Usability Testing Report

IAT 334 Interface Design Fall'08

T05
Darian Grant (Leader)
Judy Lin
Stephanie Law
Jessie Hsieh

e-create

Introduction

The Design Challenge

The design challenge here is to create a low-fidelity prototype of our e-create website and run usability tests with users from our target group to gather early feedback. We chose 5 students for our paper prototyping session, for they are well within our user group and easily attainable in the time we had. With these users, we got each one to complete all three tasks we prepared using our paper prototype.

Purpose

The purpose of this paper prototype was to gather some information from our users that will help us refine our idea in terms of the usability. We wanted to figure out what parts of our website are intuitive and easy to use, and we wanted to learn what parts of our website are confusing and need to be changed before the final prototype.

Prototype

Our *goal* for our users with our paper prototype was to complete three tasks, “Find a recipe and post some feedback”, “Post a recipe online”, and “Locate a recycling depot near you”. For our prototype, we chose a simple, yet effective method because our prototype is simply going to be a website; we printed out all the pages needed on our website to complete the three given tasks, and did not worry about setting up a mock computer.

We chose not to include a mock computer because our goal is that our website can be accessed on any computer with an Internet connection and on any browser. We felt that if we included a mock computer and browser, it might confuse users during our testing session. With each page printed out, we also included all the extra fillers required to complete each task; such as the dialogue that a user would type into the text boxes, the file upload windows for uploading pictures, and dynamic web pages for after the user logs into our website. On top of all that, each page was a coloured, detailed interface sketch of what the user will see on the final product, complete with the links and navigation menus in their appropriate places.

Having such a detailed paper prototype really helped with our testing sessions because it allowed users to give feedback on not only the ease of navigation, but as well as the colour scheme and the website as a whole. It allowed our users to really understand what our website was going to be and it also allowed them to give us suggestions for new features they would like to see on our website.

**For a detailed description of the procedure we used while testing, refer to the Procedures section in this document.

Method

Participants

We interviewed 10 people and chose five based off of a few short questions to find out who related closest to our target user group. We chose five students who are living either on their own and who own second hand furniture in their places, or who live with their families and own second hand furniture or old items. Each student we chose for our user testing session is open minded to recycling and participates in recycling small things like containers of milk, and their pop cans. The users chosen all have basic to intermediate computer skills and are between the ages of 20 and 25.

Tasks

Task 1: Find a recipe and post some feedback

You have an old clock that no longer works and you want to recycle it. You have heard of a website that allows you to look up recipes for transforming old objects into new, stylish ones. Your goal is to use this website to look up a recipe that transforms your clock into a stylish picture frame. When you have found the recipe you are looking for, log in to the website and post your feedback to that recipe. Also upload a photo of your new clock/ picture frame. For logging in, your user name is Stephanie215, and your password is "Password".

Highlighted Issues from Task 1:

In finding a recipe using our e-create website, the task highlights visibility and affordance issues. In order to complete the task, users would have to quickly locate our search box and type in a keyword. They should be able to expect an organized results page where they will be provided with images and links. Affordance issues will be identified if the user becomes confused as to which part shown on the results page are interactive.

Task 2: Post your recipe online

You have just turned an old baggy t-shirt into a nice dress and you want to share how with other people. Your goal is to post your recipe to the e-create website. Make sure you upload some photos of your design process to make it easier for others to understand before submitting.

Highlighted Issues from Task 2:

When the user is given the task of posting their own recipes, feedback and consistency are critical. After writing and posting a recipe, the user would want feedback that informs them that their request has been submitted. The success of our feedback system will test whether or not the user takes the time to read our pop-up screen, and understands that their post has been received. Users would have to login to their account using a password in order to submit anything on our website. Consistency on submitting a post or feedback is reinforced here and issues would be identified if test participants expressed confusion during posting.

Task 3: Locate a recycling depot near you

You have just turned an old lamp into a new flower pot, and you are left with the metal scraps and innards of the lamp. You want to recycle them but you do not know where the nearest recycling depot that accepts metal scraps is. Your goal is to use our website to locate the nearest recycling depot near you that recycles metal scraps.

