Program Plan

# User Interface

* Add book rating
* Edit book rating
* Delete book rating

# User Information Collection

## User Profiling

Gather ratings from users

## Web usage analysis

All user ratings available through database query

Cluster users into groups based on ratings

# Information Retrieval

## Retrieval Methods

### Content-based

Allow user to search by title key word

Allow user to specify genres from list of genres

### Collaborative

Make recommendation based on user and community

Cluster model [segmentation] and Bayesian model [conditional probability]

MinHash or PLSI (Probabilistic latent semantic model)

#### User History

predict from user’s past ratings

#### Collaborative Info

weighted average of ratings of others, weights on how similar users are

User-Based Nearest-Neighbour CF

## Content Management

## Information acquisition and searching

# Content Presentation

## Publishing