

# DeepBeauty

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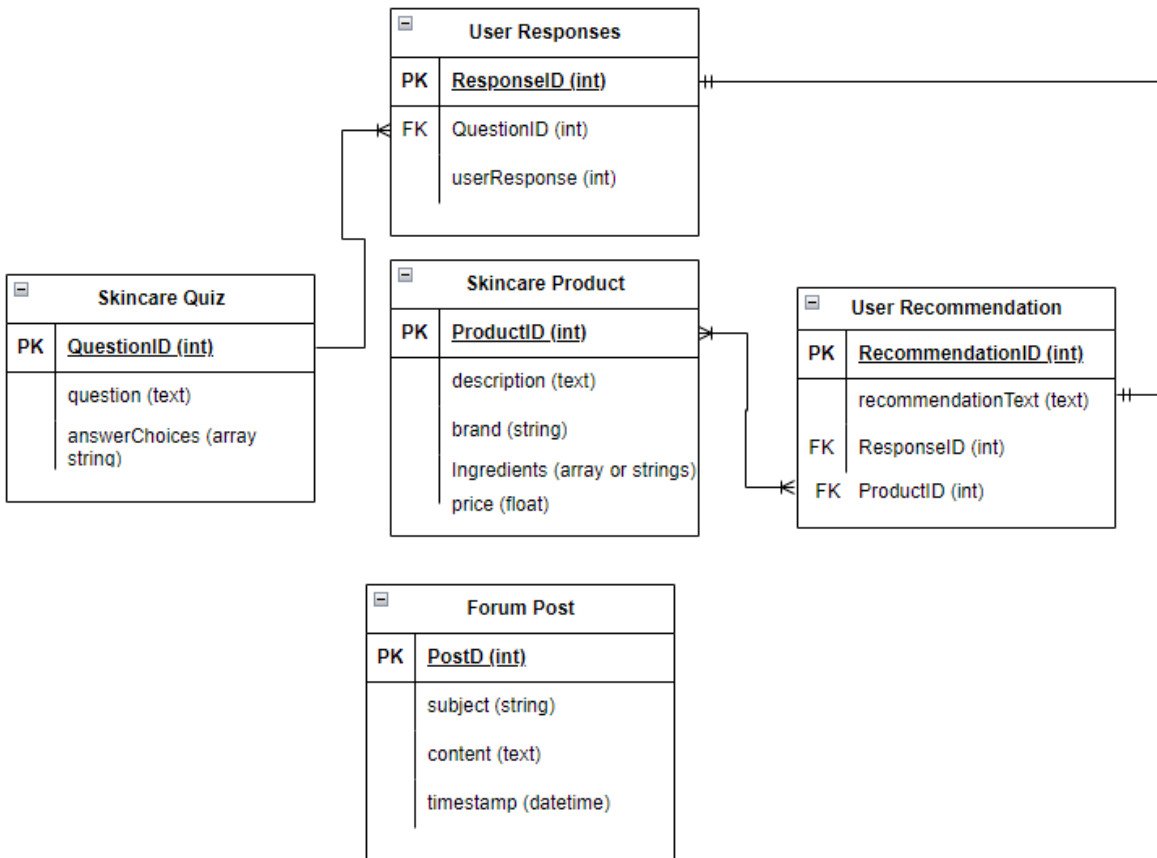
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## Database Design

### Overview

Django serves as the backbone of my skincare web application, providing a robust framework for building and managing web content. With Django, I can effortlessly create user authentication systems, handle URL routing, manage database interactions, and generate dynamic HTML content. Its built-in ORM (Object-Relational Mapping) simplifies database operations, allowing me to define data models using Python classes and seamlessly query the database without writing raw SQL queries. Additionally, Django's templating engine enables the creation of flexible and reusable HTML templates, ensuring a consistent and responsive user interface across all pages.

As for APIs, I'm leveraging Django REST Framework (DRF) to develop a RESTful API that facilitates communication between the frontend user interface and the backend database. DRF extends Django's capabilities by providing powerful tools for serializing and deserializing data, handling HTTP requests and responses, and enforcing authentication and permissions. By defining API endpoints for skincare products, forum posts, and other resources, I enable seamless integration with external services and client applications. With DRF, I can ensure that my skincare web application follows best practices for API design, including adhering to RESTful principles, using appropriate HTTP verbs, and providing clear documentation for developers.



Purpose, Implementation, and Interactions

## Skincare Product

Purpose:

My application purpose is providing users with a skincare routine that will list products from them AM/PM. This is a mandatory component to my web application.

Implementation:

When a user visits our web application and clicks to complete our test. They will be a personalized page that will have all the product recommendations based on their responses.

Interaction:

Users can navigate to the product tab and click on different products to show details such as ingredients, price etc.

## Skincare Quiz

Purpose:

The purpose of the skincare quiz component is to gather relevant information from users regarding their skincare concerns, skin type, preferences, and lifestyle factors. This information will be used to generate personalized skincare recommendations.

Implementation:

Upon visiting the web application, users will have the option to complete the skincare quiz. The quiz will consist of a few questions designed to assess the user's skincare needs and preferences. These questions may cover topics such as skin type, concerns (e.g., acne, dryness), and daily routines.

Interaction:

Users will interact with the skincare quiz by answering the provided questions. They will have options to select based on their individual circumstances and preferences. Once the quiz is completed, users may submit their responses, triggering the backend logic to process the data and generate personalized skincare recommendations.

## User Responses

Purpose:

The purpose of the user responses component is to collect and store the data provided by users during the skincare quiz. These responses serve as input for generating personalized skincare routines tailored to each user's unique skincare concerns, preferences, and lifestyle.

Implementation:

When users complete the skincare quiz, their responses are captured and processed by the backend system.

Interaction:

Users will interact with the skincare quiz by answering the provided questions. They will have options to select based on their individual circumstances and preferences. Once the quiz is completed, users may submit their responses, triggering the backend logic to process the data and generate personalized skincare recommendations.

## User Recommendation

Purpose:

The purpose of the user recommendation component is to provide personalized skincare routines tailored to each user's specific skincare concerns, skin type, preferences, and lifestyle factors. By

analyzing the responses collected from the skincare quiz, the user recommendation feature aims to offer product recommendations and skincare routines to address the user's individual needs.

#### Implementation:

Upon completion of the skincare quiz, the user's responses are processed by the backend system to generate personalized skincare recommendations. This implementation involves applying predefined algorithms or rules to analyze the user's input and match them with suitable skincare products and routines available in the database. The recommendations are then presented to the user in a user-friendly format.

#### Interaction:

Users interact with the user recommendation feature by completing the skincare quiz and providing their responses. Based on these responses, the system generates personalized skincare recommendations, which users can view and explore.

## Forum Post

#### Purpose:

The forum post component serves as a platform for users to engage in discussions, share experiences, ask questions, and seek advice related to skincare. It fosters a sense of community among users and allows them to connect with others who share similar skincare interests and concerns.

#### Implementation:

Users can access the forum post section (community tab) of the web application to view existing discussions or create new posts. They can post topics, ask questions, share skincare tips, or provide feedback on products and routines. Each forum post includes a title, content, timestamp, and user information to facilitate interaction and engagement.

#### Interaction:

Users interact with the forum post component by browsing existing posts, responding to threads, or creating new topics. They can share their skincare experiences, ask for recommendations, offer advice to others, or participate in ongoing conversations. Additionally, users can engage with forum posts by commenting.