## 5100 Final Project Proposal

**Team Ambition** 

In this era, when people are attracted by short information, we expect that more people can concentrate on reading books. At the same time, we also hope that people can recycle old books, not only save resources but also share knowledge with others. The purpose of our application is to provide quality books for people through data and build a robust old book recycling system. We trying to help people pick books that they may have more interests on and let people share their opinions of books freedom. More importantly, we hope that readers can recycle old books and exchange knowledge.

Our application has three structural level: network, enterprise and department. On the network level, We can create multiple book enterprise base in different city. Each book enterprise has three departments: reading community, where customers make comments; bookstore, where customers purchase books; second-hand book market, where customers share their books. We are able to use the system model to implement the following three different use-cases, supplier, administrator and customer. Suppliers hold book enterprise providing different types of books, while the administrator manages users accounts and inventory. Through the book recommendation and user evaluation on the system, customers can select the corresponding books of interest to purchase. Adding books to the shopping cart, making payments and managing history shopping list are available for customers. On the reading community, the application provides users a chance to obtain reviews and opinions about books they interest in. If the users are touched by a story, or get some thoughts inspired by a book, they have a specific area to publish their comments and browsing those from others with same or different opinions. What's even more exciting is that customers can sell their old books back to the bookstore, and then the bookstore sells the books at the lowest price to those in need,

The project mainly contains entities in relation to online book review and user shopping process. Abstract entities include User and Comment, which are super classes of some other concrete classes. Customer, Book Supplier and Administrator are subclasses of User class. Book Comment and Item Comment are subclasses of Comment. Besides, Book entity is the sales subject, Store entity supply a directory of Book. Order is the entity in shopping process, containing a list of Item.

Except key functions, the application also contains additional designs to improve user-experience. In shopping process, customers could manually finish their orders after receiving commodities they purchased and evaluate each item in the order. And base on this function, the application could count and analyze to find the most popular books, which will be recommended to all of our users. And in book reviewing module, administrator could manage all of comments published by other users, such as deleting improper comments