

# IAT 334 Report 1

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## Brief

This report was submitted upon request of the project outline found at <http://www.sfu.ca/~shaw/iat334/project.htm>. It details our Internet Client concept at the highest level - outlining what it is, why it is needed, who will use it, and how they will use it.

## What are we designing and why?

Email suites have gradually evolved to be more complicated. Filters, tags and address books have emerged to try and organize the emails their clients retrieve from the web every single day. These advances have made email suites far more powerful than ever before, but the price of this power has been greater complexity. Email suites are no longer easy to use for novices - those without previous experience will find themselves easily lost.

At the same time, web browsers have changed to focus on more than browsing. Though they were originally designed to seek out new content, web browsers have been redefined by social networking and news sites into programs that retrieve information from the web. Unlike email clients however, browsers have no way to sort out this new information, which means that users must visit a lot of websites to keep themselves up to date.

To solve both of these problems, we have decided to create an *Internet* suite. Unlike an email suite, this program would also retrieve information from those sites designed solely for web-browsers, like social networks, iCalendars and RSS enabled pages. If integrated with the web-browser, this would effectively place all online dealings in one place, leading to much simpler, more efficient setup. This in turn would make email more accessible to novices. Centralizing the data would also allow for cross referencing, creating a thorough, personal web archive.

In general, an internet suite does the following:

- Downloads information from the internet, including
  - Email
  - iCalendar events
  - RSS posts
  - Social Network notifications
- Sends "packets" of information to the internet, including
  - Emails
  - iCalendar events
  - Social Network posts
- Accepts plugins to expand data retrieval and transmission
- Allows the processing of multiple sources of information in parallel
- Creates a personal web archive
- Allows for the sorting of downloaded content, to better retrieve and process information
- Stores contact information to track outgoing data

## Who will use it?

The proposed Internet suite incorporation with email, rss feeds, social networking and calendar events means that the system will cater to users of all levels: basic users, medium users and power users.

The basic users of the systems are people who are new and learning to interact with the computer. They require a system that is fast, easy to use and efficient; which allows them to learn and perform simple tasks quickly and successfully. These users contain the basic knowledge of the Internet and computers such as: turning on the computer, starting a program, typing on a keyboard, and knowing how to use a mouse (clicking and scrolling). With their basic knowledge, the user would most likely be using basic computer programs such as word documents and perform or learning to perform simple web browsing and email functions.

The intermediate users are individuals who are proficient in doing everything the basic users knows. They also endeavor to learn and explore new programs and methods that would allow them to perform their tasks more quickly and effectively. These people use the Internet and check emails on a regular basis. However, advance tasks such as filtering, sorting and tagging data are rarely performed.

The power users excel in performing everything that the basic and medium users know. These individuals constantly use the Internet and have a profound knowledge in understanding the functions of a system. They demonstrate their understanding by being able to customize settings on a regular basis, utilize all the shortcut keys, and creating various message filters, groups, sorting. These customizations can be: managing plug-ins, installing programs on their own and being able to uninstall or modify if needed. They utilize all the resources that are available to them such as RSS feeds, multiple e-mail accounts and managing plug-ins, installing programs on their own and being able to uninstall or modify if needed.

## What are their expectations?

Internet Suite is an integrated system that is suitable for heavy internet users who have a busy schedule. This fast and easy to use system which consist of an email, calender events, social network events and RSS feed posts helps “daily internet users” to fit and organize several tasks more efficiently. These are daily tasks that most of the users check on the daily basis such as checking emails, checking calender events and checking favorite websites. Due to a straight forward menu structures and easy vocabulary of this system different users with different background and knowledge with computer/internet would be able to take the benefit of using this system.

The system has different help and guidance options available for Basic Users who have less knowledge with internet. They can also benefit from tips boxes where they can find out more about the advance options and educate themselves.

Medium users who have some backgrounds with the internet have the help option available for further instructions and have the options that allows them to explore more about different features.

