Interaction Scenarios:

Adding a Task:

Maggie, curious about a newly launched task management alternative, decides to load the website in her favorite web browser. Upon arriving at the home page, she notices that the content is well laid out and simple. She likes how there is a link to log into the website easily accessible on the main page and decides to sign up. When she clicks on the link, she immediately notices that the website is very responsive. The form generates very quickly and she proceeds filling it out with her information.

Once she created her account, the website asked her to login using the new credentials. Upon entering her username and password, she clicked on the "Login" button and was immediately brought to her personal task management website. Curious about how it works, she decides to explore the interface and click on the "Help" link in the toolbar. A new screen is loaded that contains tutorials on how to use the new system. She looks over a few of the simple articles about adding, deleting, and updating before deciding to try these tasks herself.

When she tries these actions on her own, she finds that they are extremely simple to use and allow for a much simpler, yet powerful task analysis process. She especially likes the table view for her tasks so that she can see exactly what needs to be done without having to click on any other elements to expand out the view to actually see the details. She decides it will be worthwhile to add all of her current school assignments and other tasks to the website and start using this instead of email herself.

Updating a Task:

Johnathon heard about a new website for task management through some of his friends and classmates. He decides to load the website and create an account. He feels the site's layout is fairly simple and well planned. John completes the form that asked him for a username and password for the website and submits it. The website prompts him to log into his new account to begin.

After logging in, he is brought to another page that is his personal portal for task management. John notices that there is a toolbar that allows him to perform some operations that appear to be more common, such as adding, deleting, etc. He likes how there are also tutorials available in case he wants to learn about additional features and abilities. He also feels that seeing all of his tasks laid out for easy viewing makes it much easier to see what he has to do. The process to update his assignments is also very easy. After a click or two, he is able to enter the new information and then click another button to save the updated information. In less than 30 minutes, John has already added all of his assignments and other personal tasks to the website.

Deleting a Task:

While John was playing around with the new website, he accidentally clicked on the "Delete Task" functionality. Since he had previous experience with accidentally deleting tasks when he used an email client to manage his tasks, he immediately became very upset and looked down. When he finally looked back up at the computer screen, he noticed that his task was miraculously still there. Instead, the website prompted him to confirm the deletion of a task, so he was able to cancel the unintended operation.

He noticed that he can also click on a button that allows him to update the due date and description fields so he won't have to delete a task and then re-add it to the site. He is extremely excited about this new interface and decides to tell his friends via social media about this new website.

Prioritizing a Task:

When Maggie was exploring the new site, she found that when she hovered the mouse over the tasks displayed, the cursor would change to a hand with a finger pointing. Playing around with the interface, she noticed that she can click and drag the tasks to change their positioning in the display. She decides to use this to put the higher priority tasks at the top of her monitor so that she sees them every time that she logs into the website. This serves as a constant reminder to her so that

she won't forget about her American Film and Culture essay until the morning that it is due.

Viewing Current Tasks:

John has a lot of homework that he has to do. Once he has loaded the website again and logs in, he arrives at his personal task management portal. He wants to be able to just view the assignments that have not been marked as complete. He notices a section in the toolbar that is labelled “Query.” He decides to click on it and explore. Immediately, he finds the options to view just the completed, or just un-completed tasks. He also found that he can search by category as well which was above and beyond what he needed. Although he did not need it this time, he thought of a few other instances where he might find it useful. When he is done selecting the query terms, he hits the submission button and finds the tasks displayed now match his criteria exactly and it required minimal effort on his part. In about one minute, John was able to find all of the information that he needed that would have otherwise taken him at least twenty minutes to sift through in email format.

Completing a Task:

Maggie loads the website again and logs back into her account. She completed her homework assignments for the weekend and wants to be able to mark them complete on the website. When she is brought back to her home page, she notices the section of the task listing that has a checkbox widget indicating whether or not the assignment is complete. She decides to check it off and notices that it remained checked off after reloading the page. Excited about how simple it was to mark her assignments complete, she hurries off to hang out with her friends.

