AI Product Recommender

Product recommender is a tool, which allows user to get suitable products based on the facial features. This will be a new component. We will be integration it on the Dove site locally.

Tech Stack Used –

* HTML/CSS/JS for the frontend
* NodeJS & ExpressJS for Backend API
* MongoDB (Cloud) and Mongoose.

The Journey begins with the image upload page. User will upload an image on his face. The uploaded image data will be passed to the API in base64 format, which identifies facial features and returns certain parameters like Age, gender, emotion, hair color, hair length etc. along with the probability. The results of this API will be consumed by second API which helps us connect to the DB.

Second API will be written Node/ Express.js backend and it will help us query the Database based on the features returned from the first API. The result will be returned in JSON format.

The Database will consist of a schema which will contains fields like product name, description, price, best before, image, suitable age, suitable hair length, suitable hair color, gender etc.

We will use MongoDB cloud Database along with Mongoose for connecting and interacting with the DB.

Product data returned from the database will be rendered and shown to the user (similar to product listing).

Alternatively, the user can edit the facial data parameters on the screen or upload new image if he/she is not happy with the automatically recognized features.

On a broad level, Dove products can be classified into four categories -

1) Core (Women products)

2) Men Products

3) Dove Self Esteem

4) Baby Dove

These categories can be further divider into various sub categories like age, gender, hair length, hair color, race etc. to generate “suitable for” tags in the database. We will be using these tags to query the database.

The Flow will be as below -

Dev Roles:

Talvinder

* New Component & Frontend for image upload.
* Feature detection API Call.
* Develop Node API to query DB and return data.
* Prepare schema for the DB.

Piyush

* Render & Show JSON Data returned from the DB
* Frontend for product listing and features editing.

Abhishek

* To do Product Entries in the Database.
* Ensure Data accuracy for the tags.