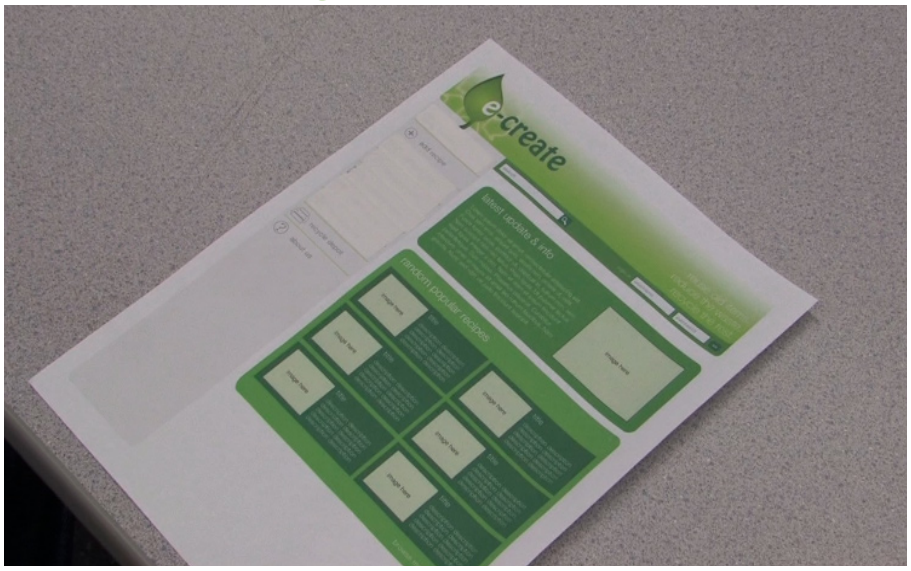
Highlighted Issues from Task 3:

This task identifies issues in mapping and effective use of constraints with the website. Users can expect a clear relation on pressing the navigation menu on the left would lead them to a page were they have to clarify which location they want. After inputting all fields, a map generated from Google Maps would appear. Constraint success would be based on when the user clicked on anywhere else other than the map itself. If a user did click elsewhere, the lack of interactivity drives he/she back to click on the map where navigation is possible.

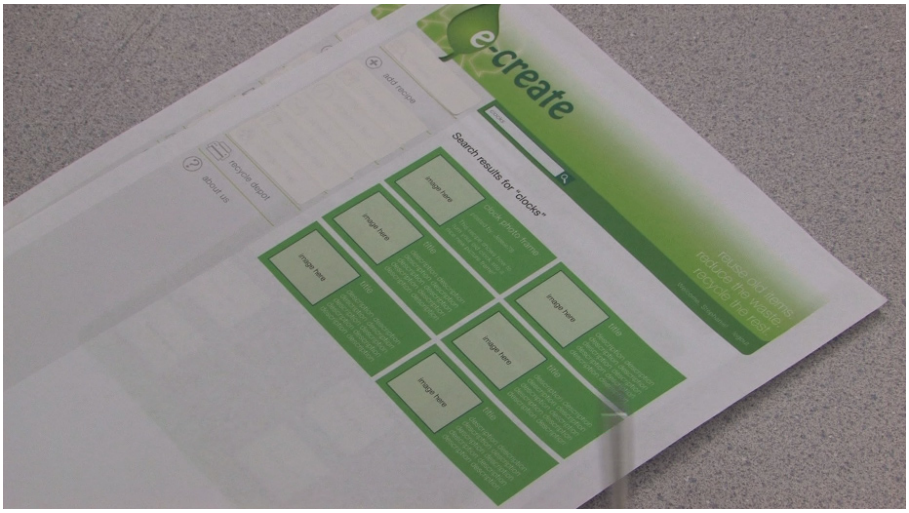
Procedure

Before we start testing with our prototype, each tester is has been explained to about the use of information we recorded, and if the tester agrees. They are require to sign the informed consent form (Appendix B). To start we asked the user a brief questionnaire to ensure the background of the user suits our target audience. For the procedure of the user test, we will have the paper prototype placed in front of the tester facing down before we start, so that the tester do not have time to familiarize themselves to the prototype. Then we will read out a brief statement about the task which needs to be completed to the user, also asking them to think out loud during the whole process, and to let us know when he/she believes that the task has been completed. As per the mode of interaction, the user is pointing at different sections as if they are clicking with a mouse. Each time an item changes on the page or if the page is changed, a new sheet or the paper will be replaced on top of the old ones.