Preventing Data Loss:

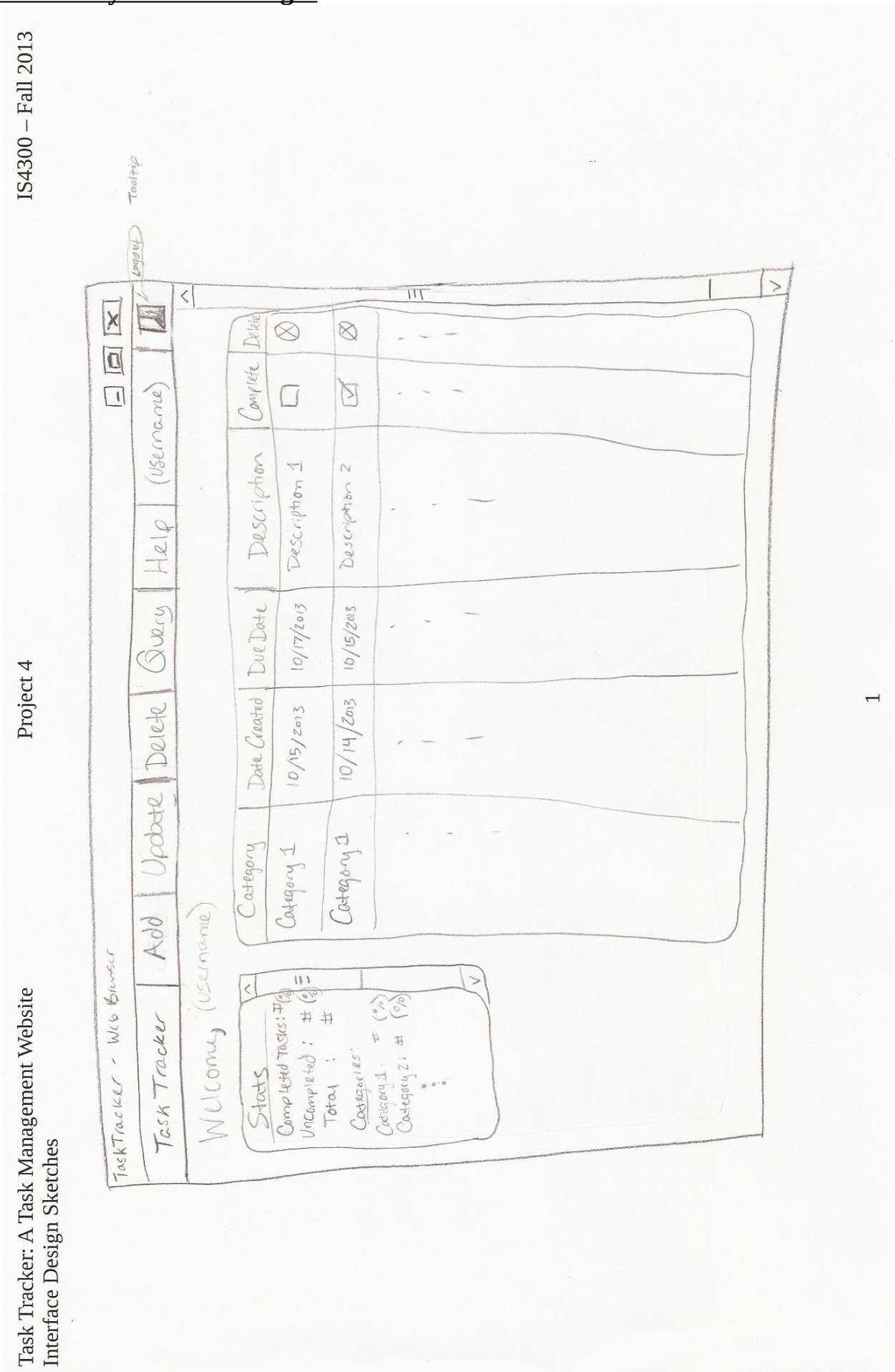
Jane is skeptical about managing her tasks online after what happened using XYZ Email services. After realizing that nothing ventured is nothing gained, she loads the website, creates an account and then logs into her new account. She explores the interface and adds a few fake tasks to the view to see how the site works. So far, she likes the simplicity as compared to her previous method, but is still concerned about losing her data. She decides to explore the “Help” section to see if they mention any way to backup your data. She notices a section that describes “Downloading your Tasks” and decides to read it.

This article contains a tutorial with steps regarding how to download her tasks as a CSV file. After reading it, she remembered seeing many of the widgets described in the steps she just finished reading. She decides to try it and finds that it worked really well and reasonably fast. Excited about this, she decides to add her actual tasks to the website and delete the fake test tasks that she used to test it out.

