Metaphors:

Task/Problem Scenario:	Metaphors:	Notes:
Adding a Task	 Sending a new email with the new task Typing the new task into a text file Writing the task into an agenda 	Email/Text File: Quick portable method of jotting down necessary info. Agenda: Quick physical note to self with dates, description and category
Updating a Task	 Responding to the initial email with the new dates and description Updating text in a text file Crossing out the old information in an agenda and writing the new information 	Email: Involved process that requires finding the initial email Text File: Simple, highlighting and deletion followed by text entry Agenda: Simple, fairly messy. Requires remembering a way to find the task
Deleting a Task	 Deleting an email that represented the task Removing the text for the assignment form a text file Erasing it from an agenda 	Email: Involved process that requires finding the initial email Text File: Simple, highlighting and deletion Agenda: Simple, fairly messy if pen was used. Must remember where the task is listed
Prioritizing Tasks	 Deciding which assignment you will work on Prioritizing which exam to study for 	Decision: Can be mentally strenuous if there are multiple assignments <i>Exams</i> : Requires timemanagement and thinking
Viewing Current Tasks	 Searching for the emails that represent tasks and looking at their contents Viewing the tasks in a text file Viewing the tasks listed for future dates in an agenda 	Email: Searching for emails representing tasks and viewing the contents of those emails for the listing Text File: Straightforward if the text file is well organized and unambiguous Agenda: Requires looking at potentially multiple dates and pages requiring a high

		memory load
Completing a Task	 Responding to an email with an appropriate body Removing the task from a text file Putting a check mark next to a task in an agenda 	Email: Simple, requires finding the appropriate email first Text File: Select the task and delete it — causes a lack of history of tasks Agenda: Find the task and then perform a simple action of making a check mark
Visiting the Website	 Accessing your email client Accessing another website 	Web: Typing in a URL and hitting enter. Viewing the page that is displayed

Activity Design Scenarios:

Adding a Task:

Maggie is a first year student at Northeastern University who is taking four classes this semester. She receives assignments in each class with very specific due dates and descriptions of a task to complete. Most of her professors do not accept late homework, so it is imperative that she manages her time well or she might do poorly in a class. She currently uses an agenda to manage her work, but she frequently loses it and it takes a few days to find.

She is worried that without a new method of managing her assignments, she might lose her agenda and forget about the assignments—that she was assigned. She has been exploring online alternatives such—as email herself as soon as she gets a new assignment, but she is not particularly fond of this either since they are easily buried in her inbox by Northeastern News emails. She also noticed that occasionally the emails do

Activity Design Scenario

Maggie was curious about whether or not an online interface could help her to manage her assignments and forget about the other methods she was using. She fears that she may forget login credentials for an online site though. She ultimately wants to be able to manage her assignments quickly and easily while walking between classes so that they are still fresh in her mind. She's afraid that websites will be extremely compatible with her iOS device.

When she explores this new alternative, she finds that the interface is compatible with her mobile devices including her tablet. She also likes how the various operations have a form template that ask for certain information about each task so that she does not forget to mention a certain aspect. The tasks are very easy to find and manipulate which she found has already alleviated much of her stress regarding managing tasks.

not appear right away so she worries that they did not go through and she lost the task information.

Updating a Task:

Problem Scenario

Johnathon is a third year student whom is also taking several classes. He studies at Wentworth Institute of Technology and was also utilizing email messages to manage his list of assignments and due dates. Prior to this year, all of his Professors were firm with their due dates and had formulated good descriptions therefore there was no need to update an assignment.

This year, John's Professors have changed the due dates a few times in the first few weeks of class. With his current method, he cannot change the description or due date without sending a new email with the new description and/or due date. This has already caused him to forget about a new addition to one of the assignments during the first week. Since the work wasn't complete, his Professor refused to accept what he had completed.

Activity Design Scenario

John hopes to be able to update his tasks more readily and easily. Sending an email to himself with the updated dates and description just cause more anxiety if the update is forgotten about. John ultimately wants something that allows him to easily update his assignment's due dates and descriptions to prevent this from happening again.

He stumbled across a website that promises to allow him to easily manipulate tasks (assignments) from a web interface. Curious to see if has what he is looking for, he started using it. Within a half hour he was already adding, updating, completing and re-prioritizing the test assignments that he added.

With his previous method he could not easily do any of these tasks and therefore is extremely excited to actually use this new service.

Deleting a Task:

Problem Scenario

John just accidentally clicked the Send button before he added any information about the assignment to his email. Since this task is useless and won't actually help him, he needs to delete it. It is fairly simple to do so with the email approach because he can just delete the message from his account.

Activity Design Scenario

John hopes to prevent accidentally committing updates that were unintended. When he does accidentally send the email before completing it, he has to delete the task and restart the process of adding a new one.

While experimenting with the website, he found that he cannot commit a task without a category, due date, or description. He also noticed that if he does accidentally submit one that is partially complete, he can always just edit it through the on screen widgets.

Previously this simplicity was

impossible and caused John a great deal
of frustration which impacted his work
quality.

