

# Specifications Document – Alpha

## Product Overview

This product is intended to assist users in the rescheduling of specific sections.

## Requirements

### Priority Definitions

1. This requirement is a “must have” for the product to function.
2. This requirement will make the product much more efficient, but is not necessary for it to function. It is still highly imperative.
3. This requirement is a luxury and is not necessarily needed. Functional Requirements

### Functional Requirements

| Function  | Priority | Date Reviewed | Approved by  |
|---|----------|---------------|--------------|
| The system should provide all information available via Banner regarding the rescheduling of the section in question for the user to view.  | 1        | 8/12/14       | Jonathan Nix |
| The system should provide the optimal solutions for rescheduling a section.   | 3        | 8/12/14       | Jonathan Nix |
| The system should provide information in order of relevancy. The user determines relevancy and chooses which information they want to view. | 2        | 8/12/04       | Jonathan Nix |

## **User Interface Requirements**

The user interface should...

- Provide a user login screen.
- Provide prompts for the user to input current section information. Instructions on what input to give and what to do to run the application should be clear.
- Provide output as information in a table format. This will look like the already existing room times' table.
- Provide output as information in a list format. An example of this is displayed below the same existing room times' table.

## **Usability**

The product should...

- Be easy to learn and understand. Clear instructions will be provided on each page regarding how and where to give input and how to view different output. (See User Interface)
- Only be useable by authorized personnel. (See security)

## **Performance**

The product should...

- Be able to support multiple users at once.
- Be able provide correct feedback within an average of 5 seconds.

## **Manageability/Maintainability**

The product should...

- Have access to Banner and download information each night.
- Run on multiple at least two servers so that if one fails, the system can remain operational
- Have embedded Ruby files that allows our system to be more easily maintained.

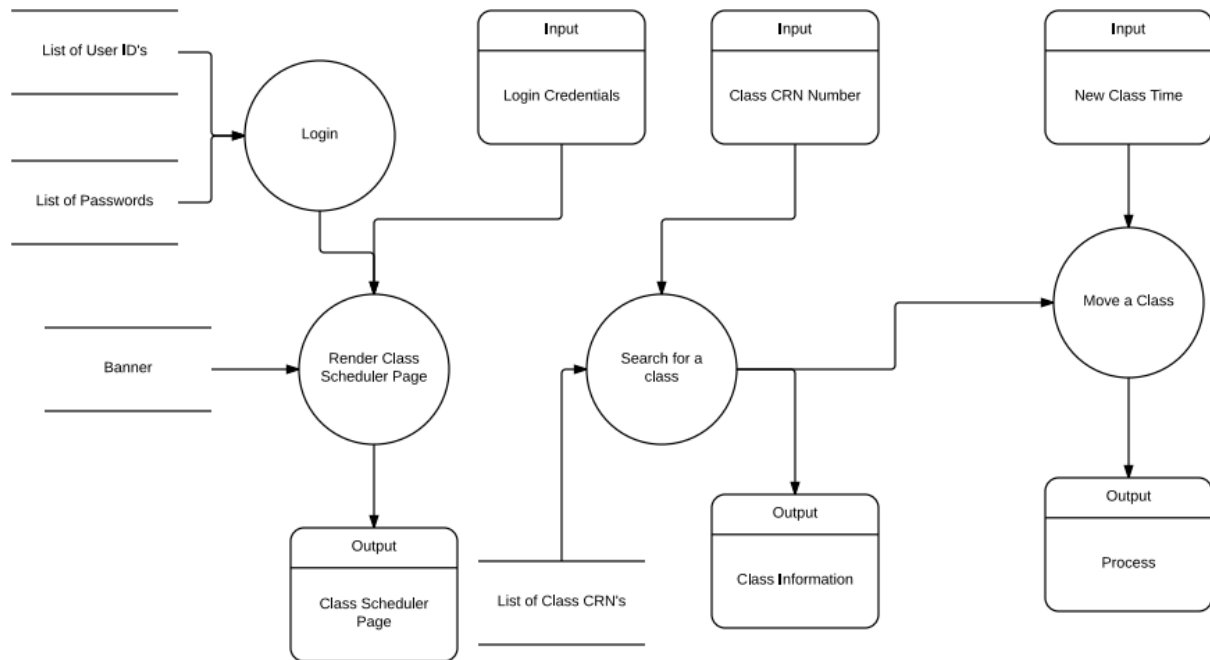
## **System Interface**

- Our system will use MongoDB.
- Our system will use the testing framework, Cucumber.
- Our system will use Sinatra.

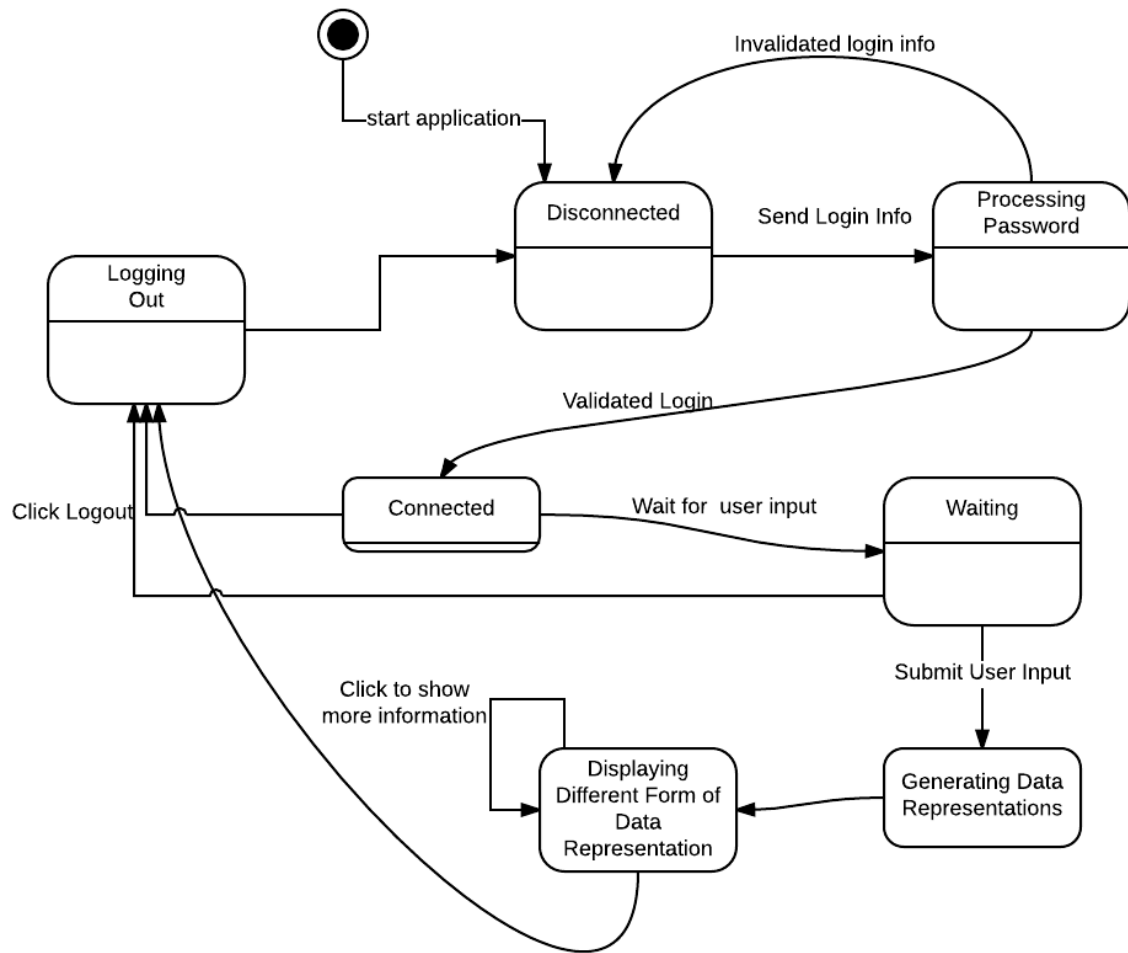
## **Logic and Algebraic Specifications**

We felt that there was no need to describe our specifications in this way. After analyzing the different processes that our web application goes through, we saw that the addition of these descriptive specifications would only complicate our document. We felt that our previous specifications were sufficient in describing the workings of the application. The Algebraic specifications seems to be only relevant if our application heavily relied on using object oriented concepts, but we did not specify any objects oriented concepts in our design.

