TEST PLAN AND RESULTS
SYSTEM TESTING AND USER TESTING

Test Plan

Testing Objectives

MyTab.com is a website that allows users to access multiple accounts related to Cornell University using a single log-in. Since, we are aiming for a contract based website that institutions can implement for their students to access multiple accounts relevant to their institution we have tested the website thoroughly to ensure that it meets the expected quality requirements. We used different strategies on the features, functionality, security and usability of the website to discover bugs, design and security issues and fix them to provide a quality product.

Testing Scope

The URL: https://mytab.org is the web site under consideration for this test plan. As part of the website we are primarily testing the Login Page and the Main Page and all the features of the two pages.

Testing Strategies

The test plan contains a series of test cases under each of the following strategies:

a) Whitebox testing:
Testing was done on the internal structures and workings of the website and the implementation source code for programming bugs, control flows and code performance, optimization and reusability. We have used this strategy at the unit, integration and system testing levels.

b) Blackbox testing:
Testing was done on the functionality by providing different cases of inputs and testing if the behavior is as expected for each input.

Features Tested

The features of the website were thoroughly tested as per the various test cases included in the test plan classified by the approaches:
- Registration & Account Verification
- Password Reset
- Login and Logout
- Adding Accounts
- Accessing Accounts
- Editing and Deleting Account Credentials
- Navigating between Accounts
- Design & Layout
- Content

Testing Approaches

The above strategies shall be tested on the following levels:

a) Integration testing:
The code modules were integrated and the working of integrated code modules , in this case , program written for each feature, was tested to ensure that the bug free units work together to fulfill their respective and behavior expected from them.

b) System testing:
All the code modules were integrated and the entire systems code was tested to ensure that the website's source code fulfills the expectations and behavior and supports all tasks.

c) Link Testing: All the links and anchors on MyTab.org were tested to ensure that the code for accessing all the pages and forms works correctly and the navigation is smooth.

d) Performance Testing : The website is being hosted on a server that we verified could support allow a large number of users . The performance of the features accessed within the website was tested.

e) CompatibiltyTesting : The website was thoroughly tested for all functionality on different browsers and the compatible and supported browsers were determined.

f) User Testing : The Beta version of mytab.org was released for an initial focus group to access and an intuitive survey covering the entire website's usage was provided. Responses to the survey have been collected and analyzed. Analytics and Webmaster tools have been used to keep track of user demographics and visitor information.

Test Requirements

Hardware:
We tested the website using Laptops and Computers with Internet Connectivity.

Software / Web Components:
PHPUnitTestFrameWork

Usage Tracker:
Google Analytics
Webmaster

Test Cases

The test cases used to test the login and main page of MyTab.org are included in the
Login_testcases.xlsx and Mainpage_testcases.xlsx respectively.

User Testing

Overview

The beta version of the website https://mytab.org has been tested. The users who tested include technical and non-technical users from Cornell community.

The overall results were mostly favorable as can be seen from the Survey Results section that follows. The site is ready to be launched in a full-fledged manner and promises a rich, good quality and secure user experience.

Test Objectives

    a) To test the user interface of the systems for any errors and usability issues.

    b) To check the working of the functionality of the system like creating a MyTab account, logging into the system, adding new accounts, accessing the added accounts and editing/deleting the added accounts.

Method
a)Participants

The total number of participants involved in testing the website – 24

The segmentation of the participants can be widely classified into technical and non-technical users. The technical users included the students and faculty from the engineering school. The non-technical users included the students from business and hotel management schools.

b)Process

The participants were sent an email that included the web address, survey link, brief description of capabilities of the website, features and also steps to troubleshoot in case any situation arises.

c)Survey Questions:

The survey sent out to the users included the following questions:

    1) What do you do at Cornell? – To get an understanding of the user.

    2) Where did you access MyTab.org from? – To understand the network of the user and to analyze if any problems are faced in a particular environment.

    3) Which Web Browser did you use to access MyTab.org? – To understand the most popular browsers that users use and analyze if any problems are faced in a particular browser.

Questions on ratings are all on a scale of 1-5 with 1 being poor and 5 being excellent

4) How would you rate your overall experience of using MyTab.org? – To understand the user's experience with MyTab.org

5) How would you rate the design and colors of MyTab.org? – To understand the user's feel for the colors and design used in the website.

6) How would you rate the layout and organization of MyTab.org? - To understand the user's feel for the layout and organization of the website.

7) How would you rate the navigability of MyTab.org? – To understand the user's feel for the flow of actions in the website

8) Were you able to perform all the actions or functions you wanted to perform using MyTab.org? – To understand if any actions have been difficult to perform for the user.

9) Was the site easy to use? – To understand the user's experience of the ease of use of the system.

10) Does the site meet your needs or solve any problem you face while using multiple accounts? – Do understand how well the website helps the users.

The survey included the following optional questions to gather more detailed feedback from the users.

