Deliverable 1: NOK L'Oreal

1. Background, Problem Statement & Proposed Solution

a. Introduction

We are **NOK**, a team of final-year Computer Science and Information Systems students at the University of Johannesburg, South Africa. Our team members—**N**qobile Nkiwane, **O**reeditse Tlou, and **K**eatlegile Ntsie—share a strong passion for innovation and aim to develop tech solutions that address important real-world challenges. With this project, we're excited to bring fresh ideas to the cosmetic industry, reimagining inclusivity in the digital beauty space by focusing on the male demographic.

b. Company / Industry Background

L'Oréal is a global leader in cosmetics and beauty, recognized for its commitment to diversity and inclusion. Recently, L'Oréal has been exploring ways to make self-care and grooming experiences more accessible and inclusive for men, challenging traditional beauty norms.

c. Current System(s) and/or Procedures

The male grooming market is largely reliant on traditional retail channels, with limited digital resources. Most online platforms are geared towards female users, leaving men with fewer personalized and supportive tools for skincare and grooming guidance. This gap in targeted, accessible resources limits men's access to self-care education and product recommendations.

d. Problem Statement

Men are underrepresented in the digital beauty and grooming space. The current lack of inclusive, tech-based solutions means men have limited resources for skincare guidance and self-care support, creating a barrier to normalizing these practices for all genders.

e. Proposed Solution

Our solution is to create a digital platform that offers men a supportive, personalized experience in skincare and grooming. It will provide tailored resources, educational content, and product recommendations designed to promote self-care as a positive habit for all. This platform aligns with L'Oréal's mission to enhance inclusivity, offering a unique opportunity to lead in fostering a more supportive and diverse beauty industry.

2. Requirements Extraction

a. Functional Requirements

i. **Profile Registration**
The web system needs to allow users to create a profile using their details such as name, surname, email address e.t.c

ii. **Login/logout**
The system needs to allow users the ability to login and logout of their profiles.

iii. **Update/delete profile**
The users will have the ability to update their profiles by changing their names, phone numbers e.t.c

iv. **Post/View/Download articles**
The system will have a blog section where users of the products can interaction with each other. They will have the ability to upload articles on the forum. Articles can also be downloadable if user wishes to read the article offline.

v. **Image/text/voice A.I prompts**
The system should have generative A.I. capabilities. Users can interact with this A.I. model through various methods, including text, voice or even image prompts.

vi. **A.I face recognition**
To take full advantage of the generative A.I. capabilities, the model will have the ability to analyse facial images that users upload their facial photos. The A.I. will need to analyse the facial structures, skin type, tone and give recommendations of the appropriate products the user should buy.

vii. **Product catalogues**
There needs to be an online store section. Here there will be product catalogues. Products will be categorized according to sex, use, brand e.t.c.

viii. **Shopping carts**
The online store will have a cart feature where the desired products will be added along the details like product name, quantity, price e.t.c. This will make checking out easier.

ix. **Payment gateway**
A simple to navigate payment gateway that accepts different forms of payment will be implemented. This will complete the shopping experience. Also for delivery purposes, before completing payment, users will be prompted to provide a physical address.

b. Non-functional Requirements