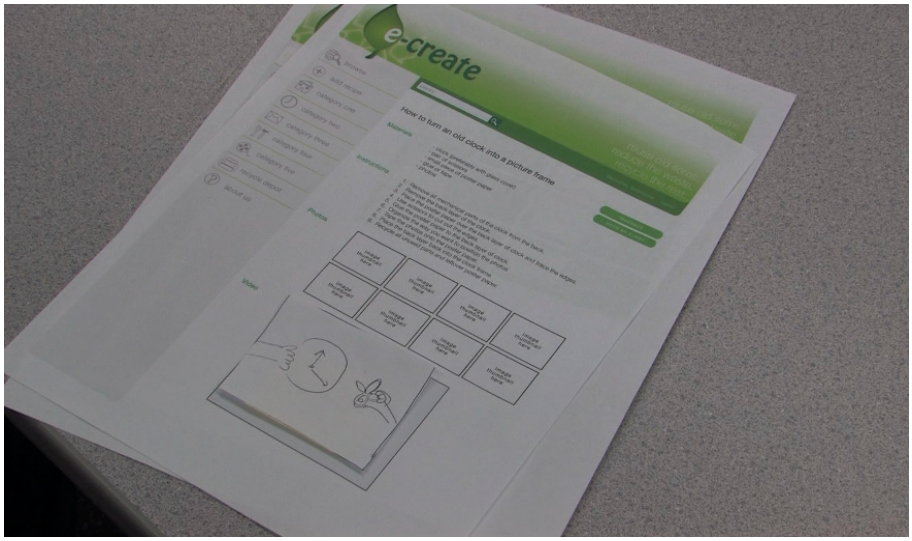
e-Create Prototype



"homepage"



"Signed in - Search result"



"recipe"

Test measure

During our task testing, we looked for the most pertinent usability issues that relates to a search website. In total, there were six usability goals: visibility, feedback, constraints, mapping, consistency, and affordances. For the general webpage layout, we tested whether the participants are able to find the main widgets such as the login bar and the search engine. Feed back is tested by observing if the users are able to tell when they are logged in and if their postings are successful. Clear mapping and affordances are tested based on if the users have no trouble in knowing that the buttons and links can be clicked on and understands where they will be directed to after clicking. Finally, the successful use of constraints are tested by recording when, if any, the users clicked on a non interactive section of the webpage and how they respond when the website didn't do anything.

- Were the test users able to complete the task scenarios successfully?
- How fast do participants do each task? Were there any obvious lags in one aspect of the task performance?
- How many pages (clicks does it take to complete each task?
- Do test users perform well enough to meet the usability goals?
- How satisfied are participants with the site?
- What improvements are needed to make sure that the users will be more successful in their tasks?
- Is the search box in a good location and is it large enough for most of the words used?
- Do the search results provide leads to quick recipes to users materials?

Result

From conducting our tests with our paper prototype, we can see that, in general, our webpage is very intuitive in its usability, and fair in terms of its usefulness. In terms of usability, our testers navigate through our webpage fairly smoothly every time, there was not an occasion where someone was completely stuck and needed assistance from us. One of the testers commented on the layout of our page, saying it's a pretty common and simple layout, making it is easy to understand and intuitive. Consistency throughout the pages also helped the users to find what they need and complete their task smoothly. The usefulness of our webpage is fair and will be improved. The basic needs for browsing our website are there, but we discovered that we are lacking several little features such as printing the recipe or a back button in some areas. The user test made these visible, hence giving us a chance to make corrections before the final prototype.

