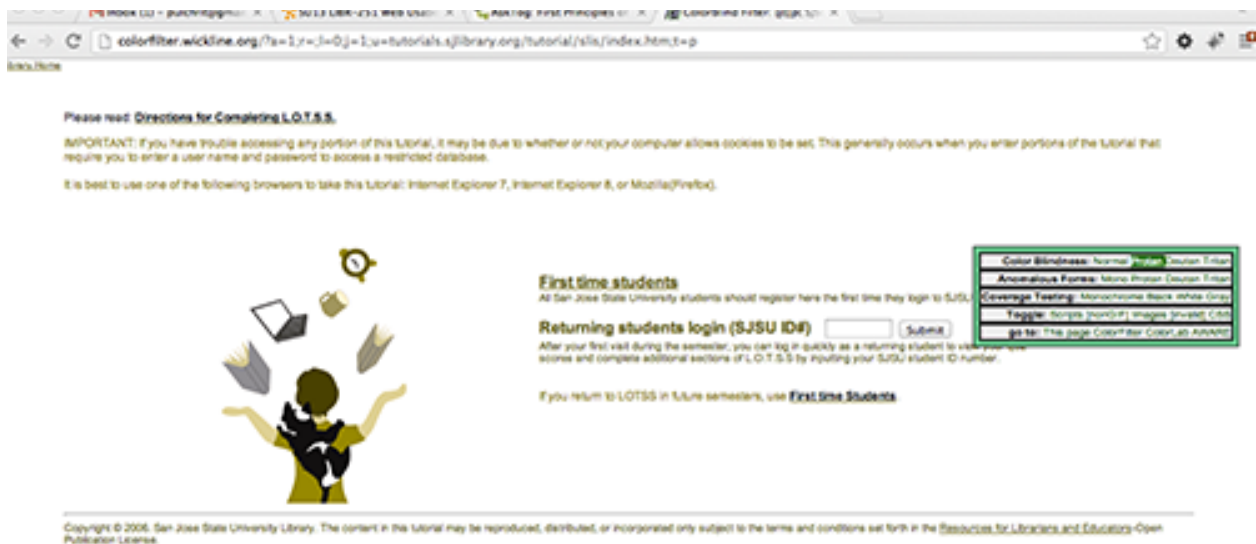


Heuristic Evaluation of LOTSS

There are many, many usability issues with the LOTSS interface. This post only highlights two examples for each of the three heuristics chosen.

1. Color Blindness

- There are significant issues with the login page for those who are red/green color-blind. The red text highlights on the page are lost for these users. There is only a slight discernable difference in color, and I think that would only be noticeable for those who were actually looking for it. The only clue that the text is some sort of alert is the all caps formatting on the word "IMPORTANT". **See screen shots below for comparison.**
- The same issues for color-blind users appear on the Module 1 introductory page. Again, the important note at the bottom is in red text, meaning it won't be highlighted for those with red/green color blindness. The note should be formatted in bold (or possibly italicized) so that it stands out and alerts color-blind users to the fact that they can't use their browser's back button—a very important behavioral difference for users acclimated to utilizing browser back buttons. **See screen shots below for comparison.**
-




colorfilter.wickline.org/?a=1;r=;l=0;j=1;u=tutorials.sjlibrary.org/tutorial/slis/index.htm;t=m

library Home

Please read: [Directions for Completing L.O.T.S.S.](#)

IMPORTANT: If you have trouble accessing any portion of this tutorial, it may be due to whether or not your computer allows cookies to be set. This generally occurs when you enter portions of the tutorial that require you to enter a user name and password to access a restricted database.

It is best to use one of the following browsers to take this tutorial: Internet Explorer 7, Internet Explorer 8, or Mozilla(Firefox).



First time students
All San Jose State University students should register here the first time they login to SJSU

Returning students login (SJSU ID#)

After your first visit during the semester, you can log in quickly as a returning student to view your scores and complete additional sections of L.O.T.S.S. by inputting your SJSU student ID number.

If you return to LOTSS in future semesters, use [First time Students](#).

