

Human attire is a symbol that represents people's internal perceptions through their outer appearance. It conveys information about their choices, faith, personality, profession, social status, and attitude towards life. Therefore, clothing is believed to be a nonverbal way of communicating and a major part of people's outer appearance. Recent technology advancements have enabled consumers to track current fashion trends around the globe, which influence their choices. There are many online fashion applications available. However, none of them has the filter, where module recommends according to the physical appearance. Existing systems do not provide personalized recommendations. This may result in waste of time.

To solve this problem, we come with an innovative solution where the system itself takes the details of the user, analyses their physical appearance, and suggest the best outfit that most probably matches their expectations.

Stage 1: We have created a web application using HTML, CSS and JavaScript. We have integrated it with the help of a python flask. In the first step user will be introduced to the main page where, user can login if he/she is existing user or else create a new account using sign up. To store all the login credentials securely we have used SQLite as a database, after successful login user need to interact with IBM Assistant. The IBM Assistant asks questions related to their event, gender, age group, and size group, to analyse what he/she looking for, the assistant will record all these responses in the back-end.

Stage 2: To connect IBM assistant with python flask we have used the ngrok application. It will send the assistant responses to the python flask, where the result will be stored for the next condition checking. In the end assistant will respond with upload an image, the user has to upload an image that will be used to identify the skin tone of the user by image recognition service. User can upload image using gallery button or else they can click the image with the help of the camera button and save it on the local disk, and upload by using the gallery button. We have built this image recognition service with the help of the CNN module. The CNN Module determines the skin tone with the help of the train dataset and test dataset.

Stage 3: The application will take all of these results obtained in both the step and according to the conditions, it will show the fashion recommendations. With the help of this application, users can get fashion recommendations related to their event only. Some additional features are also there, where user can change their account details, or delete the account. If they need any help, the help page given with the solution to the problem.

The main application of this solution is that it is less time-consuming, as users may not have to search multiple sites for the best outfit. As there is a new feature where outfit recommendations can be set with the filter of physical appearance. As there is no module exists which has the physical appearance as the filter. If the physical appearance report is generated then dealers can decide which outfit to be exported according to the region. Which helps in the fast growth of the business.