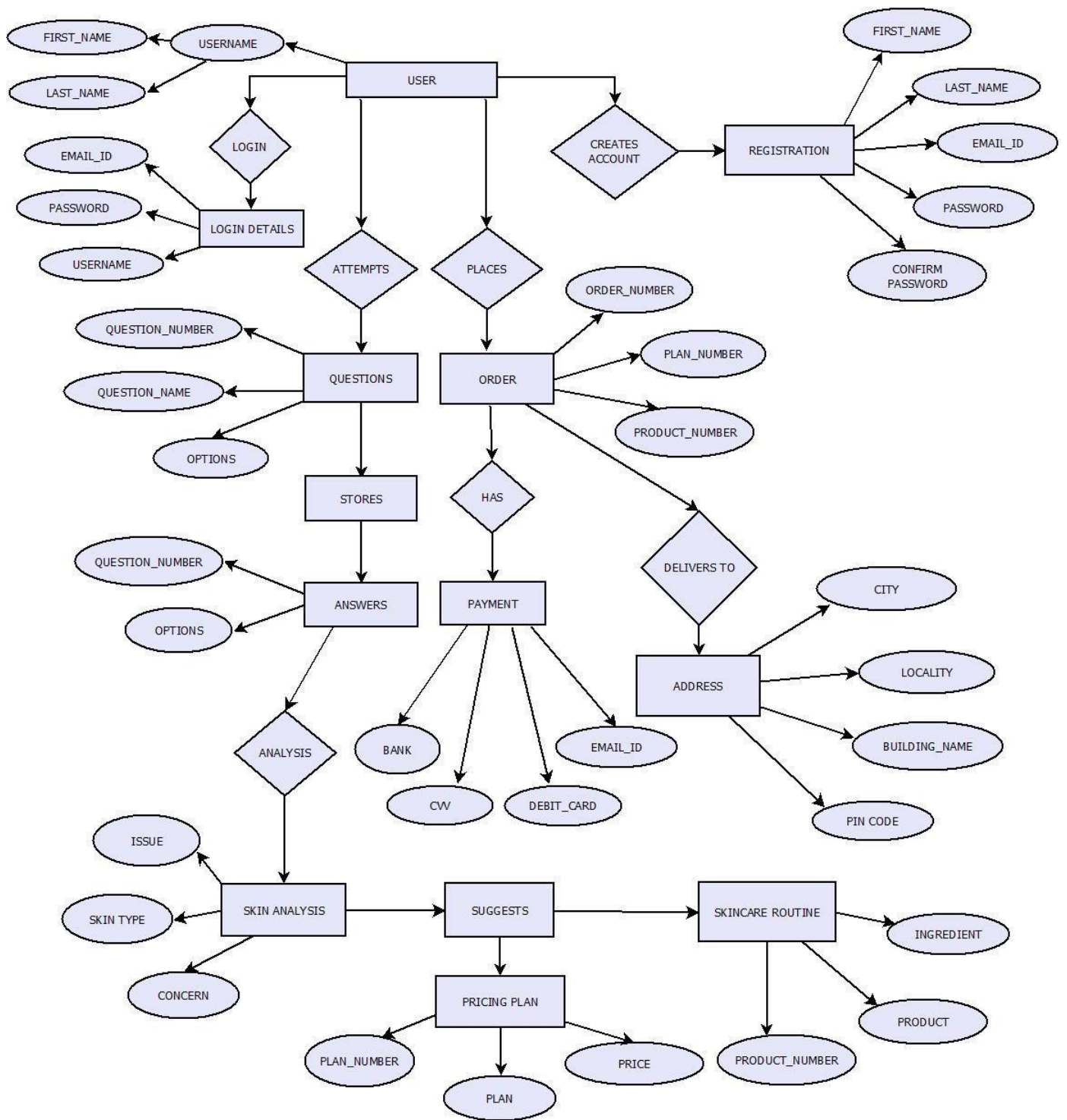
### **Software Requirements:**

- Frontend: JAVA Swing
- Backend: PostgreSQL
- Programming Language: Java
- Operating System: Windows 10