Discussion

Since we have design the interface, there are a lot of assumptions made by us, and however it is designed is the expected mode of interaction. From conducting our experiment, we see different ways which the users go about completing the same task, and they are very helpful because it then we can note on different areas that need to be improved, and have to chance to see the users' reaction right away. From this experiment, we learned that organization for user testing is the key for the test to run smoothly, from organizing paper prototype to details like wording to describe the task are all very important factors to the test. To avoid misunderstanding and to have the user performing the correct task, we found that being able to describe the task clearly in a fairly short and brief statement is crucial; at the same time by keeping it brief so that we're not giving away too much instructional detail especially how to complete the task. Another factor which leads to a successful testing would be the corporation from the tester. The tester need to think our loud for us to understand their actual mental process, without their though we would have to guess whether or not they're actually stuck, and need assistant on specify areas.

For areas of improvement, first and one most common feedback about our interface is that we should have a print feature for the recipes. The print feature allows user to keep the recipe and retrieve it whenever without having to always search it again, also if any user do not prefer to read the recipe on screen then they can have a hardcopy of it. Secondly, from task two we found that most users would like to have the ability to view their posting prior and right after inputting their recipe. This improvement would allow the user to ensure themselves from careless mistakes of spelling or formatting errors, so the user will know ahead how their posted message and pictures will look like. Another area of improvement s the feedback system we have after reading a recipe. From the test we found that feedback is a very personal preference matter and might not always apply, but it is still a necessary feature. As we planned the feedback system we were thinking about having it for people to post their end result after following the recipe. From the test we found that a lot of user would just have a brief thank you or comment for feedback most of the time. We were glad to notice this from the test, but we will keep our original feature just as a bonus feature to a feedback system. Overall, the experiment identified many problems for us that we might not have noticed before, and in the future we should further refine our test after the previous testing result.

Appendix A

Raw data from testing

Recorded data during testing.

Drew Batcheller

Do you recycle?
I do
I live on my own
Second-hand furniture- got from garage sale
At least as the website is in depth enough
My favourite recipes have icon and "favourite tray"
Print function for listed instruction
Navigation: menu on the side can use more colour
Attention all drawn to the right side
Make sure it's not hard for people to get back to the page that what to
Make magazine on the web, inscrutable
do recycle
live with/ parents
have second-handed furniture
would be interested in recreating something unwanted

task1
go to search bar and search up old clock
read description to see if interested or open multiple tab to browse
to browse one, play the video
log in, then upload feedback
click feedback – browse – select photo – type in the comment - submit – thank you page – go back
task2
log in – add recipe – title – material – upload process picture (does it allow user to upload video?) click submit – thank you page – go back and review the posting

Feedback –
Wants to have the ability to upload video, also wants to be able to go back and review posting right away
Task3
Recycle depot – fill in information – find location – would pick the one closes to own location – go to google map and search for direction from google
Feedback - intuitive? During the feedback, not something that he would be doing base on the button
E-mailing original poster and say thank you instead of posting something back
Having to click back "go back "button is kinda weird because isn't that the last thing already?

Attention all drawn to the right side
Make sure it's not hard for people to get back to the page that what to
Make magazine on the web, instrcutable
do recycle
live w/ parents
have second-handed furniture
would be interested in recreating something unwanted

task1
go to search bar and search up old clock
read description to see if interested or open multiple tab to browse
to browse one, play the video
log in, then upload feedback
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Recycle depot – fill in information – find location – would pick the one closes to own location – go to google map and search for direction from google
Feedback - intuitive? During the feedback, not something that he would be doing base on the button
E-mailing original poster and say thank you instead of posting something back
Having to click back "go back "button is kinda weird because isn't that the last thing already?

