

cis20.2, spring 2010, project III
tools and technologies

- This is the project for Unit III. It is worth **15 points** (15% of your term grade).
- It is due on FRIDAY APRIL 30 by midnight.
- SUBMIT your assignment via email to: sklar@sci.brooklyn.cuny.edu
- Do your development on the mingus server (146.245.250.181).

This assignment covers two aspects of your group project: (1) the user interface and, (2) the flow of data. Use this assignment to develop these aspects. In PART 1 and PART 2, you will design and implement these aspects for your group. In PART 3, you will independently discuss these aspects as they relate to two case studies.

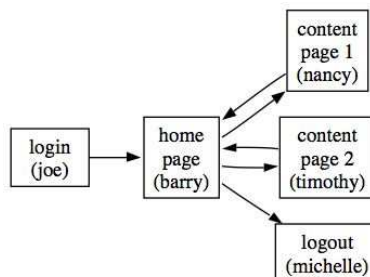
⇒ **READ THROUGH THE WHOLE ASSIGNMENT BEFORE YOU BEGIN!**

PART 1 – user interface

5 points

The team member in your group who is responsible for the **user interface** should take the lead in designing an overall look-and-feel for your group's site as well as the overall architecture of the pages (i.e., what pages there are and how to go from one to another). The person whose role is **system administrator** should take the lead in designing the system administration pages.

Step 1. As a group, develop a common storyboard of pages, one for the interface for both normal users and one for system administrators. Each should be a diagram with page labels and arrows showing how to get from one page to another. Each member of the group will implement one or more of the pages in this diagram. On your diagrams, make sure that you clearly indicate who is implementing which page(s). An example is shown in the figure below.



Step 2. Implement the page(s) that are assigned to you. These pages should reside on the mingus server.

Submission. Your submission for this part should consist of:

- A copy of the two diagrams created in the first step, above (one for normal users and one for system administrators). Note that everyone in the group must submit copies of the diagrams. Make sure that the diagrams clearly indicate which page(s) you have implemented and how they fit into the rest of the site.
- A list of the URLs (on mingus) of the page(s) that you implemented.

PART 2 – data flow

5 points

Work together with your team members to design two overall data flow diagrams: one for normal users and one for system administrators.

Step 1. Use each of the two user interface diagrams (completed in PART 1) as a guide to illustrate how data from the tables designed and created in Project II will flow into and out of each page. Be sure to indicate which pages will access data for reading and which pages will access data for writing. You only need to provide this level of detailed data flow information for the page(s) that you are implementing.

Step 2. Implement the data access you have designed on the page(s) that you implemented for PART 1.

Submission. Your submission for this part should consist of:

- A copy of the two diagrams created in the first step, above (one for normal users and one for system administrators). Note that everyone in the group must submit copies of the diagrams. Make sure that the diagrams clearly indicate which page(s) you have implemented and how the data flows to/from each page you “own”.
- A list of the URLs (on mingus) of the page(s) that you implemented. (This is probably the same as for PART 1, but please include this information again.)

PART 3 – case studies

5 points

This section should be done independently (i.e., NOT in your group).

Below are two sets of web sites (A and B), each specializing in bringing stuff (set A) or information (set B) to people. For this section of the assignment, you will pick ONE site from each set and critique that site as follows.

- (i.) Draw a basic storyboard of each site. Obviously, these sites are quite large and you will not be able to diagram the complete content of each site. Pick what you see as the most relevant content. You should include at least 3 pages from each site. (2 points, 1 per site)
- (ii.) Draw a data flow diagram for each site, based on the pages you have included in your storyboard (above). (2 points, 1 per site)
- (iii.) Compare and contrast the two sites, based on the information you have gathered and diagrammed, above. (1 point)

Set A. Web sites that focus on delivery of goods or products (bringing stuff to people):

- amazon.com — a “click and mortar” company that didn’t exist before the internet. It delivers products and also provides a means for re-sellers (other companies) to sell products through amazon’s gateway.
- macys.com — a traditional “bricks and mortar” company that existed long before there was internet; but now they have a web site and support online purchases in addition to physical stores.
- 11bean.com — a catalogue-based company that sells clothing and accessories. Now they have a web site and also sell online, in addition to sending out physical catalogues and supporting sales over the phone. Originally, they did not have any physical stores (except a factory outlet in Maine, where the company is located), but now they have stores in shopping malls.

Set B. Web sites that focus on delivery of services (bringing information to people):

- yahoo.com — delivers a wide range of services, from email to games to a search engine to news feeds
- google.com — primarily a search engine, but also now supports email, hosting and a very popular mapping application
- jstor.org — a not-for-profit services that archives and provides access to a broad range of academic journals

Submission. Your submission for this part should consist of:

- Two storyboard diagrams, one for a site from Set A and one for a site from Set B.
- Two data flow diagrams, one for a site from Set A and one for a site from Set B.
- One or more paragraphs, written in clear English, comparing the user interface design and data flow of the two sites you have documented.

SYNOPSIS

You need to develop and submit the following:

- Part 1: interface diagram for normal users
- Part 1: interface diagram for system administrators
- Part 1: list of URLs (on mingus) of the page(s) for which you implemented the user interface
- Part 2: data flow diagram for normal users
- Part 2: data flow diagram for system administrators
- Part 2: list of URLs (on mingus) of the page(s) for which you implemented data access
- Part 3: interface diagram for one case study site from Set A
- Part 3: interface diagram for one case study site from Set B
- Part 3: data flow diagram for one case study site from Set A
- Part 3: data flow diagram for one case study site from Set B
- Part 3: comparison of site from Set A with site from Set B