Power users who are the most advance users are the ones that can benefit from the advance settings on the system. Due to their knowledge about internet there are more flexibility for this users such as customizing based on their preferences.

The benefit of using this system for the users is to spend less time on browsing different websites, easily manage different tasks and to-do things, increase time efficiency and archive personal web history.

## Where will they use it?

Due to the nature of the email suite and its use, it depends heavily on the Internet connection coming from the various ways of the WiFi, cable, or satellite. Therefore, all of the tasks that the users would do will also be based on this Internet connection through the means of a computer. A mid-high attention level is expected to perform any of the tasks we will be discussing later. Going back to the list of whys the system is needed, one could really use the system as a means to coordinate, communicate, and update with other people and/or events. Of course these would only can be achieved by having an Internet connection established, or else there would not be new updates (hence, only outdated information will be shown). However, the environment of which this system can be used is almost endless, because the system is still accessible without Internet if the user wishes only to browse through their personal web archive. The environment required to these tasks is simple, particularly to those who are younger in age and are more technologically inclined; the user only need to have at least one of the following: computer (desktop, laptop, netbook), cell smartphones (iPhone, Blackberry, HTC), anywhere (at school, on the go, on the bus, etc.)

## What will they use it for?

1. To View Data
2. Manage Data (Emails, RSS Posts, iCalendar events, Social Network events)
  1. Create Data
    1. based off of existing data (email reply)
    2. from scratch
  2. Send Data
  3. Edit Data
  4. Organize Data
    1. Manually Organize
      1. Add/Remove Grouping
      2. Edit Grouping
      3. Run Grouping
    2. By Conversation
  5. Hide/Erase Data
3. Managing Sources of Data
  1. Adding/Removing Data Source
  2. Organizing Data Source
4. Managing Contacts
  1. Add/Remove Contacts
  2. Edit Contact
  3. Organize Contacts
5. Managing Plugins
  1. Add/Remove Plugins
6. Manage Macros (Key/Button Shortcuts)
  1. Create/Delete macro
  2. Edit Macro
    1. Set Macro to Key Combo
    2. Change what the macro does
7. Get Help
  1. Browse Help
  2. Search Help

## Who has done this before?

Gmail was first introduced by Google in April 2004 as an invitation-only beta mail, but since 2007 it has made public and been increasing in the number of users, roughly serving about 146 millions of users as of July of this year. It has surpassed all the other predecessors like Yahoo Mail and Hotmail, for its gigantic capacity in memory storage per user and for several other features like labeling, live chat, and the conversation view interface. Gmail has progressed over the years, complicates their product bits by bits as they go, up until now when it is a little too cluttered for a novice user to use. When opened, the user is greeted by an inordinate amount of options to choose from: archive, delete, move to, more actions, chat, inbox, contacts, tasks, filter, and a hundred more options. A novice user would feel intimidated and end up staring at the screen for a longer time than they should be. However, once the user familiarized himself with Gmail, they would start finding it rather useful and helpful when organizing messages, because it has the features of archiving and labeling.