Michael

Cans and bottle, his mom does
Living with parents
2nd handed furniture, yes, got rid of with a bunch old furniture, didn't recycle them
Would you take the time to browse through our website? Yes, have a lot of stuff that would like to keep and not throw out
I like to keep as much of my stuff as I can

Task1
Search with keyword- choose a recipe – click to watch video – log in – click log in – feedback – type in comment- click "Go back" after making comment posting
**Wondering if he can just choose any one of the recipe
**Questioning whether or not the upload function's for him or not

Task2
Log in first- input information – click log in- click add recipe – input information – title, material. Instruction, browse to upload pictures – submit recipe – thank you page and go back
Task3
Recycling depot- input information – choose the one closes to you

2nd progress and it's similar process to task 1
It's similar to every website
Wouldn't have log in for searching
Google map was good,
TASK 1
Uploading photos is not quite intuitive

TASK 2

TASK 3
User tends to have no problem understanding that they do not need to log in for this task
Choose the closest location to their home
Everyone loves google map

Last interview
Both her and her parents tries to recycle
No 2nd hand furniture
Living w/ parents
Navi
Task1
Search the word clock - look for one that seems interesting – look at pictures and see how they looks like – print off instruction – send feedback – log in – then go back to feedback – type in comments – upload own picture
Send feedback saying what?
Task2
Type in info to log in - add recipe – input information to add recipe - submit recipe – go back
Task 3
Recycle depot – input location information & material – click closest one

Feedback –
Which one was easiest
Finding recycling depot – don't need to log in

Anything confusing?
Everything's simple
Anything you would like to see?
Option to print out stuff
The design?
Simple and user friendly

Shin
Recycling general stuff
Living on her own
Yes 2nd handed furniture – bookshelf
Will keep old unwanted item for chances to give them away

Task 1
log in first ? add recipe – inputting information submit – go back –
**is go back gonna empty and clear everything?
When click go back it should go to the posting page
-skip task 2

Task 3
Recycling depot – input information – submit – choose the first one or closes on closes – google map
Feedback
Navigation- some step arrows and instruction

Appendix B

The following are the main criteria which the tasks are tested on:

Task 1:

Visibility:

- Did they find the search widget, register/login, (and categories menu)?
- Did they see the best fitting recipe on the search result page right away? Did the result page allow the users to read and find efficiently?
- Did they see the login option at top?
- Did they know where the browse-to-file button is when posting an image?
- Did they see the video box on the instruction page?

Feedback:

- Did they know when their image or comment has been posted?
- Did they know when their recipe has been submitted successfully?

Constraints:

- Did they click somewhere besides the search box when they intended to search a product?

Mapping:

- Did they have a clear understanding of how the pages are linked?
- Did the results of links clicked bring up pages that the user expects?
- Did they know how to play the video by clicking on the thumbnail itself?

Consistency:

- Did the user know they didn't have to (register) or log in to read a recipe?
- Did the users know they were automatically logged in after registration?

Affordances:

- Did they know they can click on images on search results page?
- Did they know they can click on the titles on search results page?

Task 2:
Visibility:
- Did they see the login option at top?
- Did they know where the browse-to-file button is when posting an image?

Feedback:
- Did they know when their recipe has been submitted successfully?

Constraints:
- Did they click somewhere besides the browse button when they intended to upload files?

Mapping:
- Did they have a clear understanding of how the pages are linked?
- Did the results of links clicked bring up pages that the user expects?

Consistency:
- Did the user know they have to (register) or log in to post a recipe?
- Did the users know they were automatically logged in after registration?

Affordances:
- Did they know they can click on the browse button?

Task 3:
Visibility:
- Did they find the locate a recycling depot near you button on the navigation menu?
- Did they see the best fitting location on the search result page right away? Did the result page allow the users to read and find efficiently?
- Did they see the Google map on the page?

Feedback:
- Did they know when their image or comment has been posted?
- Did they know when their recipe has been submitted successfully?

Constraints:
- Did they click somewhere besides the Google map when they intended to look for directions?

Mapping:
- Did they have a clear understanding of how the pages are linked?
- Did the results of links clicked bring up pages that the user expects?
- Did they know how to navigate Google map?

Consistency:
- Did the user know they didn't have to log in to find the nearest recycling depot?
- Did the users know they were automatically logged in after registration?

Affordances:
- Did they know they can click on images on search results page?
- Did they know they can click on the titles on search results page?
- Did they know they can click on the Google map thumbnail to navigate it?

Appendix C

Inform consent forms

Please find 5 "Inform consent" forms signed and dated attached to this document in the following next 5 pages.