## **CHAPTER 6:**

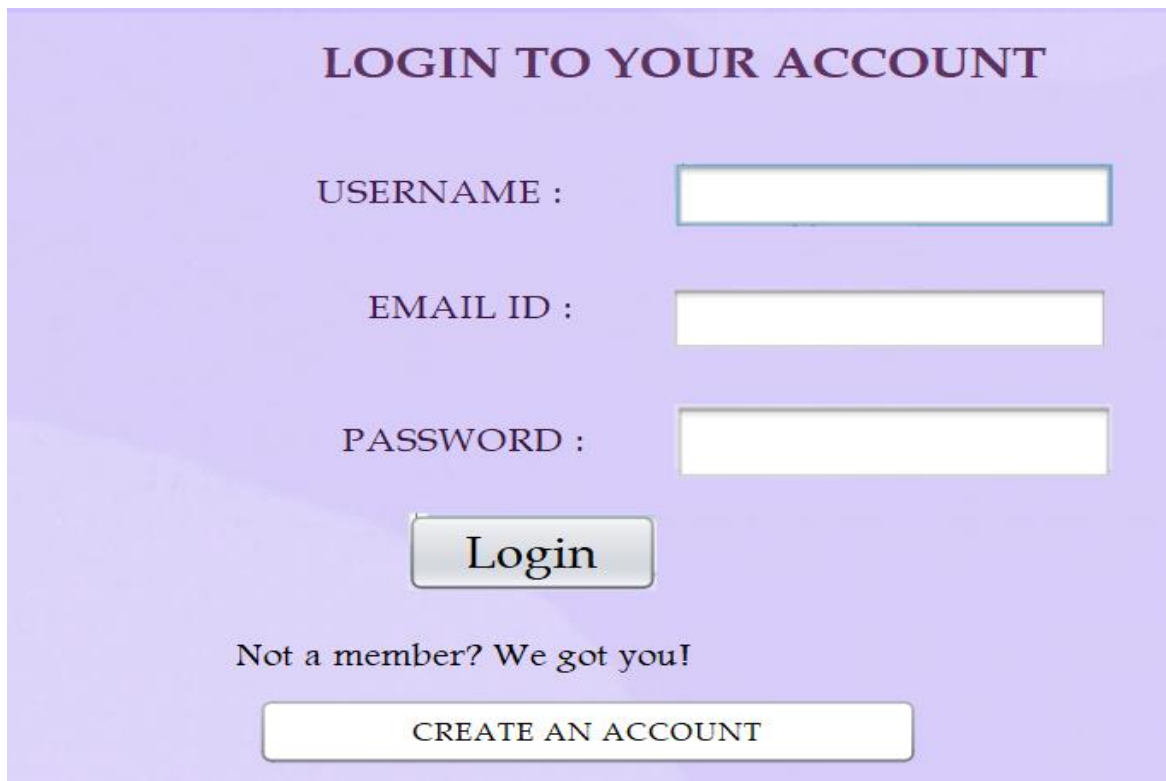
### **Project Design:**

In this phase, a logical system is built which fulfils the given requirements. Design phase of the software development deals with fulfilling the skin requirements into a logically working system.



## User Interface Design

### Login page



A login page with a light purple background. At the top, the text "LOGIN TO YOUR ACCOUNT" is centered in a dark purple, serif font. Below this, there are three input fields: "USERNAME :", "EMAIL ID :", and "PASSWORD :". Each label is in a dark purple, serif font, and each input field is a white rectangle with a thin blue border. Below the input fields is a "Login" button, which is a white rectangle with a thin blue border and the word "Login" in a dark purple, serif font. Below the button is the text "Not a member? We got you!" in a dark purple, serif font. At the bottom is a "CREATE AN ACCOUNT" button, which is a white rectangle with a thin blue border and the text "CREATE AN ACCOUNT" in a dark purple, serif font.

