CS6326 Human-Computer Interactions

Fall 2018

Homework 1

I’m sure you have looked at coursebook by now. For reference, it’s coursebook.utdallas.edu. But have you really examined it and thought about how its user interface works? Based upon what you have learned about how the human eye and mind work, answer the following questions about the design of coursebook, looking at it with an eye toward design and usability. Keep your answers short and to the point but include enough explanation to answer the question. For questions with a numerical answer, just the number is sufficient.

1. Critique the color scheme. It uses school colors, but is it readable? Any issues? (4 points)?

(a) The school colors used on the website, although readable to some extent, does not show some of the texts clearly. The orange color used on the top may look too bright to some users.

(b) The two shades of green (light and dark) used together does not complement each other.

The 'login' link on dark green strip is difficult to spot at the first glance. It changes to black color on mouse hover which makes it even more unreadable on a dark background.

(c) All the links given at the bottom of the page uses a very light shade of green on white/grey background. It looks very faint and one needs to strain their eyes while looking at it.

(d) The letter 'UT' inside the Texas map uses orange color on white background which is again on orange background. This looks a bit inconsistent and repetitive to the user.

1. How many sets of tabs are there on first screen that comes up? (Find them all for 2 points)

There are about three sets of tabs on the first screen that comes up.

First set - Course Tools, CourseBook, Syllabus Policies and Syllabus Templates.

Second set - class search, guided search, my classes, advanced search, syllabus submission, help and about.

Third set - search results, saved classes and my events.

1. Does Coursebook follow the rule of telling you where you are in the navigation? (2 points)

No, Coursebook does not follow the rule of telling where we are in the navigation. Suppose if we follow the chain of prerequisite courses for a particular course, the webpage does not give us the links to go back to the previous pages which we have visited.

1. Can you navigate the “guided search” tab without using a mouse, using only the keyboard? Explain. (2 points)

Yes, we can navigate the 'guided search' tab without using the mouse. All the links and buttons are accessible from the keyboard except the 'question mark' icon on the side of the drop-down list.

1. If there is anything odd about the way the drop-down lists work on the “guided search” tab? If so, describe what might be the problem. If not, explain why not. (4 points)

There are some features that are odd about the way the drop-down lists work on the 'guided search' tab. They are as follows :

(a) Whenever we select any value from the drop-down list, each time the table reloads automatically making the button 'Click here to show' of no use. This also adds to the overhead on the page and the page becomes slow.

(b) For the textboxes accompanying the drop-down list where we can type keywords for quick match, it looks like we can type anything into the textbox like special characters, numbers etc. The text that can be entered in the textbox should be restricted and must be the kind of values the drop-down list offers.

(c) The first drop-down list for 'Term' allows us to select dash (------) which is definitely an error since any 'Term' cannot be dash. The dash option should be removed from the list of options provided by the drop-down filter.

1. Explain how to find all of the prerequisites for CS4384 (that is, follow the chain of courses) using coursebook, and list all of the prerequisites for that course, back to a course that has no prerequisites (such as CS1336.) Record how many clicks it took you to find them all. (6 points)

We set the drop-down filter to Computer Science which loads the table with all the Computer Science courses. We need to find the course CS4384 which is Automata Theory. We then click on 'View class details' on the right hand side which gives us an accordion view of the course details. There is an Enrollment requisites row which states that the 'Prerequisite course as 'CS3305 with a grade 'C' or better.

By clicking on CS3305 which is 'Discrete Mathematics for Computing' we can see the description of the course. For this course the prerequisites mentioned are 'CE2305 or CS2305 or TE2305 with a grade of C or better and Math 2414 or Math 2419.

We can now click on CS2305 which is 'Discrete Mathematics for Computing 1' and it is same as CE2305 or TE2305. This course has a prerequisite of at least 75% in ALEKS or Math 2312 with a grade of C or better.

We also need to look for the course Math 2414 or Math 2419. So we go back to guided search tab and choose 'Math - Mathematical Science' from the drop-down list. We then get Math 2414 which is 'Integral Calculus' and by clicking on 'View class details' we find the prerequisite for this course is (Math 2413 or GPA greater than or equal to 1.67) or (Math 2417 or GPA greater than or equal to 1.67). For Math 2419 that is 'Calculus' , the prerequisite course is also Math 2417 with at least a grade C.

For CS2305, the prerequisite course is 'Math 2312' that is 'Precalculus'. This course has prerequisite of 70% on ALEKS math placement exam or a grade of at least C- in Math 1314 or Math 1316.

We now find the prerequisite course for Math 2413 that is 'Differential Calculus' and it is 'Math 2306 or Math 2312' with at least a C- grade or a score of 80% on ALEKS math placement exam. Also, the course Math 2417 which is 'Calculus 1' has similar prerequisite course of Math 2306 or Math 2312 or a minimal placement score of 85% in ALEKS math placement exam.

Math 1314, College Algebra' has prerequisite of score of 50% on ALEKS math placement exam. Math 1316 - Trigonometry, has prerequisite of score of 50% on ALEKS math placement exam or a grade of at least C- in Math 1314 or concurrent enrollment in Math 1314.

The total number of clicks to find all the prerequisite courses of CS4384 is about 9-10. If we search all the prerequisites for Math courses then the total number of clicks may go upto 15-16.

Fill in the answers in a copy of this document and hand it in through eLearning.

Total 20 points.