### **An evaluation done using Nielsen's 10 Heuristics for User Interface Design:**

- Visibility of System Status: Gmail is pretty good at this, it is prompt in giving the user feedback on what page are they on but responding quite quickly. User knows which page are they on by looking at the different, yet familiar page layout it presents.
- Match Between System and the Real World: The language used all throughout Gmail is simple and straight forward, to let users, with a range of English (or any other language, when enabled) proficiency is able to understand what each button is for. There seems to be no tricky language that might trick users into clicking into the button with the consequence they are not expecting to get.
- User Control and Freedom: The user gets to control how much they would like to program Gmail to suit them. He may not do any control and leave everything on their inbox; however, for a more advanced user, he might choose to label all the email he got to get himself organize. The user also can choose whether to see it all the conversation (back-to-back email) all at once, or one by one.
- Consistency and Standards: The banner on top of the page and the list of menu on the side never changes, the only changes made from page to page is the box showing whether the user is inbox, or when composing, or when in the setting mode.
- Error Prevention: Gmail should get kudos for this because they do not have any annoying sudden pop-up messages indicating an error. Rather they do it subtly with a box showing in the middle of their own screen and goes away once and for all.
- Recognition Rather Than Recall: A little confusing at times, because of all the different options Gmail has to offer. It is great it has that many options, but sometimes the user has to recall what he did last time, instead of recognizing it.
- Flexibility and Efficiency of Use: As written earlier, the user can take control of the system because Gmail has given the flexibility to do so. User may choose to organize their email and syncing it to their calendar, or to their phone, or not at all. The efficiency of use is also depends on each user, whether they allow themselves or not.
- Aesthetic and Minimalist Design: Overall, it's a design done with a purpose to enable the user to quickly click on an option they like. The drawback on this, however, is that they present all of their options on the main screen, submerging those who are not familiar with it.
- Help Users Recognize, Diagnose, and Recover from Errors: \*shrugs\* pop up?
- Help and Documentation: Gmail has provided the Help feature on the top right of the page. When the user needs any sort of help, they could click on the feature and come to the page of which they can quickly search the keyword in, or go through the list of keywords they have provided according to the most frequent searched topic.

## Research

### **Competitive Product Review:**

There are many preexisting email suites that are available to the general public. Examples of these email suites are Google Mail, Yahoo Mail and Mozilla Thunderbird 2.

In a product review of Google Mail and Yahoo Mail on CNET, Google mail was found to be the “speediest online e-mail service” compared to the other email suites. Google mail is also favored in its “uncluttered” presentation with “copious white space and rounded edges”. Thirdly, Google mail allows the user to organize its content by tagging it with labels, filtering options that allow for designated messages for an automatic label or star or to be archived, forwarded or deleted. Lastly, Google mail is favored over the other suites with its integration with Google Calendar, Chat and Maps. After completing the review, the authors of CNET have concluded, “Gmail (Google Mail) will rule the online email world shortly”.

Mozilla Thunderbird 2, is another e-mail suite that is favored on CNET. Similar to Google Mail, the authors of

CNET favors Thunderbird 2 for its “speedy searches”. Other features that are praised in Thunderbird is the built-in RSS feeds, add-on features and compatibility with Windows, Mac and Linux systems, as well as Google mail and .Mac accounts.

In these comparison product reviews, there seems to be a similarity that appeals to users for email suites that the web mail must be fast, organized and its ability to integrate other systems. This is evident where reviewers favored Google mail’s ability to allow the user to organize its content and integrate with other systems such as Google calendar, chat and maps. In addition, Thunderbird’s RSS feed, add on features and its compatibility has been some of the highlights to achieving a good review. Thus in creating an email suite, these features must be put into consideration to produce an effective and likable web mail suite.

### **Observations**

Mark had previously watched his Grandmother work with her first computer. She found email to be incredibly cumbersome, and elected to abandon it. The computer has since been abandoned

### **Survey**

A survey was circulated to Mark's family, and around the campus. The following results were extrapolated from the surveys, which are available online.

Among those surveyed, 4 email clients were used, with the most popular being Gmail and Hotmail (browser-based clients).

3/4 of the people polled visited a group of websites on a regular basis. 2/3 of those people (1/2 of everyone) visited those sites to retrieve information, not to seek out new information. These users would be good targets for an RSS integration.

General happiness ratings were high, showing that these email clients were successful at appealing to intermediate users - our surveyed group.

Adoption of iCalendars was high, and was concentrated on students and adults with strong social lives at work. Cited reasons included co-ordination, self-maintenance and as a news source for upcoming events.

One of the users lamented that they couldn't read an email and edit one at the same time in Gmail.

Praise was high for Gmail's tag system.