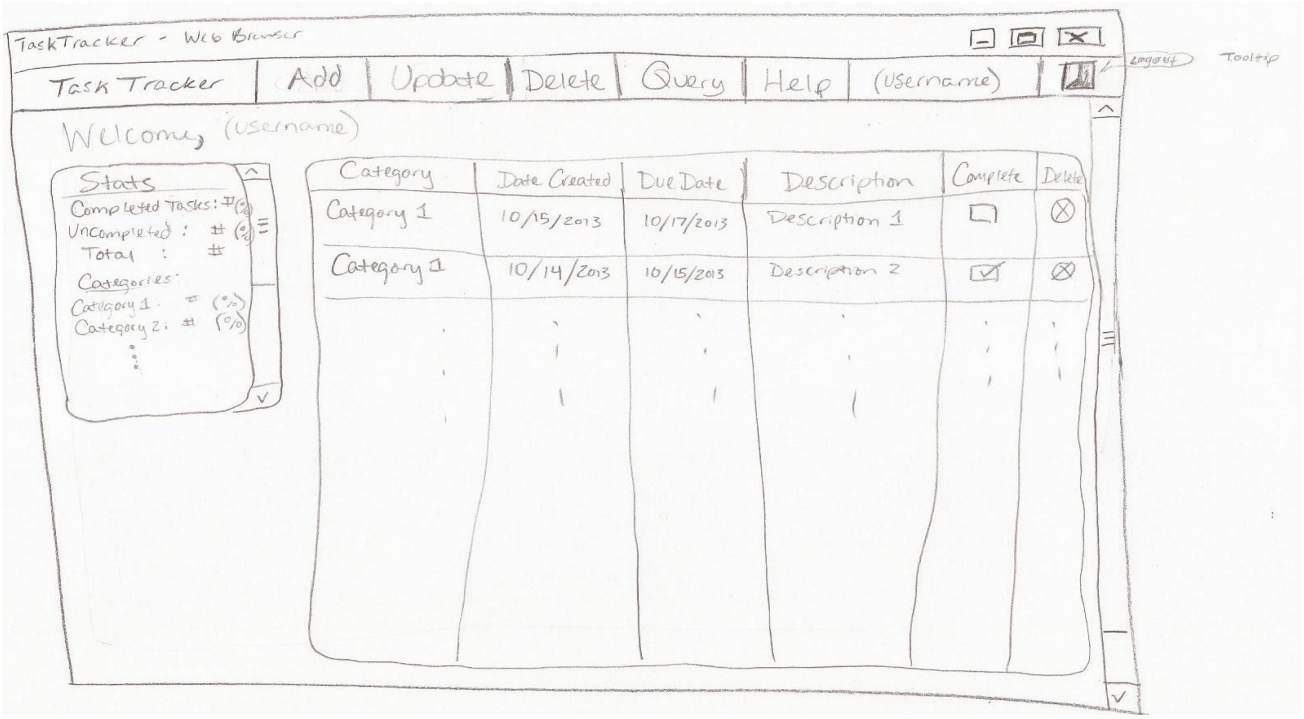
Maintaining Website:

Mike decided to subscribe to a web-hosting platform called DigitalOcean. They provide access to a hosted Virtual Machine for a fairly cheap price monthly with additional hosting plans to increase disk space, bandwidth, etc. He chose to use Ubuntu Server 12.04.3 LTS x32 as his Operating System due to his extensive experience with it. Since Ubuntu Server does not come with a graphical interface by default, he ssh's into his Virtual Machine there using its IP address that he can retrieve through the DigitalOcean online portal. Using this terminal connection, he installs Apache, MongoDB, and PHP5 for his website. He decided to use MongoDB because of its simple JavaScript client which has a lot of online support for performing certain features and due to his previous experience. He moves all of the necessary files to the website in order to host the site for multiple users to use. He then sets up the database structure so that the scripts will work using the already coded collection names. Once the site is online, he uses his ssh terminal connection to keep the Ubuntu Linux packages up to date and uses vim to modify any files in order to fix any bugs that might be found. If downtime is necessary, he can add a simple redirect from the homepage to another “Website under Construction” page so that users will not lose data during this period.

