**Title for Project**

Application for consumer-to-consumer trading

**Problem Definition**

The rapid development of information technology has facilitated an elegant trading environment in the Internet. There are many trading platforms nowadays but there is no good platform designed for direct consumer-to-consumer trading primarily for university students and people for local trading, to sell their goods and services directly through the website from which they were bought. Such a need arises in a social network where items should be traded or exchanged easily with a small community. The famous websites such as Amazon or eBay are too global in nature and does not support the direct trading of goods and services among the students in a small social network such as a campus environment.

**Previous Approach**

Previously, the Content Based Filtering Algorithm was used. Content recommendation system recommends products to the buyers based on the content of the buyers past. Buying history gives the content of the overview of the products*,* in which buyer is generally interested from the large amount of products. Content recommendation system filter products based on the content of the product, in which buyer is interested. Content recommendation system uses Content based filtering for doing the separation.

The disadvantages of this approach are that the content based filtering does not take into consideration the reviews from other customers or other users.

Content based filtering also has some limitations like finding the quality of the content. For example content based filtering cannot differentiate between good article and bad article.

**Proposed Approach**

The Proposed approach uses the combination of Content based Recommendation as well as the collaborative recommendation and intersection between them.

Content recommendation system recommends products to the buyers based on the content of the buyers past product buying history. Buying history gives the content of the overview of the products, in which buyer is generally interested from the list of products.

Collaborative filtering system are used because they are based on opinion of the other users. Collaborative filtering is one of the way to do recommendation on the web.

Association rule mining finds interesting association and correlation relationship among data set of items .For example, in market basket analysis customer buying habit is analyzed for finding association between different items customer put together in their shopping cart.

Our web application mainly has two options in which you can use the feature as a buyer or a seller. A user must sign up to the application in order to become a seller or a buyer. An email verification is done when the user signs up on the website. Once signed up only he gets access to sell his goods or buy any product. A seller gets to sell his items bought from the website by specifying additional specifications. The application recommends to the buyer the used product he wishes to buy based on the price specified by sellers in descending order. Buyer once logged in gets the option to order the product which he is interested. Data mining techniques is used for the buyer who gets to see similar products to which he is looking for and even the recently viewed items. Once a buyer buys a particular product the seller of that product gets an email notification that his product is sold and other details about the buyer. Another added feature in this is that there is an admin login where he gets to add or remove new products, find out all the transactions that has taken place.