Business Proposal

# Executive Summary

Project Title- DermoScanners

Team Name- PRJ566 Group 5

Executive Summary-

In today’s world, the skincare market is continuously growing and becoming very competitive. With new skincare products being launched every day, consumers want tailored solutions to their skin problems. To solve this problem, our team has come up with a solution—DermoScanners, which will use barcode scanning to identify skincare products, analyze ingredients, and compare them based on user preferences, dermatological compatibility, and prices. We will also introduce a built-in chatbot to provide skincare recommendations based on users’ skin problems.

Through this application, consumers will be able to easily compare skincare products, learn more about them, and buy products that suit their needs. This will also save consumers’ money as they will not need to buy skincare products and use them on their skin and find out whether that product works or suits their skin. Our app will assist them in buying the correct products.

DermoScanners empowers skincare customers by providing barcode-based comparisons of various skincare products, helping them gain knowledge about the ingredients of products and also providing skincare recommendations tailored to their skin problems, making them confident about their skin and money.

Team members and roles

Arshdeep Kaur- Developer and UX designer

Pranjal Sethi- Lead Developer

Harsimranjit Kaur- Project Manager and User Testing Lead

# 2. Project Overview & Background

The skincare industry is expanding fast, introducing plenty of new products every year, making the choice for consumers quite confusing. Often, buyers must deal with ingredient names that use technical terms, lots of mixed online reviews, and not enough tools that fit their personal skin type. Because of this, people become uncertain about their purchases. DermoScanners provides an online assistant that makes it easier for people to research and find the right skincare products for themselves. To learn about what’s in a product, users can scan the barcode or upload it to see brief explanations, fast reviews, and a simple comparison with gas for similar new cars. The platform provides users with customized suggestions depending on their skin type, issues, and ambitions, taking a straightforward, evidence-based approach to shopping for skincare products.

# 3. Problem Statement & Need

Despite the availability of numerous skincare products on the market, the process of choosing the right one is anything but straightforward. Shoppers face multiple barriers that affect the quality of their choices and satisfaction with purchases:

* **Ingredient Complexity**: Most skincare products list ingredients in scientific or chemical terms, leaving average consumers puzzled about what those ingredients actually do and whether they are safe or suitable for their skin type.
* **Dispersed Information Sources:** Product reviews, ratings, and user experiences are scattered across various websites, online retailers, and forums, making it time-consuming and difficult to obtain a full picture of how well a product performs for different people.
* **Lack of Personalization**: The current shopping experience is largely generic. It rarely accounts for specific skin types, concerns like acne or sensitivity, or personal preferences related to ethical standards such as cruelty-free or vegan products.

There is a clear need for a centralized platform that provides transparent product information, gathers collective user feedback, and delivers suggestions based on a user’s skin needs. The goal is to reduce confusion, save time, and increase confidence in product selection.

# 4. Objectives

* **Barcode Scanning Capability**  
  Let users scan or upload product barcodes for instant identification.
* **Clear Product Insights**  
  Present concise ingredient explanations, usage guidance, and key product facts in plain language.
* **Review Sentiment Analysis**  
  Aggregate and summarize customer feedback to highlight overall sentiment, common praises, and recurring concerns.
* **Product Comparison Tool**  
  Enable side-by-side evaluations of ingredients, pricing, and satisfaction scores.
* **Personalized Recommendations**  
  Suggest alternative or complementary products aligned with a user’s skin type, sensitivities, and goals.

# 5. Why This is a Substantial Two-Semester Project

The vision behind this is both ambitious and impactful. Its development will require extensive planning, multi-stage implementation, user experience optimization, and comprehensive testing. Unlike a simple website, this platform requires layered functionality that makes it an ideal candidate for a substantial, multi-semester academic project.

The following points illustrate why two full semesters are justified and necessary for its completion:

• **Extensive Research and Requirement Gathering**  
The initial phase of the project will involve studying skincare ingredients, identifying reliable data sources, and understanding user expectations. This foundation is crucial for developing a platform that is both accurate and user-centric.

• **Interface Design and User Flow Mapping**  
Designing intuitive, responsive, and inclusive user interfaces for scanning, searching, and comparing products is a core part of the first semester. Special attention will be given to accessibility, simplicity, and efficiency.

• **Data Collection and Review Analysis**  
A large part of the work involves gathering, interpreting, and presenting review data in a meaningful way. This includes identifying patterns in user feedback, summarizing sentiments, and ensuring that the information is displayed in a non-biased, helpful manner.

• **Advanced Feature Integration**  
In the second semester, the focus will shift to implementing more intelligent features, such as product comparisons and personalized recommendations. These features depend on a deep understanding of user behavior and skincare science.

• **User Testing, Refinement, and Deployment**  
No digital platform is complete without proper testing. Time will be allocated for conducting user trials, collecting feedback, and refining both design and functionality before final launch.

The scope of the project is rich in complexity and requires continuous refinement. It is a layered process that involves research, content design, user interaction, and evolving logic—all of which demand a significant development period. Dividing the workload over two semesters will ensure quality, innovation, and thoroughness.