What did you like the most about MyTab.org? – To understand the user's most favorite parts of the website.

What did you dislike the most about MyTab.org? – To understand the features not particularly liked by the user which can be changed if many users feel the same.

Is there anything you would like to change about the website? – To gain feedback on things the users would like to see differently in the website.
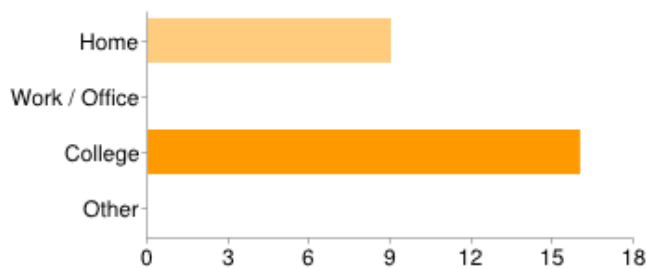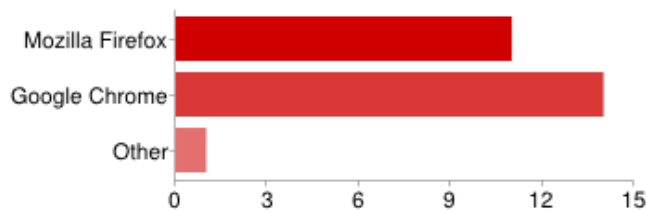
d) Survey Results

What do you do at Cornell ?
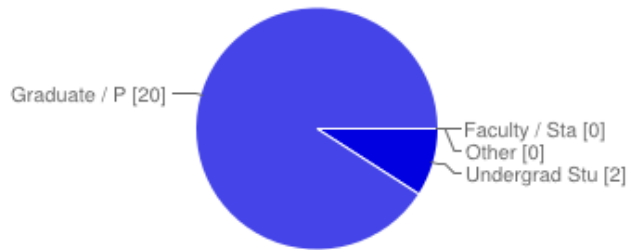
Undergrad Student	2	9%
Graduate / PhD Student	20	91%
Faculty / Staff	0	0%
Other	0	0%

Where did you access MyTab.org from ?

Home	9	36%
Work / Office	0	0%
College	16	64%
Other	0	0%

Which Web Browser did you use to access MyTab.org?

Mozilla Firefox	11	42%
Google Chrome	14	54%
Other	1	4%

4	14	61%
5	3	13%

How would you rate the navigability of MyTab.org ?
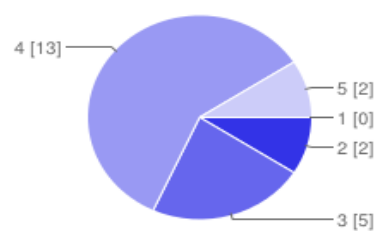
1	0	0%
2	2	9%
3	5	23%
4	13	59%
5	2	9%

4 [13]
5 [2]
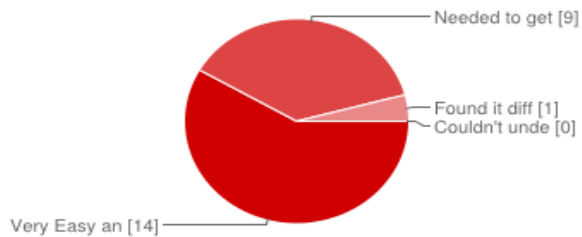1 [0]
2 [2]
3 [5]

Where you able to perform all the actions or functions you wanted to perform using MyTab.org ?
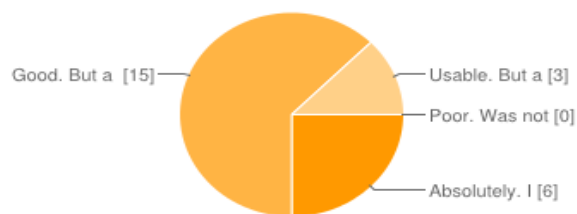
Absolutely. I could do everything I wanted.	6	25%
Good. But a few glitches here and there.	15	63%
Usable. But a lot of things need to be improved.	3	13%
Poor. Was not able to use even for basic work.	0	0%

Good. But a [15]
Usable. But a [3]
Poor. Was not [0]
Absolutely. I [6]

Was the site easy to use ?