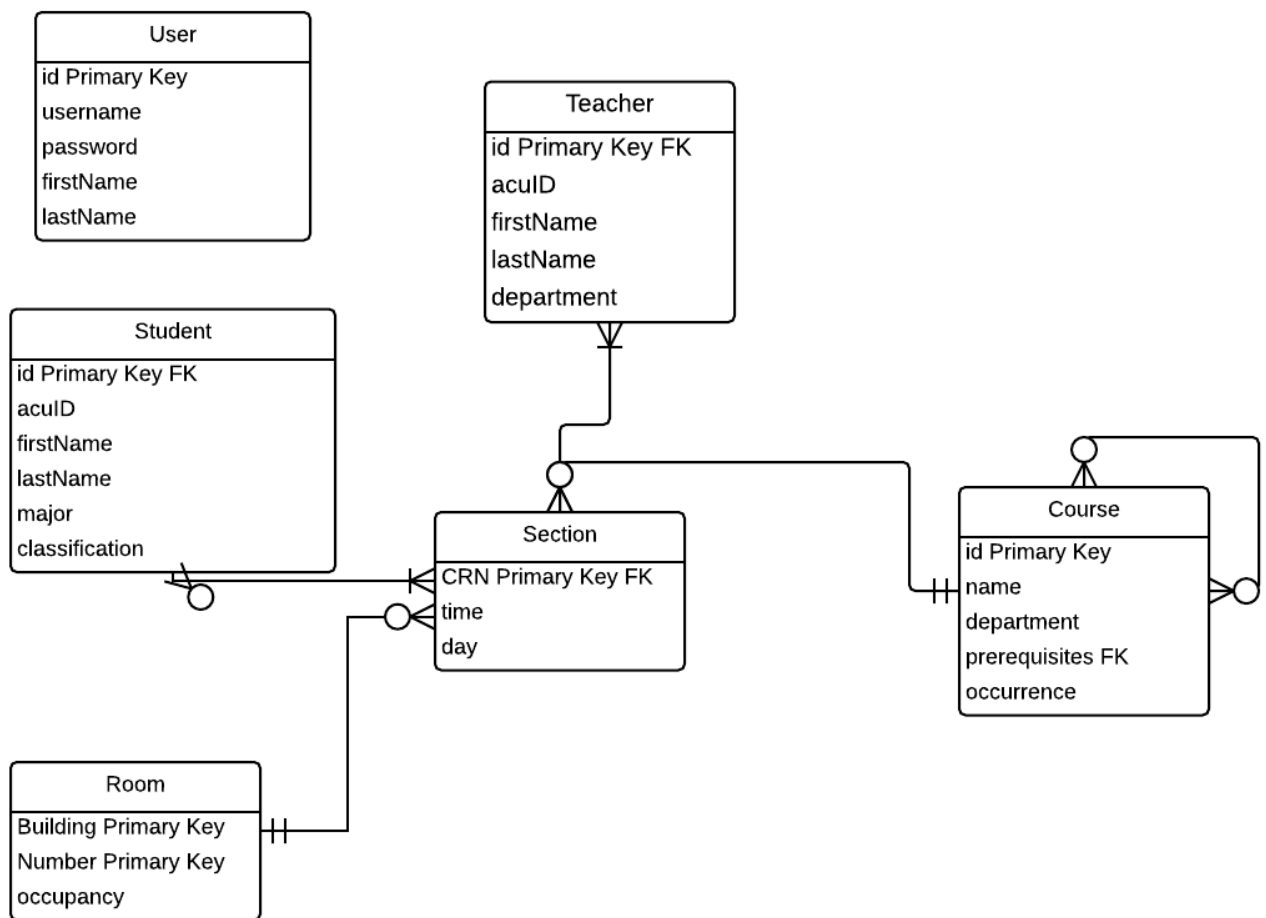
## DFD



## State Machine



## Entity Relationship Diagram



## Use Case Diagram (UML)