Prioritizing a Task:

Problem Scenario

Maggie has realized that she needs to learn to manage her time well as a new student on campus. She currently cannot prioritize her tasks because there her email client does not support custom sorting of emails. She has found this to be a huge issue with the system because she cannot move one assignment higher than another which results in an oversight of it being worked on. This is exactly why she was up until 2:00am last Monday working on a large essay for her American Film and Culture class.

Activity Design Scenario

Currently, Maggie has no means to help her manage her time besides her current email approach to task management. This approach did not provide her the information that she hoped for though and it lacks a number of usability features required for this particular application. She also wants to be able to move tasks around in their representation so that she will see the more important tasks more frequently.

Once Maggie started with the Task Tracker site, she found a feature that allows her to view the total number of tasks that she has entered in each category in a convenient and easy to understand format. She also noticed that she has complete control over the order that the items are listed in.

She looks at the percentages of tasks that are in each category and divides her time devoted to homework each week accordingly based on those percentages. After doing this, she has found that she has had more free time and can actually get to sleep at a reasonable time.

Viewing Current Tasks:

Problem Scenario

John wants to see a list of all tasks that he needs to complete for Monday so that he does not have to stay up late on Sunday night because he forgot about one. The only way that he could query his emails without adding some sort of keyword to the emails that no other

Activity Design Scenario

John hopes to see all of the tasks that need to be completed over the weekend. He does not want to need to stay up late on a Sunday night because he just remembered a task that he did not see using his old approach. He fears that a website might not display all of the

emails would have, is to search by the course number. This approach works, but it displays all emails from the Professors and Piazza for this class. He has a hard time with this view, and ends up writing down all of the assignments on a piece of paper so that he will only have to look at these search results once. John does not want to have to waste paper by writing down all of his assignments and still maintain an email approach.

information he needs to be able to perform this function.

After experimenting with this website, he found that it is much simpler to use and does not become as hard to find his current tasks. For example, he does not need to sift through the countless Piazza emails in order to find his assignments.

This approach significantly simplifies John's work to find his current assignments/tasks. He is ultimately able to spend more time on completing his work and less on searching for the specifications of the assignments he needs to complete.

Completing a Task:

Problem Scenario

Maggie completed her assignments for the weekend and wants to somehow indicate in those email chains that she does not need to worry about those assignments anymore. She proceeds to send herself an email that simply states "COMPLETE." She was content with this, but when she looked for her assignments on Monday, many of these tasks still appeared in her list. Without opening the email and reading the chain, she cannot tell whether or not the assignment has been completed or not. She also cannot see any of the information about the assignment without opening the emails. After one week, she is starting to become annoyed at having to read over old emails to make sure that she is not accidentally overlooking an assignment.

Activity Design Scenario

Maggie is now using the new website that she found but wants to be sure that everything she was able to do previously is still possible and even simpler. One thing that she really wants is to be able to easily mark an assignment as complete without having to work extremely hard.

She found that with this particular website, it is extremely simple and involves at most a few clicks on the screen.

With this new system, she can quickly find and complete the assignments so that she can do more enjoyable things than homework with her free time.

Preventing Data Loss:

Problem Scenario	Activity Design Scenario
Jane was a subscriber at XYZ Email	Jane's boss recommended she look at
services. She paid monthly for an	Task Tracker for task management. She
daccount that she used as her primary	hopes that it will let her backup her tasks

email for years now. Recently, the CEO was found to have been stealing money from the company and therefore the company recently had to file for bankruptcy. They closed not long after and did not migrate user accounts to another hosting service. The users lost their email accounts.

Since Jane also used her email to manage tasks that her boss gave her at work, she lost all of her tasks. She had been using this approach for a number of years, she had at least 15 tasks that she had on her to-do list. After the company closed, she lost all of that data. Her boss recently asked why her performance suddenly dropped and she had to explain how her task management system fell through the cracks.

locally so that if the website goes offline for whatever reason, she can still access her tasks.

After exploring for about 20 minutes, she found a setting that allows her to utilize on screen widgets to download her tasks as a .CSV file which Excel can open.

This allows Jane to keep local copies of her tasks so that she won't experience the same situation that she previously did.

Maintaining Website:

Problem Scenario

Mike is the Software Developer at TaskTracker Inc. that will be in charge of developing and maintaining the latest task management website that his company will be developing. He has developed multiple websites before and has encountered situations where browser updates can cause website features to break. He knows that the end-users become very frustrated when this occurs due to having received hundreds of emails reporting the issue the last time that it occurred.

When he develops this website, he wants to make sure that he will have a web hosting platform that will allow him to quickly and easily update the site to prevent a massive number of bug reports being filed. He also found that with his last server setup, he needed to occasionally take it offline for maintenance. He wants to be sure that he

Activity Design Scenario

Mike ultimately wants to be able to easily maintain the site by performing bug fixes and slight UI modifications to increase usability based on user suggestions.

With this site, he plans on using persistent data storage techniques so that all changes are committed to hard-coded data stored on the server so that if he needs to take it offline for maintenance he will not cause data loss. He goes about designing the site so that it will be unlikely that the site will need to be taken offline for such maintenance.

With his previous sites, he used methods that did require the site to be brought down temporarily, but with this new site he is going to attempt to alleviate those necessities through the use of appropriate data structures.

can still keep the site accessible for end
users during maintenance via a secondary
web hosting server.

HTA Diagrams:







