CSE 510, Spring 2014
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Simple Heuristic Evaluation

Due: in class Wednesday, April 23, 2014

Overview

The goal of this assignment is to learn how to apply Nielsen's heuristic evaluation technique on one small, but flawed, piece of a user interface, including identifying usability violations, rating their severity, and comparing with the ratings from other evaluators.

If you are already familiar with heuristic evaluation from another course or self-study, you can ask that this lab be waived – in that case, please propose something else to substitute for it (for example, using heuristic evaluation on your project, some additional work on your course project, or whatever would work best for you).

Plan

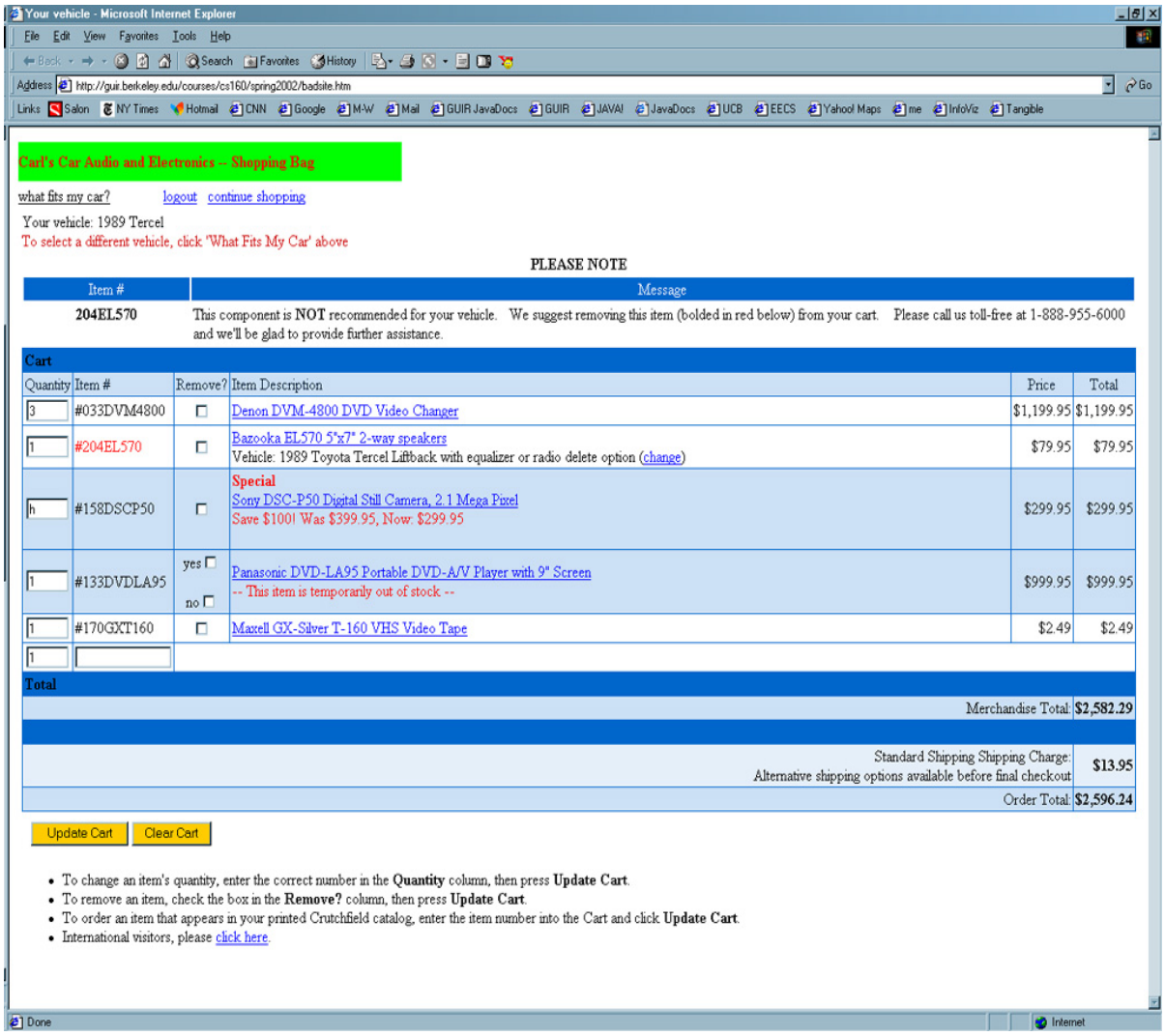
The first part of this assignment is done individually. The figure on the other side illustrates a shopping cart for an online store. Perform a heuristic evaluation of this interface, and describe the usability violations that you find. You should find at least 8, although there are more. Label each violation with a number *on the figure* and separately make a list of violations. For each one, describe *which guideline* is violated, and *why*. You should also *suggest a solution* to solve each of these problems. Use Nielsen's second set of heuristics to label each violation (see attached). Remember to list each violation separately, and list the name of the related heuristic. After you've identified the violations, rate their severity using Nielsen's scale (also attached).

