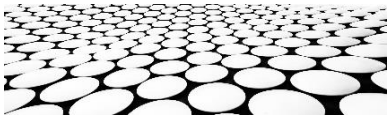
SEG3125 User Interface Design and Analysis



MODULE 7 – TUTORIAL/LAB

Design of a Site of your Choice

GOALS

Our theme this week is heuristic evaluations. We will use the 10 heuristics at the core of heuristic evaluation to create a design, which from its conception, meets the expectations of the evaluators who could review it.

During this laboratory, you must:

- Design a site of your choice (this site must meet certain criteria listed in the Design section)
- Create prototypes (paper sketches or mock-ups/wireframes) of your site
- Show the knowledge organization within the domain of your site
- Include in your UI, an element of design for each of the usability heuristics

PLEASE NOTE:

- *Choose a subject that you like for your site because you will have to continue with this site for the next 2 laboratories. Module 7 is a first step (design), modules 8 and 9 will follow with implementation in React and React Native technologies. If you want to get a little ahead in learning these technologies, go back to the Net Ninja videos! He has a very good series on React.*
- *As this lab focuses on design and not on the use of technology, I will not include an advanced requirement level.*

SUBMISSION DEADLINE

- Tuesday, July 7th, 11:30pm

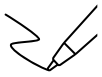
SUBMISSION METHOD

- In Brightspace, the Module 7 checklist contains a link for your submission.
- Submit a PDF file containing your design report which must include all the required elements enumerated in the Design section of this document.

INSTRUCTIONS / TUTORIALS

This laboratory is different from the previous ones. I ask you to make a design which will include many elements taught in the videos of this week and the preceding weeks. I recommend to:

1. Review module 3 on prototyping. You can choose to make paper sketches or, if you wish, you can decide to use mock-up/wireframe design tools to make your prototype. Different tools have been suggested in the checklist in Module 3.
2. Review module 6 on semantic networks and interactive processes. You will have to make a network reflecting the knowledge organization of your site, and you will have to make a site which contains at least 3 different processes.
3. Review module 7 on heuristic evaluation. Furthermore, I advise you to do Activity 7 in which you will do a heuristic evaluation. After the activity, you will be better prepared for this lab.



DESIGN

As it is a design lab, your requirements are given in this section.

<u>Requirements for your choice of site:</u>

1. Your site must include at least 3 of the 8 interactive processes presented in the videos in Module 6: follow instructions, absorb information, do supervised activity, etc. (See Module 6). If you think your site would include a process not part of this list, describe it and explain why.
2. Your site must contain a design element linked to each usability heuristic.

<u>Requirements for your design report:</u>

1. Introduce the name of your company (or organization).
2. Provide a description of the purpose of this site.
3. Discuss the necessary knowledge organization, and present a semantic network showing this organization. Limit your network to ten concepts, this will be enough.
4. Explain which interactive processes will be featured (at least 3).
5. Show a sketch/mock-up for each process. Name these sketches (Sketches 1, 2,…) so that you can refer to them in your point (6).
6. For each usability heuristic (10 heuristics):
    a. Explain which design element in a sketch is related to this heuristic.

STARTING POINT

I give you three examples of possible sites. You can certainly take inspiration from these examples to think of your site. You don't have to find something super original…. This is not the goal here. The goal is to practice making a good design. Think of a site you would like to do as you will continue with this site in the next two labs.

For each of my examples:

- I show you 3 processes. Your site must cover at least 3 different processes.
- I also give you some terms that would be part of the knowledge organization. You must present a semantic network with terms and relations.
- I give you ideas for UI elements to include with respect to the 10 heuristics. With my 3 examples, I cover the 10 heuristics. You must discuss the 10 heuristics and point, in your sketches, to the elements in relation to these heuristics.

My examples are incomplete. My goal is to indicate what to do and not to do it entirely.