Preliminary interface design:



Storyboarding:

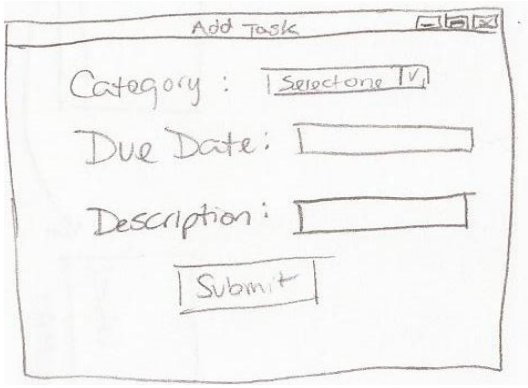


Drawing 1: Mockup of Homepage

All of the items in the toolbar at the top of the page will open new windows to allow for performing certain tasks except for the section with the user's name. That particular section will be a drop-down menu which will allow users to download their data as a CSV file. The item in the farthest right section of the toolbar will be an exit icon with a tooltip stating that it will allow users to log out of the system. The left most column of the body of the site will have important user statistics and the right hand side will have all of the users tasks listed out in tabular format.

Adding a Task:

When a user goes to add a task, they will first open a web browser and navigate to the homepage. When a user arrives, they should click on the "Add" option in the toolbar. This will load a new window that would prompt the user for key information about the task. The window would look like this:



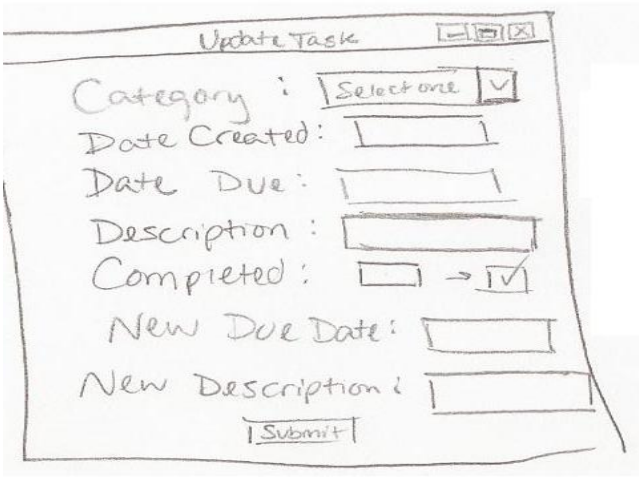
Drawing 2: Add Task Screen

Upon clicking the "Submit" button, the task will be added, the window closes, and the table on the homepage will reload to show the new change.

Updating a Task:

When a user goes to update a task, they will first open a web browser and navigate to the homepage. When a user arrives, they should click on the "Update" option in the toolbar. This will

load a new window that would prompt the user for key information about the current task and what changes will be committed. The window would look like this:

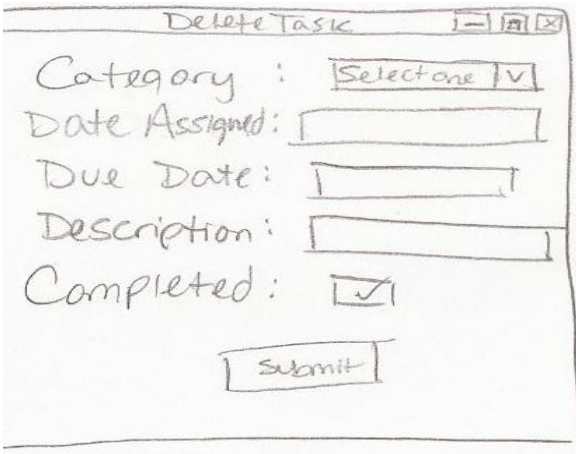


Drawing 3: Update Task Screen

Upon clicking the "Submit" button, the task will be added, the window closes, and the table on the homepage will reload to show the new change. Another option that will be explored through user test and exploring with potential coding methods is the ability to single click on a task in the table on the homepage which will then open the update screen with most of the fields already pre-completed so that only the "New ..." fields require user input.

