# NACOA (Not A Copy of Amazon) Design Document

I ordered the things we need to get done at each level (presentation (JSP), business (Servlet) and data access (database)) in the order of functionality so you guys know what needs to get done.

Please change things if you think its missing something or is wrong.

Presentation layer is the most independent layer. Servlet responds to presentation layer requests and processes form info. Servlet talks to the database layer providing queries.

## Deliverables:

* **Creating Database schema** (Database): DONE
* **Generating Database Data** (Database)
* **User registration**
  + JSP: Link to registration form in topbanner?
  + JSP: a registration.jsp with a form with username, password and email
  + Servlet: process registration form
  + Database: create a new user in table with information, set not confirmed
  + Servlet: send email with confirmation
  + Servlet: redirect to jsp
  + JSP: a waiting\_confirmation.jsp with a message “Please check your email…”etc.
  + Servlet: process confirmation from email (process request)
  + Database: set user in table to be confirmed
  + Servlet: auto login
  + Servlet: redirect to main page If confirmation complete
* **User login**
  + JSP: Link to user login form in topbanner?
  + JSP: a login.jsp with a form with username/email, password and email
  + Servlet: process login form:
  + Database: query retrieve password
  + Servlet: compare stored password, if correct login (set session attributes with login=true, userid, username etc.), else if incorrect return error message
  + Servlet redirects back to main page if successful
* **User Info change**
  + JSP: Link to user’s account settings in top banner?
  + JSP: a account\_setting.jsp with a form for all user data to edit.
  + Servlet: process account setting changes
  + Database: query and edit user data
  + Servlet redirect back to account\_setting.jsp with account details changed
* **Selling Books**
  + JSP: need to implement a way to sell books…
    - Should we have a link on main page or topbanner to a jsp…
    - JSP: upload\_books.jsp? Where user can input into a form a new book details and then click “upload book”
  + Servlet: process new book information
  + Database: create a new book in table, with user’s sellers book table set
  + Servlet: redirect back to the jsp we left off (upload\_books.jsp)
* **Buying Books**
  + JSP: we can keep what we have except now we need to include a “buy” button at the shopping cart (cart.jsp)
  + Servlet: process cart info, access database to…
  + Database: retrieve info we need to display at check out like credit card details, address etc (if available), return availability of books (not sold yet)…
  + Servlet: remove books that have already been sold
  + JSP: checkout.jsp, which has credit card, address info etc if does not exist yet, and a confirm button. Returns error if book already sold. Form to “checkout”…
  + Servlet: process checkout, notify sellers via email about their books being sold…
  + Database: change book details, retrieve emails, change shopping cart
  + Servlet: redirect to…
  + JSP: transaction\_complete.jsp: message “Thanks for Shopping” or something similar
* **Admin stuff**
  + JSP: need a JSP menu that is separate from what we have that is like a search for people.
  + JSP: Admin can search for all people and go through and ban…
  + Servlet: process ban queries and turns on a flag for a user to be banned
  + JSP: a link from each user in result to their transaction history.
  + Servlet: retrieves request, asks database to retrieve info
  + Database: returns user’s transaction history
  + JSP: user\_history.jsp displays the user’s history
* **Tracking users (Database only)**
  + Should be simple, we just add in a function that queries the database adding in entries for the user and what they’re doing + the time stamp. We can do this last.