**LOGIN TO YOUR ACCOUNT**

USERNAME :

EMAIL ID :

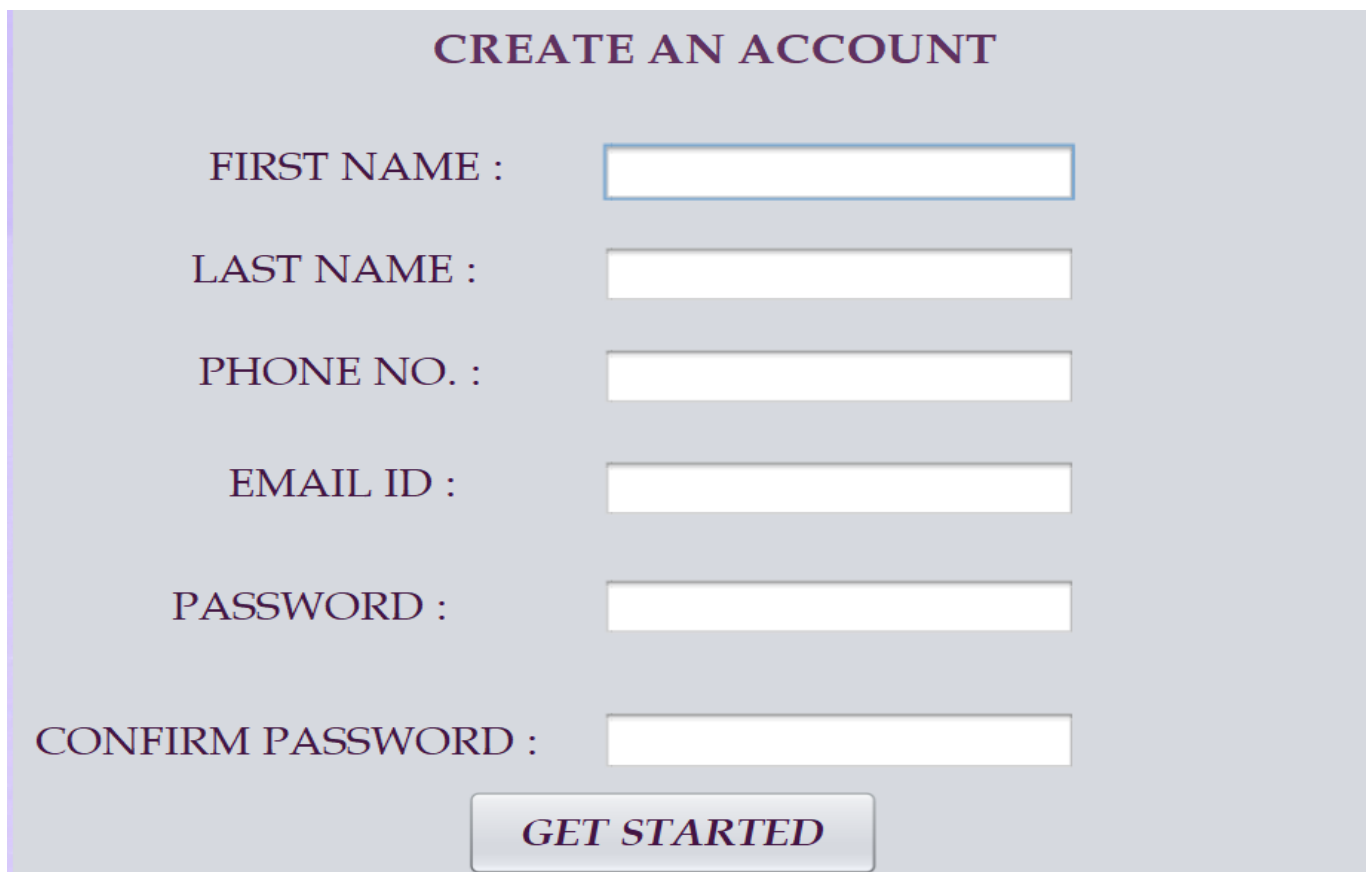
PASSWORD :

**Login**

Not a member? We got you!