Deleting a Task:

When a user goes to delete a task, they will first open a web browser and navigate to the homepage. When a user arrives, one option is to click on the "Delete" option in the toolbar. This will load a new window that would prompt the user for key information about the current task and what changes will be committed. The window would look like this:



Drawing 4: Delete Task Window

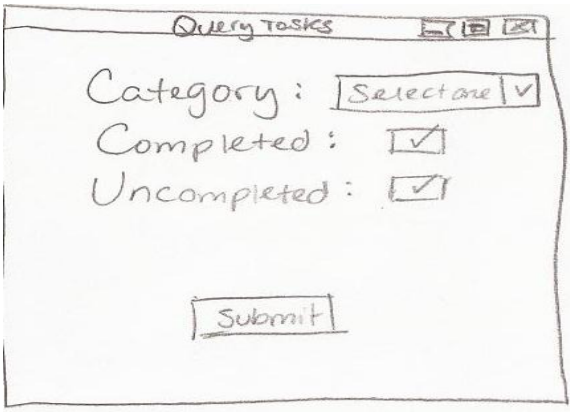
When the "Submit button is clicked, the task will be deleted, the window will close, and the table will update. The other alternative that will be explored through user testing is the use of an icon in the table that when clicked will allow for the deletion of a task. Both methods will create a standard JavaScript *confirm* window that will allow users to cancel the deletion of a task so as to avoid slips in the interface.

Prioritizing a Task:

When a user goes to change the priority level of a task, they will first open a web browser and navigate to the homepage. When a user arrives, they should click on an entry in the task display (currently a table) and drag it to where they feel it should be positioned. This will allow for a drag-and-drop method of re-ordering tasks according to which should be completed with a higher sense of urgency.

Viewing Current Tasks:

When a user wants to view their current tasks, they will first open a web browser and navigate to the homepage. When a user arrives, they will see a table view of their current tasks with columns for each field about the task. This view can be seen in the homepage mockup pasted earlier in this document. Users will also be able to utilize the "Query" option in the toolbar to view certain types of tasks. Clicking on that link will open another window which will let the user specify some predetermined criteria to limit results displayed. The window would look like this:



Drawing 5: Query Tasks Window

When a user clicks "Submit," the table will regenerate based on this criteria and then the window will close.

Completing a Task:

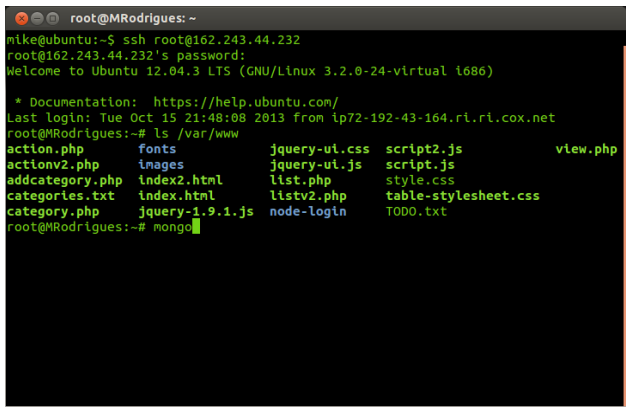
When a user wants to mark one of their tasks complete, they will first navigate to the homepage. From the homepage, they will need to locate the task in the table and find the checkbox in the column labelled "Complete" and click on it. When this checkbox is clicked, the table will send data to the server indicating the changes and will then regenerate the table to ensure that the changes truly took effect.

Preventing Data Loss:

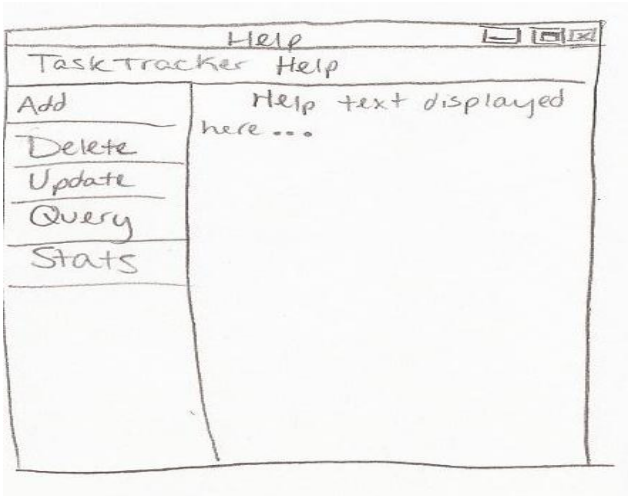
When a user wants to download a copy of their tasks as a CSV file for their own records, they will need to load the homepage. From the homepage, they should click on their username in the toolbar. This will have a small dropdown menu that will have an option that will let users download a generated CSV file of all of their tasks. Users should note that this may take a long time depending on how many tasks they have.

