Team CookieCrumbs

Project Milestone 1

CGT 411
Contemporary Problems in Applied Computer Graphics

Purdue University

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At the beginning of the semester, we started with a problem statement and research question. With the help of Dr. Hartman, we were able to establish our problem statement as, "The current website for Lafayette Instrument Company (L.I.C) has usability issues and lacks modernization." We, then, were able to confine our research question to "What are the best way to maximize the usability of the pre-existing website?" as a basis of how to go about our research. Keywords such as "User Experience, Website, Design, and Ecommerce" were used when researching to get the best results possible. Throughout the semester, everyone has/will be using Mendeley to gather and share research articles pertaining to our process and how to execute our usability test. We will continue to gather data and research to further both our understanding of steps we are taking and establish other steps that we may need to complete along the way. This list will be provided in references along the project and will be completely shown on the final paper.

Also, we narrowed our search to a certain demographic that Jennifer specified as our target audience. Data was gathered for multiple demographics, but Jennifer particularly wanted us to aim for customers buying from their website, and for this project, specifically from "Lafayette Instrument Polygraph". Our current product goals after further communication with our sponsor, Jennifer, and our advisor, Nancy, is to at least have a high fidelity prototype and a list of recommendations to give to Jennifer to use in upgrading the usability of the Lafayette Instrument Co. website.

During the Go/No-Go presentation, Team CC talked about the current state of both the technical side and the usability side of the project. Both Jordan and Jessica have been working on an initial survey for users of the site to gain an insight on the target audience, as well as the major reasons for visiting the site. Jonathan has been working with the Plesk data and running the eye tracking software through EyeQuant. Laurena has been working on creating the Gantt chart that has been revised by Jonathan and creating a sitemap for the current site. As a group, we have been meeting together multiple times a week to talk about our goals and evaluation plans, as well as setting up a problems list for the current website.

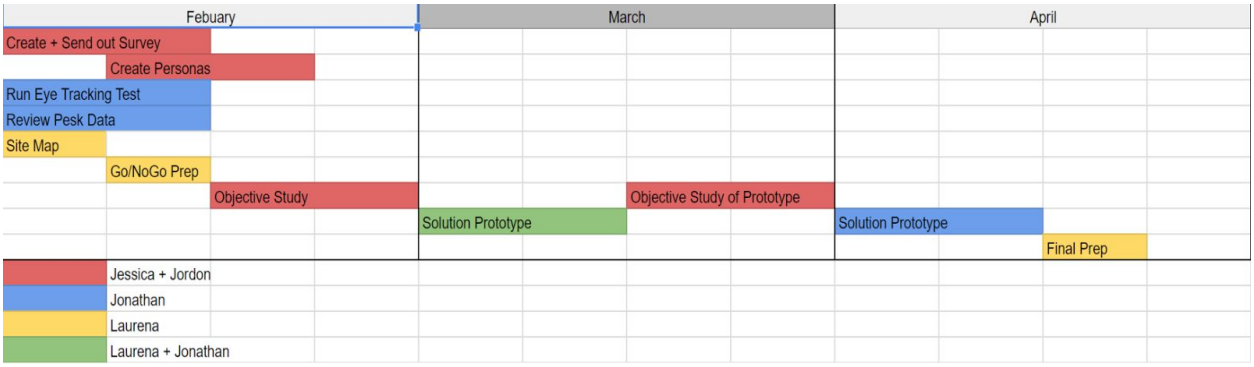
Since the presentation, we have closed the initial survey, and Jordan and Jessica have begun work on personas. They have contacted our users and set up a date to deliver our first task based usability test. To accomplish this, they have been creating iterations of the task based test and getting feedback from Nancy. Jonathan has still been trying to get Google Analytics on the site and is working on determining the user flow and objectives of users, which will be aided by Google Analytics. We have also discussed with Jennifer about setting up a weekly meeting time via call or Skype, which was the only feedback we received to do from Go/No-Go from Dr. Hartman. From here, we have reached steps 3 and 4 of our initial checklist:

1. Create and send out initial surveys
2. Run eye tracking and mine analytics data to determine flow and goal of users
3. Create personas and objective based studies based on them
4. Test current website and brainstorm ideas
5. Create "quick and dirty" wireframe, low fidelity
6. Test above solution via interview with users provided by Jennifer

7. Identify new and continued issues and brainstorm ways to solve them
8. Create high fidelity prototype
9. Test high fidelity prototype via interviews again, as well as wider range users using UsabilityHub
10. Compile files and data for final presentation

This informal list summarizes what we have to do in the weeks left in the semester until the final presentation, so it will be used as a rough guide. Having the items in a numerical list does not mean that only one item at a time is being completed. For example, we are now on list item 2, which Jonathan is assessing, but we are also on list items 3 and 4, which is what Jordan and Jessica are working on. We then crossed this list data with our Gantt chart (**Table 1**) to find that we are still on schedule to complete the semester's amount of work on time.

Table 1 Gantt Chart



We are continuing work on the Gantt chart weekly, these changes are made out of necessity, which is why our list was not set in stone from the start. Now that we have explained what we have done and are currently doing, let's look toward what we are doing next.

Our next steps are to test the current site with our users and our task based survey. We have certain measurables that we will be gathering from each round of usability testing. We will be collecting the following measurables:

1. Time spent on task
2. Completion of task
3. Error rate
4. Likert scales

These qualitative and quantitative metrics will be used predominantly to gauge the usability of the website and the following solution prototypes. More measurements will likely be added as we continue with the user's feedback on each iteration of the site. We will then use these measurables to find what is working well for the site and what is not. These will dictate the design choices made through the corresponding steps. The next step, after the testing of the current site and gaining the data from it, will be for us to hit the drawing board and come up with

as many ways to fix these usability issues as possible. We will create many different ideas that will then be narrowed down into one idea used to create our wireframe.

The wireframe will be used as a basis for our functional wireframe that will be created soon after. With the functional wireframe, a second round of testing will be scheduled with our users, though they will be completing the tasks from our wireframe. After gathering that data, we will repeat the process one more time, except once we begin creating another deliverable it will be a high fidelity prototype. A third round of usability testing will be carried out with the prototype. This will be our final test of the semester and will give us the necessary data to create a recommendations list for Jennifer and L.I.C. Once these have all been completed, we will collect all the files and data and prepare for our final presentation.