Color Blindness: Normal Protan Deutan Tritan

Anomalous Forms: Mono Protan Deutan Tritan

Coverage Testing: Monochrome Black White Gray

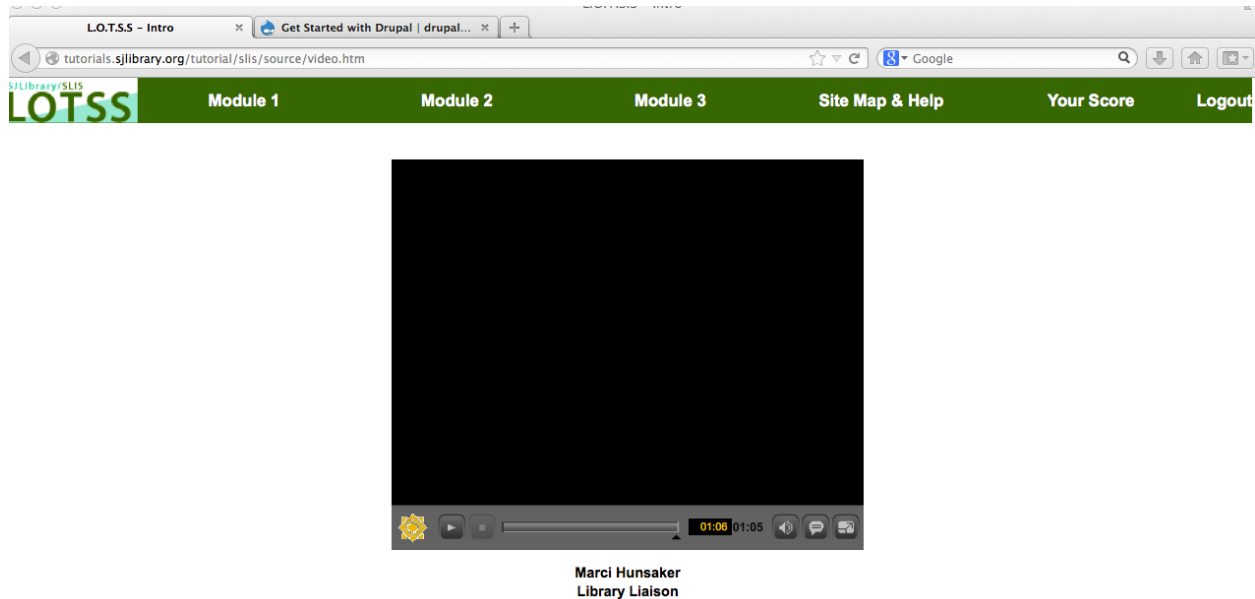
Toggle: Scripts [nonGIF] Images [invalid] CSS

go to: This page ColorFilter ColorLab AWARE

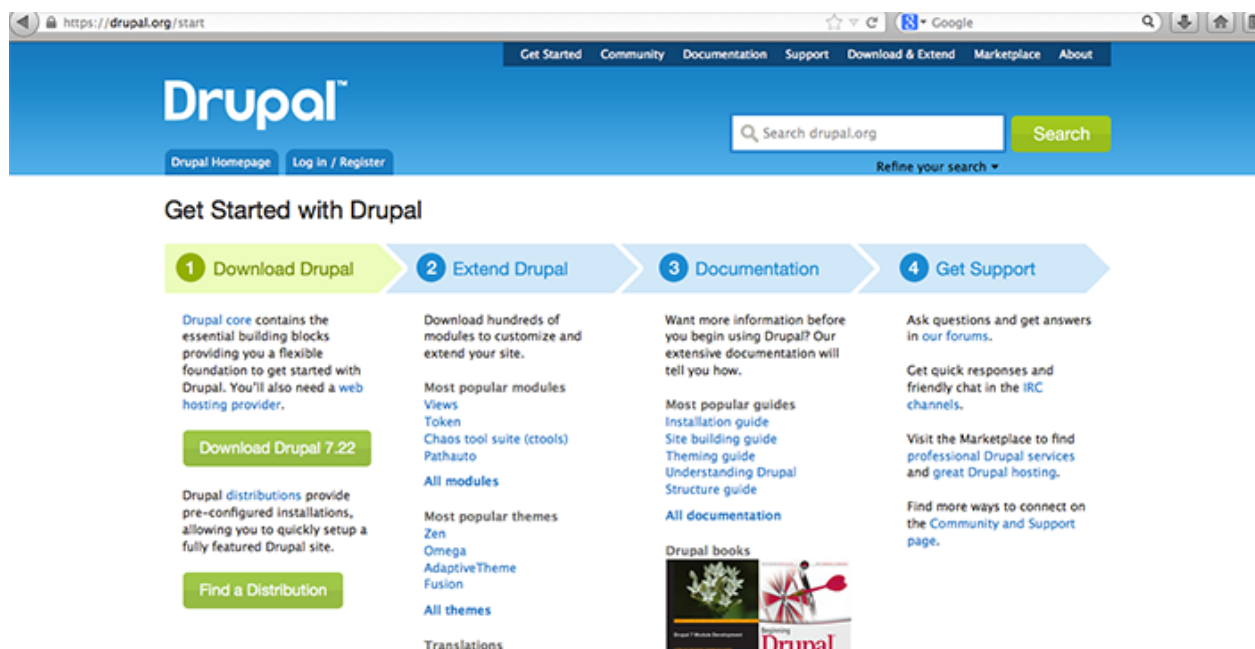
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2. Consistency

- The homepage of the tutorial doesn't look as I would expect it to. There is no horizontal menu bar for the main options (Library Lingometer, Liason, Modules 1, 2, 3). Also, the subheads themselves are not text links, as would be expected. My first inclination was to try to click on the subhead, and when I couldn't I had to search the page to find clickable links. They appear at the far right of each paragraph, repeating the subhead in the first instance and using "view" instead of the subhead "Library Liaison" in the second, so even internally there is no consistency in how text links are handled. (This "view" link also violates the principle of using descriptive keywords in links.)
- When I made it **through the Lingometer test, menu options appeared across the top of my screen. See** screen shot below. Why didn't they appear previously? To prevent me from going to the modules before taking the Lingometer test? This could have been handled through menu formatting where the module options were grayed out until I had completed the Lingometer. It would be even better if the grayed-out options were formatted in a step format like the Drupal Getting **Started page below**. Users would both know that they can't access the modules yet and the steps to complete before access would be granted. (Such a step-by-step treatment would also be an excellent status indicator as users moved through the tutorial.)
- Oddly, the multiple choice options were often (though not always) re-ordered when my answer was validated. Certainly, this is not a terrible issue, but it is a strange and annoying feature that contributes to a general feeling of malaise—though users may not be able to identify the specific reason for this feeling. For me this is one of the strangest examples of inconsistency on the site. See screen shots below.



[Next](#)

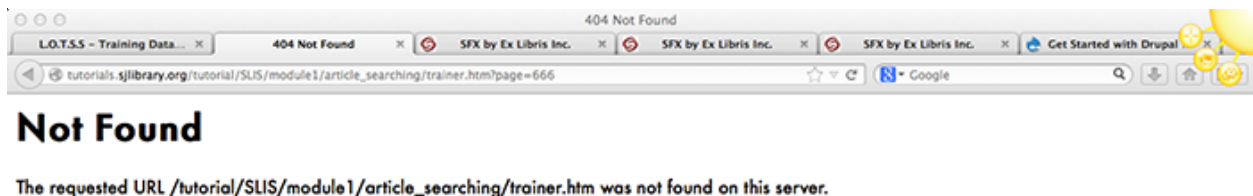
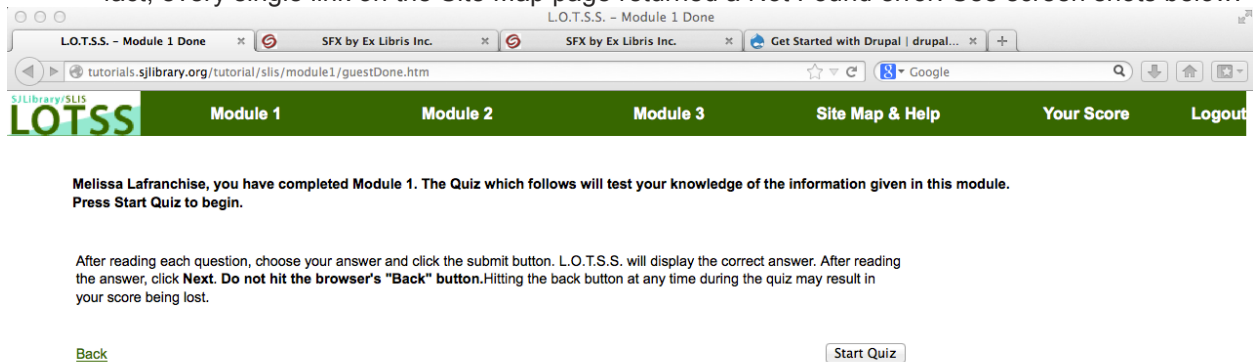