Maintaining the Website:

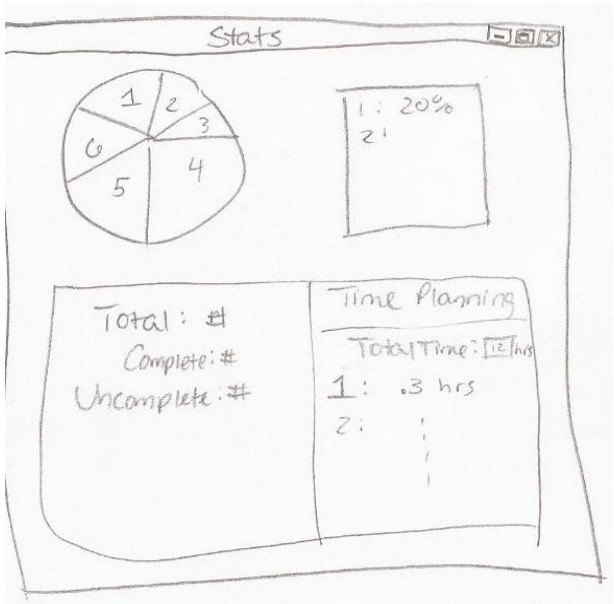
When Mike wants to maintain the website, he will need to open an ssh connection to the server. He will perform all commands through this connection. This interface although not related to the actually interface that the website is hosting, looks like this:



Additional Preliminary Interface Design Concepts:



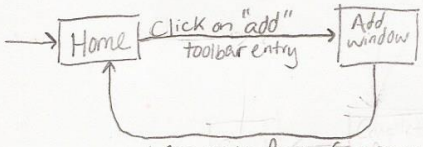
Drawing 6: Help Window



Drawing 7: Statistics Window

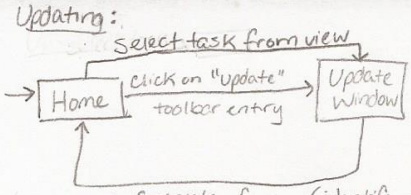
Drawing 8: jQuery Datepicker Window for Date Selection fields

Adding:



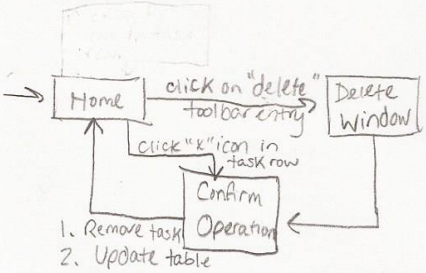
1. Complete form (Due Date, Category, Description)
2. Hit submit
3. task list updates
4. window closes and returns to home page.

Updating:



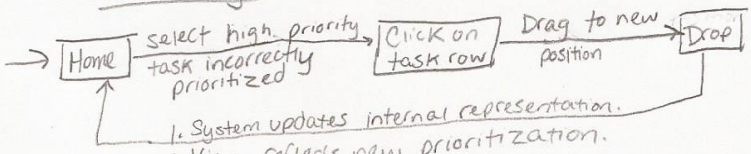
1. Complete form (identify old task attributes and enter new values)
2. Hit submit
3. Task list updates
4. Window closes

Deleting:



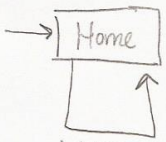
1. Remove task
2. Update table
3. Return to homepage

Prioritizing:



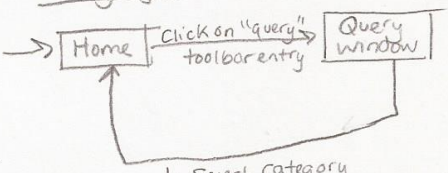
1. System updates internal representation.
2. View reflects new prioritization.

Viewing:



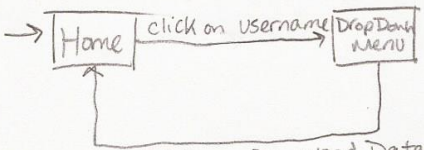
1. Look at table on main page.

Querying:



1. Select category
2. Determine whether "Completed" tasks should be displayed
3. Determine whether "Uncompleted" tasks should be displayed
4. Submit
5. Table updates and returns users to the home page.

Backing Up Data:



1. Click on Download Data
2. Download initiates
3. Username dropdown closes
4. User is returned to the home page.

Username Dropdown: