

Team #9

Members:

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1. Subject Application:

- Topic: Flea Market
- Name: Goostore

2. Application Summary

- a. Target domain: APPLICATION, SHOPPING
- b. Expected user: KAIST students
- c. Description: KAIST students, especially exchange students often have things that are no longer used after their short stay but may still be useful and in good condition, and it will be a huge waste for the students to just throw them away or abandon them somewhere on campus.

Originality: There are many similar Apps and websites which have been realized the flea market functions, such as Xianyu, Craigslist and so on. What's more, some physical flea markets have also existed on campus and are very popular among Korean students for the cheap price and excellent quality of goods especially the textbooks. However, as foreign students, we always need to face plenty of problems to find the flea market or what we want in the market, like the language and limited information resources. Hence our App is specially designed to help we foreign students to get access to the local flea market and obtain what we like much easier or sell things we do not need anymore but still meaningful to others.

As for our originality of this App, firstly, our App will focus on the huge demand of campus students, such as second-hand textbooks, bicycles, small furniture, electronic products and even housing rental information for foreign students. Secondly, auction-based system will be implemented, and the sellers can either just set a fixed price for their goods or choose to use our auction system to get more profits. Meanwhile, the buyers can also set their expected price before the beginning of auction and they will get the item after the auction if they have supported the highest price. (If there are several persons who have set the same price, the one who first provided the price will be the winner.) The third one is the effective quality assurance measures.

After the buyers pay for their goods, our system will temporarily have custody over these money which is like the mechanism of credit card pre-authorization, and the sellers can get this money only after the buyers have checked the goods and make sure they are in good conditions. More importantly, the traditional flea market is seller oriented and sometimes the buyer can not find exactly what they want, so our App can provide this platform where our users can make their personal requests and expected price, while our sellers can also provide them with suitable goods. In addition, our App will imports credit rating system for sellers which is based on the trading volume they have made, and the higher credit rating means the information of your merchandise will get more chances viewed by buyers. All in all, the original intention of our App is to provide our foreign and even Korean students with more convenient service and help them better save living expenses in Korea.

3. Functional Issues

a. Interface issue

- The most basic and important functional issue given to us is to build the interface. We need to create an interface such as a homepage, trading systems, accounts systems, which are the basic elements to operate a market.
- In order to purchase and sell many goods, an interface for sorting goods is required. The system needs to be able to order the items according to the information the users want, such as price.
- We have a functional issue with how we store and sort data, and we are considering using XML.
- The interface required for buyers and sellers is different, so each interface must be produced.

b. Internet issue

- Our app must be connected to the internet. We need to make it possible for buyers to see the goods which are uploaded by seller, so we need to allow data to be shared by multiple users.
- We need to create a server that can share data.

c. Interaction issue (about signal)

- The biggest feature of the flea market is that there must be a person who wants to sell the product in order to buy the product and vice versa. In this situation, competition between sellers and buyers can also occur.

- Since users cannot always access our app, we must be able to signal people with information about buying and selling goods. Thus we faced a functional issue of how to send a signal.

4. Non-functional issues:

Accessibility - app will be designed for people without disabilities.

Availability - app should work almost 100% of the time.

Capacity - app should have a high rate of reliably transmitting information.

Data Integrity - app should have collect and transmit the data very accurately.

Environmental - app will not have any negative impact on the environment.

Interoperability - interface of app should be completely understandable.

Maintainability - app should constructed so that every change could take only a few time and resources.

Performance - app should have very short response time and high throughput.

Reliability - app should have high reliability.

Scalability - app will be potentially scalable as having more sellers, we will have more items and therefore more buyers, so the number of users could increase without a limit.

Security - users' physical and cyber security will not be affected as users do not input any private information, except registered mobile number/kakao id, but it is not something dangerous.

Usability - app will be easy to use for all students (English speaking).

5. Github Link:

- <https://github.com/Rainhunter13/CS350-Project>