I. Introduction - K-pop

K-pop(Korean pop or Korean popular music) is a musical genre consisting of electronic, hip hop, pop, rock, and R&B music originating in South Korea. Many view K-Pop Merchandise as an opportunity for fans all over the world to support their favorite acts and it usually includes a wide variety of products from posters, albums, apparels, accessories and other official goods specific for each artist. It's currently a booming industry among fan communities and as long as there are K-pop acts out there, there are people who will continue to support them by buying merchandises. With the fast growth of technology as we know it today, E-Commerce and Online Businesses are rapidly growing each year and it already incorporated itself to most successful businesses that we have today and the same can be said for the K-pop world.

In this study, we incorporated the software development life cycle in the whole process of developing the website. For the Requirement Analysis Phase, we picked three similar competitors to identify and analyze the problems that lie within them, and then used it to effectively propose improvements. In the Design Phase, we prepared a menu layout of the main page together with a usercase diagram for our website. As for the Development Phase, we used HTML5 and Cafe 24 to bring our design to life. This shopping mall hopes to promote K-pop globally while generating profits at a lower marketing and production cost.

II. Requirement Analysis

We chose three similar K-pop Merchandise websites namely KPOPTOWN[2], KOPPMART[3], and KPOPVIBE[4], and evaluated them based on different fields including Main Page, Website's Vision, Navigation System, Page Configuration, Search System/ Statistical BBS, Graphics, Operations and Management, and Marketing. In Fig 1. Web Evaluation Checklist shows that evaluation scores for 'Navigation System' is uniformly lower than the rest of the categories. Scores given is from the range of 1-5, 1 corresponds to 'poor' and is the lowest and 5 as 'very good' and the highest score. We gave a bunch of questions under each category and we got the average of every individual categories for each website.

![Web Site Evaluation Check List]

Based on a comparative analysis of the evaluation of three similar competitors, it can be concluded that while basic website functionalities were good, the graphics and navigation systems for all three were significantly lacking as can be seen in the graph. With this, we proposed a secondary navigation feature which is a scrolling move on the side, enabling quick movement to different parts of the page. We also came up with the idea to keep the main image updated with artist's recent comebacks and link it to their respective music videos. Fig 2 shows a use case diagram using Unified Modeling Language (UML). The use case diagram in Fig 2 shows the interaction between the system and the customer and shows the service
functions of the system from the user's perspective. The log-in process is omitted from Fig 2, and the goods can be checked and paid immediately after searching for the product.

![Fig 2. K-NARA Kpop shopping mall’s Use case Diagram](image)

### III. Design Phase

Fig 3 shows the design of the website’s main page. Logo will appear on the top left screen and beneath it will be the site’s menu. On the right side of the site will have a quick menu feature that will help the users for a much more comfortable navigation experience. The Main page’s image slide show will show pictures of artists/idols who recently had their comeback, which will be linked to the artist’s music video. Beneath it will be the notice board and the merchandise area.

![Fig 3. Main page structure](image)

Fig 4 shows the overall menu structure of the K-POP shopping mall. The menu is mainly consisted of apparels and accessories worn by the idols, CDs/albums, miscellaneous, and new items(newly released products).

![Fig 4. Menu structure](image)

### IV. Development Phase

Fig 5 shows the prototype system’s main screen using cafe24 smart design tool. It shows the actual implementation of the design shown in Fig 3. The upper part of the site shows the logo and main image slide show, and the area below is divided into bulletin boards and footer areas. The menu is on the lower left side, when clicked, will show a detailed description screen for the product in the right area.

Fig 6 shows the HTML5 code that modifies the logo, menu and image slide show using the smart design feature of Cafe24 tool.

![Fig 6. Modified HTML5 Code](image)

### V. Conclusion

Fans would buy almost anything just to support their favorite K-pop idols but there are more international fans who don’t have time to fly to Korea so they tend to use online stores to buy their favorite artist’s goods–thus the growing demand of online k-pop stores. Now, more and more K-pop merchandise is being shipped out of Korea which has also helped improve the country’s global sales. Having an online based platform for merchandises means that not only can it promote opportunities of profit for suppliers and sellers alike, it can also provide a better platform of Online K-pop merchandise store for K-pop fans from all over the world. A user friendly interface and navigation system also establishes higher customer satisfaction and results in better overall online shopping experience. As you can access the website anytime and anywhere, it offers easier, cheaper and a whole lot more convenient means of buying your K-pop merchandise without taking too much of your time.

### References