**CREATE AN ACCOUNT**

### New User Registration



A new user registration page with a light gray background. At the top, the text "CREATE AN ACCOUNT" is centered in a dark purple, serif font. Below this, there are six input fields: "FIRST NAME :", "LAST NAME :", "PHONE NO. :", "EMAIL ID :", "PASSWORD :", and "CONFIRM PASSWORD :". Each label is in a dark purple, serif font, and each input field is a white rectangle with a thin blue border. Below the input fields is a "GET STARTED" button, which is a white rectangle with a thin blue border and the text "GET STARTED" in a dark purple, serif font.

**CREATE AN ACCOUNT**

FIRST NAME :

LAST NAME :

PHONE NO. :

EMAIL ID :

PASSWORD :

CONFIRM PASSWORD :

**GET STARTED**

## SkinQuiz Question

The skin on the T-zone feels

☐ Oily

☐ Dry

☐ Normal

SAVE



## Pricing plan for the product

### CHOOSE A PLAN

Choose a plan that's right for you!

MRP 2697/-

<p>1-Year Plan</p> <p>63% off</p> <p><b>Rs 999/-</b></p> <p>per month</p> <p>one box delivered monthly</p> <p>Continue</p>	<p>6-Months Plan</p> <p>52% off</p> <p><b>Rs 1299/-</b></p> <p>per month</p> <p>one box delivered monthly</p> <p>Continue</p>	<p>3-Months Plan</p> <p>44% off</p> <p><b>Rs 1499/-</b></p> <p>per month</p> <p>one box delivered monthly</p> <p>Continue</p>	<p>1-Month Plan</p> <p>37% off</p> <p><b>Rs 1699/-</b></p> <p>per month</p> <p>one box pay once</p> <p>Continue</p>
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## Instructions for the users

### Morning

#### SkinFit Deep Cleanse Facewash

- Every Morning
- 1 Pump
- Full face and neck

#### SkinFit Hydration Gel

- Every Morning
- 1 Pea size
- Full face and neck

#### SkinFit Day Cream SPF 30

- Every Morning
- 1 Pea size
- On the exposed areas

### Night

#### SkinFit Deep Cleanse Facewash

- Every night
- 1 Pump
- Full face and neck

#### SkinFit Hydration Gel

- Every Night
- 1 Pea size
- Full face and neck

#### Active

- Instructions will be visible after product delivery.
- Please start using this 2 days after starting other products.

BACK

## Address page

### Fill your Address details

## Payment Method

### Select A Payment Method



## CHAPTER 7

### Project Scheduling Template

Sr. No	Group Member	Time duration	Work to be done
1	Anusha Gondhalekar Sakshi Balekar	1 <sup>st</sup> week of October	Implementing 1 <sup>st</sup> module Homepage ( <i>Designing the main page/admin will login with security verification and will enter to the main menu</i> )
2	Anusha Gondhalekar Maaz Mirza	2 <sup>nd</sup> week of October	Testing 1 <sup>st</sup> module Admin login  <i>Designing next page/ This will consist of the page where admin will have to enter their id and password to login and access the main menu where there will be options like:</i> <ul style="list-style-type: none"><li>• Home</li><li>• Compare</li><li>• All Phones</li><li>• Logout</li></ul>
3	Hamza Ansari Sakshi Balekar	1 <sup>st</sup> Week of November	Implementing 2nd module Student login  ( <i>Designing next page/ functionality: Creating Database for all the Records</i> )
4	Hamza Ansari	By the end of November month	Implementing 3rd module Connection  ( <i>Transfer page/ functionality: Connecting database with the pages. Lastly testing the system and its functions by providing inputs and getting desired outputs</i> )

## **CHAPTER 8:**

### **Conclusion:**

Our project is only a humble venture to satisfy the needs of the consumer and manage this project work. Several user-friendly coding have also been adopted. This package proves to be a powerful package in satisfying all the requirements of the user.

At the end, it is concluded that we have focused on the following points:

- Made statement of the aims and objectives of the project.
- The description of Purpose, Scope, and Applicability.
- We define the problem on which we are working in the project.
- We have described the requirement Specifications of the system and the actions that can be done on these things.
- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
- We included features and functionality in detail.
- We designed user interface related to system.



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