Site for Student Painters

1. The site is for the company "Color Experts".
2. *Color Experts* offers interior and exterior painting services, but also aims to help people make good color choices.
3. The 3 processes in the site:
    a. Follow instructions: Users will have to provide information as to the work to be done, and the UI should guide them to obtain this information
    b. Divergent / convergent exploration: Users will be able to explore paint colors, types, prices. They will also be able to explore types of work previously done by the *Color Experts* team to possibly choose the service they want.
    c. Produce / Design: users will be able to design virtual rooms with walls of various colors side by side to see the layouts.
4. My semantic network should include the terms painting, works, measures, colors, etc., and show the relations between these terms. This organization will help me in the design of structural patterns which will be found in my sketches.
5. I should include at least 3 sketches for my 3 processes. Probably 4 sketches even here because (3b) contains 2 different aspects in the exploration.
6. Here are some elements in my UI for the 10 heuristics:
    a. Consistency: we find the same theme (image + logo) at the top of each page. See the sketches ...
    b. Familiar language and metaphors: The words chosen for the buttons will be…., For the menus will be… (see sketch…)
    c. Simple and functional design: See sketch 1 in which it will be easy to explore paint colors by doing …
    d. ….

Virtual Museum Site

1. The site is a site of a non-profit organization "Art with you".
2. *Art with you* aims to introduce great paintings to all those who cannot go to museums.
3. The 3 processes in the site:
    a. Divergent / convergent exploration: Users can explore the exhibits and paintings in order to choose one.
    b. Absorb information: Users can see a painting with zooms on various parts, and also listen to an audio description of the work.
    c. Communicate: users can exchange in connection with their opinion on the work
4. My semantic network should include the terms painting, artists, public, opinion, etc and the relations between these terms.
5. I should include at least 3 sketches for my 3 processes.
6. I will give a design element for each of the 10 heuristics:
    a. …
    b. Freedom: when a user no longer wants to listen to the audio description of the work, they can stop. We can see the STOP buttons at the bottom of sketch 2.
    c. Flexibility: Some users do not want to explore the works but already know the title. The UI will provide a QUICK SEARCH entry allowing the user to write the name of the work.
    d. Recall Recognition: All information about artists and works will be shown as a list, as well as images (reduced sizes)
    e. …

Site for tennis club

1. The site is a site of a community organization "Get on your rackets!".
2. *Get on your rackets* offers tennis lessons to its members, but also access to tennis courts.
3. The 3 processes in the site (here I put 4):
    a. Follow instructions: Users can register to a course. To do this, the UI will guide them in what to enter.
    b. Follow instructions: Users can reserve a tennis court. To do this, the UI will guide them in what to enter.
    c. Divergent / convergent exploration: Users can explore the courses offered, as well as the availability of tennis courts.
    d. Communicate: users can communicate with other people to find people of the same level with whom to play in singles or doubles.
4. My semantic network will contain these terms: courts, hours of availability, instructors, courses… and it will contain the relations between them.
5. I should include at least 4 sketches for my 4 processes.
6. I will give a design element for each of the 10 heuristics:
    a. …

b. Clear status: On each page, the menus will clearly give the options. For example, in sketch 2, we see ... and when a person presses the button to Book, there will be a message…
c. Error prevention: When making a reservation, the UI will offer a calendar with only the times available.
d. Error recovery: For all pages not on the planned routes, the UI will display…
e. Help: There will be global help with an item at the top of the page (see sketch 2) explaining the site. Also there will be local help, for example, sketch 3 shows an active tooltip for the Z button.

CODING

No programming. The requirements were given at the Design level. See Design section.

☆☆☆

EVALUATION

- This laboratory is worth 3.5%.
- Any student who has met all requirements be granted 10/10. Each missing requirement will be penalized by one point.
- Any delay beyond the deadline will have a penalty of 10% per day.

QUESTIONS

- You can ask your questions in the Module 7 discussion forum on Brightspace.
- There is a consultation schedule for the laboratories in the organization section of the course on Brightspace. That will tell you when a teaching assistant is available on the forum or by zoom.
- You can also send your questions directly to the TA you are assigned to. Refer to the lab consultation schedule to see which TA you are assigned to.