3. Track state, Protect user's work and Help users recognize, diagnose and recover from errors

- I left the Lingometer test for a period of 10 to 15 minutes. When I returned, I was able to continue answering questions where I left off. However, once I had completed the last question, I received an error instead of a completion confirmation. The error was very non-specific and not at all helpful. It said: "You need to login first." This doesn't tell me that my session timed out, which is what happened. It also doesn't tell me if my answers were saved. I should have been alerted to my session timing out immediately upon returning to the test after the 10-15 minute break. Instead, I spent several minutes answering the rest of the questions in vain, as my answers were not saved. Also, there was no link to the login page from this error. So, I, very counter intuitively since the system just told me that I had to Login, had to Logout (the only link available to me) in order to get back to the Login screen. **See screen shot below.** After logging back in, I became aware that none of my previous answers were saved. Very frustrating. I had to retake the

Lingometer test. Ideally, the system would have remembered the work I'd done so far, especially as the Login page made specific mention of using cookies. Extra frustrating.

- I left the Module 1 Quiz because I wanted to compare the formatting of Module 1 questions to the formatting of Module 2 questions. However, when I tried to return to Module 1 Quiz by clicking on the Module 1 option in the menu bar, I went to the start page of Module 1. Again, the system is not tracking my state. I would need to retake Module 1 in order to get to the review quiz. There is no link that will take me directly to the quiz. The Site Map won't even take me to the quiz for Module 1, and though it promises to take me to a specific section of Module 1 through text links (e.g., Subject Terms, under Module 1), when I clicked on the link a 404 error was returned! In fact, every single link on the Site Map page returned a Not Found error. See screen shots below.



Other issues

Browser compatibility

- The site is only partially functional in Chrome, Firefox, and Safari. See screen shots. The logo image doesn't appear in any of the browsers. It is only in Firefox where we can see the alt text of the logo image to know for certain what should be there.

Error message

- Login in error when trying to login as returning user (assumes I have not seen/read the note about returning students from prior semesters)- Error message isn't really helpful. It's certainly short, but it isn't helpful. **"You need to login first. Please write correct Student ID."** It should read something like, "Your student ID is not recognized. Please try entering it again (links to login page). If you are a returning student who accessed this tutorial during a prior semester, please re-register (link to registration page)."
 - Improve by changing the language of the first time and returning user logins.
 - Register or Re-register: First time students or students returning from previous semesters.
 - Login: Students returning in same semester.
 - Alternatively, some additional system work should be done to save student IDs beyond one semester.

Readability

- The default body font size is very small—at least on my screen. I am able to zoom in (Firefox) to increase the font size without inducing layout issues.

Orientation within the site

- While a browser title appears, there is no title on the page that actually helps orient the user within the site. **See screen shot.** This is the Menu page, but you'd not necessarily know that from the page itself. The only areas that convey this information are the tab and browser window titles. It's only once you start taking the test that the page title "Lingometer" appears in the very low resolution meter graphic on the right.
- Within the Lingometer, there is no page title at all. Nor is there a link back to the menu page.

Visibility of System Status

- There are no status indicators in the Lingometer. While the questions are numbered, I have no idea how many there are, so I don't have an understanding of my completion status.
- I, at least, assumed that the meter graphic on the right might change to show either my progress through the test or my performance on the test. Nope. It's just a static graphic.
- Oddly, this second time I was going through the Lingometer, the meter icon on the right was apparently tracking my progress through the test, but this didn't occur the first time I took the test.

Response to Felicia:

Consistency: We both commented on Consistency, and I noticed the same thing that you did about the menu options appearing at the top of the screen only after the Lingometer test! I assume this was to ensure that the Lingometer test was completed before the modules, but you're absolutely right, what if a user needed the site map or help? They simply wouldn't be able to access this information when they first visited the site. Frankly, it's when you first come to a site that you would be most in need of help—and you are prevented from accessing it! I also felt that the abrupt change in menus could make users feel like the site wasn't functioning correctly. Finally, the initial lack of menus is very inconsistent with what users expect from websites generally.

Error Prevention: I think there are so many issues with how the quizzes and modules actually operate. You point out a significant issue in that there is no warning when a user pushes the back button. In fact, this warning only appears once at the start of the module and states that the user can't use the browser back buttons—which is very counterintuitive to users who expect that they will work. The idea that he answers are not saved when a user goes back is also an issue with the system not tracking the state of the users work; I mentioned this lack in my evaluation.

Visible navigation: Great point about the lack of home option on the menu. It's such a simple and expected option that it's lack is confusing—even if users are used to clicking on a logo to return to the homepage. And certainly there is enough room in that horizontal menu bar to add "Home" as an option. It seems like this was another oversight that could easily be corrected.

I also saw some issues with alert messages not being properly formatted for those who are color blind as well as some other issues related to tracking state.