

15637 F14 Final Project Proposal

Online Flea Market

Team member

Tianyu Xu (tianyux@andrew.cmu.edu)

Haoliang Quan (hquan@andrew.cmu.edu)

Project Description

In some university BBSs, there is a board called SecondHand, which allows students to sell and buy used stuffs. However, this trading system has several obvious disadvantages. First of all, descriptions and pictures can be deceptive. It is hard to tell whether the seller and the buyer are reliable or not. Second, the price is always fixed. The seller and the buyer are hard to bargain with each other. Third, a BBS, as its name suggest, is merely a place to leave messages. It is hard to search and compare goods on this kind of.

Based on this demand, we are going to build a web application called Online Flea Market. On this website, users can be seller, buyer or both. Sellers can post their goods onto the market, associated with photos and descriptions. They can choose either fixed price or bidding price to sell their stuff. Buyers visit this website much like visiting Amazon: they scan by category, or search typical keywords to get what they want. There is also an evaluation system within the market. Buyers may comment on the goods they bought as well as the sellers they bought goods from. Sellers may give descriptions or stars to buyers. All these features have one same goal: to make second-hand trades easier and on-campus transactions safer.

Detailed Features:

To be specific, our Flea Market is supposed to have these features:

Key features:

- User authentication: one student can only register one account. This prevent students from registering multiple accounts to do something malicious.
- Item posting: a user can post any stuff he wants to sell on the website, associated with photos and descriptions. Seller can also choose category and add tags to each good she/he sells.
- Price mechanism: seller can use fixed price or auction to accomplish a transaction. For fixed price, buyer can only buy the good on this price. For auction, anyone who wants to buy the good may bid against each other in a specific time range. The one who bids the highest will finally get it.
- Search: buyers should be able to search a good by keywords. Buyers can also choose to scan items just by category.

- Credit evaluation system: evaluation is a two-way process. After a successful transaction, the buyer can evaluate the goods as well as the seller; the seller can also evaluate the buyer. The evaluation will be displayed with the good or on the detailed information page of the user.

Additional features:

- Q & A system: potential buyers may ask questions about the item on the item page. The owner of the item can answer some of these questions.
- Demand posting: it is possible that someone wants to buy something but no one sells it at the moment. In this case, buyers can post a demand on the website so that if someone happens to have it and wants to sell, he can contact with the buyer.
- Message box: for additional communication needs, we have a message box system that allow users to send short messages to another user.
- Email notification: user can get email notifications when certain event happens, for example, when a fixed-price transaction is accomplished or someone else is bidding against you.

Develop Technology:

Server side:

Django: Good web framework that we have been using for more than a month.

Client side:

AJAX: Based on the highly interactive nature of our (proposed) project, AJAX is an essential technique that we must make good use of. Also, jQuery is something that we do not want to miss in this case.

CSS3: Some animation feature may be implemented by CSS3.

B/S communication:

JSON: JSON is a good way to pass intermediate data between server and browser, since an object is easy to be serialized into JSON at server-side and deserialized into an Object at browser-side.