Evaluation Summary Report for NC Sites Project

Ajay Jadhav, Anup Rohamare, Jinay Mehta, Juilee Chitre, Mohit Nayak

Evaluation report of initial survey of wireframes and Maryland website

We evaluated the wireframes for **NC State Site for Business Registration & Licensing** and the **Maryland Business Licensing Information System** website.

Participant Characteristics

We chose our 10 participants to be mostly students in the age group of 18-30 as we assumed that they had a good chance to be the future users of the website. Some participants were from Computer Science background. Most of them were fairly accomplished at using internet and browsing but had little or no experience with gathering information to set up their own business and finding required licenses. This was our prime objective, that the website should be usable and intuitive to any new user.

The Wireframes

The team realized that conducting the evaluation using paper prototypes would be time-consuming and inconvenient. We made use of the wireframes in Word format. Hyperlinks were created for proper navigation from one page to another. Thus instead of one of us acting as the *computer* and changing the paper slides, these hyperlinks would now serve the purpose. This also meant that we could capture participant activity through a screencast.

Later we converted this Word document to a Webpage archive (Wireframe.MHT file) for ease of use. The users were then asked to use this web-page to complete their tasks and their experience was recorded.

Designing the tasks

Tasks were designed to get an overall perspective of the wireframe/website. Some were very intuitive and some needed a bit more navigation. They involved tasks to register businesses, get required licenses and look up licenses on the Maryland website.

We captured a video of the participants when they were performing the tasks. This allowed us to observe their emotions when they were working with the wireframes. Screencasts were taken for some of the participants. **You can find the links to these videos** here.

Tasks

Business registration (wireframe)

- 1. You plan to start a school for under-privileged children as a non-profit initiative. How will you go about it?
- 2. You want to start a Ferry business. What all information you need about the shares of the corporation? In case of any questions, whom should you contact?
- 3. Let say you plan to use "Sammy's Grill" as the name of your business. Are you allowed to use this name?

Licensing (wireframe)

- 1. You want to open up a Convenience Store in Wake County. Some of the items you plan to sell are alcohol, money-orders and lottery tickets? How will you proceed with the licensing requirements? Which departments should you contact?
- 2. You want to start your own Food truck. How you will you proceed the licensing requirements? What are the rules and regulations that apply?
- 3. You plan to start your own Dental Clinic. What are the license requirements?

License Lookup (website)

- 1. Search for the licenses associated with legal services.
- 2. Suppose you are an aspiring optician. You need a license to practice your profession. Look for this license on the given website.
- 3. Suppose you are starting a School Bus Transportation service. Look up matching types of licenses
- 4. Lookup for all types of licenses associated with Washington county

Summary of Evaluation Results

We found some of the common concerns to be cluttered web pages, unorganized information, long chains of navigation to reach any information, non-intuitive user interface, very poor search/browse functionality for licensing and non-responsive user interface. While performing the business registration tasks 1-3, it was apparent that the wireframes guided the participants well but the excess of information was overwhelming to all participants and they took longer than desired to locate any information. Participants found the licensing tasks on the wireframe to be easy and found the checklists given on the landing page to be very useful. However, the licensing tasks on the Maryland website did not go as well as expected. Participants seemed frustrated with the search cum browse functionality and many participants took more than 9 minutes. The browse feature was not intuitive since it was provided under a 'search' title. The website was slow and for every selection of category/sub-category, it took them to a new page which was frustrating to users. The results were not tagged appropriately, so the 'search by keyword' option seemed useless to some participants.

Emotions and Experiences of Participants

Tired, Frustrated, Lost, Unhappy, trying random paths to finish the task, facing difficulty in navigation, overwhelmed by the clutter of information.

Our new objectives for the prototype

- Easy navigation
- User intuitive workflows
- Aesthetically appealing user interface
- Clean design with no clutter of text
- Having ease of access to information
- Website explaining its purpose and services well and creating positive experiences in users.

Evaluation Report of survey with our Prototype BLNC site

Tasks: We kept the same tasks for the survey of business registration workflow. However, in order to test the effectiveness of our prototype more thoroughly, we designed new and more complicated tasks for the license lookups.

License Lookup (on new prototype):

- 1. Search for the licenses if you want to start a brewery.
- 2. Lookup for all types of licenses associated with Wake County
- 3. Use the browse tool to browse through NC FOREST SERVICE. Filter the results to show only High Hazard Counties

Summary of Evaluation Results

The participants loved the new and revamped user interface, they especially liked the website's purpose and services clearly explained in the carousel. Many of them found the wizard for business registration to be very helpful. The overall reaction from evaluating the prototype was positive and participants were happy, never frustrated, completed tasks quickly and efficiently. The tasks related to business registration were very easy as the information was organized using modals and accordions in <u>Bootstrap</u>.

So, a common reaction was that the user interface was very clean and aesthetically appealing. The easy navigation also instilled a sense of trust among users. The licensing search and browse functionalities helped the participants perform the tasks related to licensing with great speed. The search within the search results option was clearly favored by all participants.

Why is the prototype better than earlier designs?

We have revamped the user interface to provide a unified portal for all business needs. We made the goals of the website more visible in a carousel which also serves to represent user stories. The highlights of our prototype are the clean web pages, designer fonts (easy to read even on smaller devices), concise way of representing data (using modals and accordions in Bootstrap), a responsive user interface (resulting in an optimal viewing experience viz. easy reading and navigation with a minimum of resizing, panning, and scrolling across a wide range of devices -from mobile phones to desktop computer monitors). Also, we included a wizard for keeping track of user's progress in the business registration workflow. Next important features are the separate search and browse licensing functionalities. These implement search and browse features much like standard websites like Amazon. There is also a search within the search results option for efficient way to get the required licenses. The search results are shown on same page avoiding unnecessary loading of extra pages.

We have used standard and latest web design techniques (<u>Bootstrap</u>) for our prototype to provide a 'one-stop' experience while being completely usable. Thus the users did not feel frustrated or lost when using the new prototype. We hope this will serve as a basis for the hosts of the <u>BLNC</u> site to provide their users a great experience while fulfilling their needs.