Task Analysis

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Who will use the system?
 Everyone can use the system, including people whose skin is sensitive or people going through puberty or menopause with rapid hormonal changes or people who don't know his or her skin type, etc.

What is the current user doing?
 The current users get recommended skin care cosmetics from a friend, family or acquaintance like coworkers, or from a cosmetics store employee. They can find skin care cosmetics through Internet searching, Youtube videos, or reading reviews that are said to be good.

What do you need?
· What users consider important when choosing cosmetics
· Understanding text recognition algorithms
· Understanding of recommendation systems, knowledge of artificial intelligence
· More data about cosmetics (or data related with age and skin type)

How can you learn about work?
 We can learn what users want through Google Form questionnaires such as whether they are curious about the ingredients of skin care cosmetics that do not suit their skin type, etc. And we can find free lectures covering recommender systems and artificial intelligence or search related papers.

Where does it work?
 People can use this system anywhere. People can use it at home or workplace to check what ingredients don't fit their skin, and people can use it at cosmetic stores before buying a new cosmetic product.

What is the relationship between users and data?
 Users use the cosmetic product, and we can make data based on the user's evaluation and thoughts on that cosmetic product. Also, based on the data made by other users, we can recommend a cosmetic product that will fit well to the user. Furthermore, since we have the data of ingredients in cosmetic products, it is easy to recommend users based on the data.

What other tools do users have?
 There are other tools related to cosmetic products such as Olive Young, '화해' etc. However, they usually show users the ranking of the cosmetic products that others buy the most. They don't have a function to find the ingredients that don't fit people's skin and don't have a recommendation system based on it, so our tool is distinctive from those tools.

How do users communicate with others?

Currently, users get information through direct conversations with acquaintances or cosmetic store clerks. Or, they refer to YouTube videos or search for products directly on the Internet. Before purchasing, users make purchase decisions after viewing reviews of cosmetics searched through the Internet.

How often do they work?

We expect each user to use this application once every three to six months when searching for one type of cosmetics. It is because the expiration date of cosmetics is usually 3 to 6 months. In addition, some people change cosmetics according to seasonal changes because their skin condition changes depending on the season.

Are there any time constraints on this task?

There is no time limit to using this application. However, in terms of updates, newly released cosmetics do not have much purchase history, so even if they are suitable for the users, it can be difficult to make it to the top of the recommendation list in real time.

What happens when something is wrong?

If a problem arises in terms of the algorithm of the application, it will not be possible to recommend suitable cosmetics to users, and extreme problems that can harm the skin health of users can occur. Also, when you take a picture to recognize cosmetics in the first stage of the application, if this application does not properly recognize the text of the cosmetics, this will not be able to recommend the product correctly. Since these problems are directly related to technical problems, it is necessary to perform algorithms and artificial intelligence designs meticulously.