Next, assemble into groups of 3-4 and compare your lists of violations. There is a Catalyst forum topic set up for finding partners and a time for this. For each violation that you found that was also found by one or more other evaluators, record the mean of the ratings as well as your own.

Deliverable

Turn in your annotated figure, and (on one or more separate sheets) a list of the violations by number on the figure, the guideline violated, your own severity rating and the average of all ratings, and a suggested solution. Finally, please include a brief note reflecting on the process. How much overlap was there in the violations identified? How much agreement or disagreement was there on their severity?

Please write your name on all sheets.


Your vehicle - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://guir.berkeley.edu/courses/cs160/spring2002/badsite.htm
Links Salon NY Times Hotmail CNN Google M-W Mail GUIR JavaDocs GUIR JAVA! JavaDocs UCB EECS Yahoo! Maps me InfoViz Tangible
Carl's Car Audio and Electronics -- Shopping Bag
what fits my car? logout continue shopping
Your vehicle: 1989 Tercel
To select a different vehicle, click 'What Fits My Car' above
PLEASE NOTE
Item # Message
204EL570 This component is NOT recommended for your vehicle. We suggest removing this item (bolded in red below) from your cart. Please call us toll-free at 1-888-955-6000 and we'll be glad to provide further assistance.
Cart
Quantity Item # Remove? Item Description Price Total
3 #033DVM4800 Denon DVM-4800 DVD Video Changer $1,199.95 $1,199.95
1 #204EL570 Bazooka EL570 5"x7" 2-way speakers
Vehicle: 1989 Toyota Tercel Liftback with equalizer or radio delete option (change) $79.95 $79.95
h #158DSCP50 Special
Sony DSC-P50 Digital Still Camera, 2.1 Mega Pixel
Save $100! Was $399.95, Now: $299.95 $299.95 $299.95
1 #133DVDLA95 yes no Panasonic DVD-LA95 Portable DVD-A/V Player with 9" Screen
-- This item is temporarily out of stock -- $999.95 $999.95
1 #170GXT160 Maxell GX-Silver T-160 VHS Video Tape $2.49 $2.49
1
Total
Merchandise Total: $2,582.29
Standard Shipping Shipping Charge: $13.95
Alternative shipping options available before final checkout
Order Total: $2,596.24
Update Cart Clear Cart
To change an item's quantity, enter the correct number in the Quantity column, then press Update Cart.
To remove an item, check the box in the Remove? column, then press Update Cart.
To order an item that appears in your printed Crutchfield catalog, enter the item number into the Cart and click Update Cart.
International visitors, please click here.
Done
Internet

Ten Usability Heuristics by Jakob Nielsen (2nd version)

These are ten general principles for user interface design. They are called "heuristics" because they are more in the nature of rules of thumb than specific usability guidelines.

H2-1. Visibility of system status
The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

H2-2. Match between system and the real world
The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

H2-3. User control and freedom
Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

H2-4. Consistency and standards
Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

H2-5. Error prevention
Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

H2-6. Recognition rather than recall
Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable when appropriate.

H2-7. Flexibility and efficiency of use
Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

H2-8. Aesthetic and minimalist design
Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

H2-9. Help users recognize, diagnose, and recover from errors
Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

H2-10. Help and documentation
Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Severity Ratings

0 = I don't agree that this is a usability problem at all
1 = Cosmetic problem only: need not be fixed unless extra time is available on project
2 = Minor usability problem: fixing this should be given low priority
3 = Major usability problem: important to fix, so should be given high priority
4 = Usability catastrophe: imperative to fix this before product can be released