Very Easy and Convenient from the start	14	58%
Needed to get familiar first but convenient after	9	38%
Found it difficult to use	1	4%
Couldn't understand a thing !	0	0%

Needed to get [9]
Found it diff [1]
Couldn't unde [0]
Very Easy an [14]

Does the site meet your needs or solve any problem you face while using multiple accounts ?
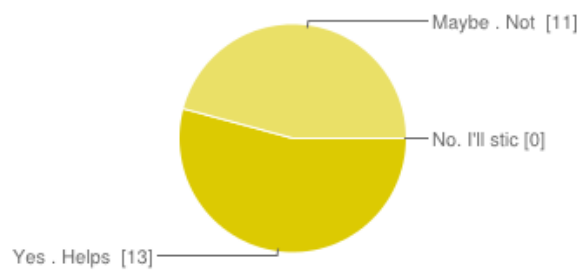
Yes . Helps a lot !	13	54%
Maybe . Not sure how it'll help	11	46%
No. I'll stick to the old way	0	0%

Maybe . Not [11]
No. I'll stic [0]
Yes . Helps [13]

Some of the comments that we received:

What did you like the most about MyTab.org ?

need not remember passwords anymore   Good job...!!   The responsiveness of the site   design and colors   I can access multiple accounts through one website . I liked it !!   UI looks good.   New idea to integrate Cornell accounts on a single site just like Google accounts   Enables ease of use

What did you dislike the most about MyTab.org ?

sometimes it takes more time to load the pages   wsedfghjkl;   Nothing as of now .   Some of the usual keyboard events are not supported   The navigation   Make the UI more intuitive   Was getting some random messages while navigating like 'undefined'. No idea why?

Is there anything you would like to change about the website ?

I logged in to Cornell Blackboard and Cornell Student Centre . I could access Cornell Blackboard but could not access the Student Centre .   I would like it to be more organized   Add social networking sites   Login page colors can be changed to make sure it doesn't look like a Facebook rip off   Main Page looks similar to Facebook   Little for easy to use   Color Scheme throughout could be changed.   Probably some more funtionalities

The team is hoping to deliver the project with adequate documentation which will make the future maintenance of the application easy.

A Technical Troubleshooting encountered for User Testing

(i) Troubleshooting for Firefox

Even though our website is secured and runs in SSL, some of the accounts that we support do not run on HTTPS, for this reason Firefox blocks them. It is to be noted that this is not a security concern created byMyTab perspective.

To make these accounts work, look for the shield icon in you address bar.Upon clicking it and then clicking the arrow button on "Keep Blocking" dropdown, the instruction "Disable protection on this page" will be displayed. Clicking on this, will allow loading the HTTP script from other websites. Below is the illustrated diagram for your convenience.
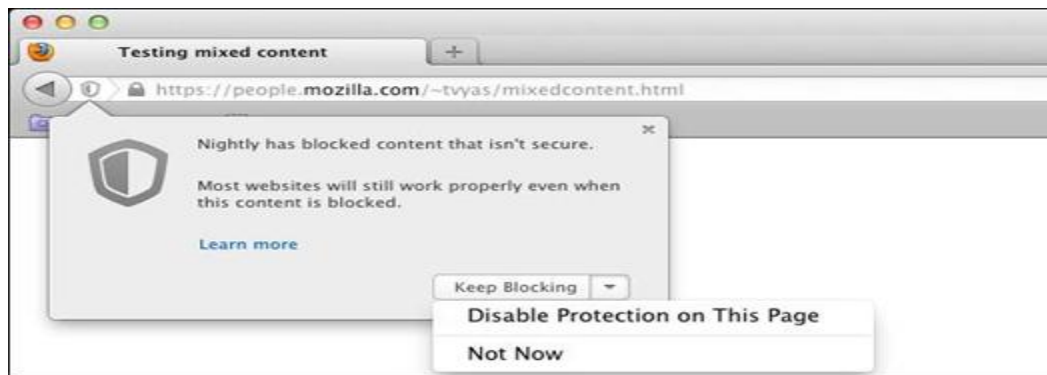

Also, the pop-up blocker needs to be displayed which can be done by clicking on Options in the top yellow bar, as we are showing websites in new tab when required. Below is a picture which can help you.

(ii) Troubleshooting for Chrome

Similarly to enable non-https accounts on Chrome, look for the shield icon in your address bar, on the right hand side. Upon clicking this icon you will see the below instruction.
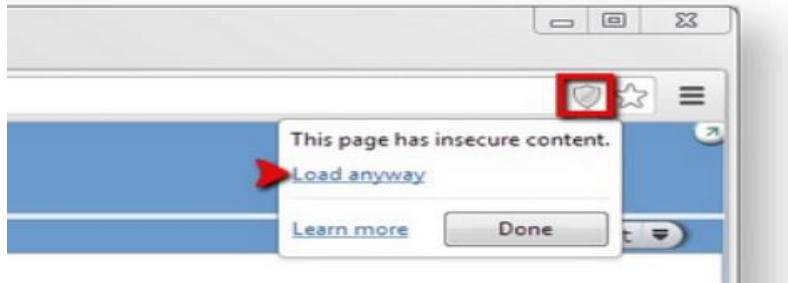
Now please click on "Load unsafe script" or "Load Anyway" to enable the non-https accounts also in your MyTab account.

To enable pop-ups - Click on the pop-up blocker icon in the address bar and select allow pop-ups from mytab.org.