### cisc3650, spring 2012, lab II.1 / prof sklar. Heuristic Evaluation

This exercise will comprise part of the homework assignment for Unit II. The complete assignment will be given in class next week, and will be due 2 weeks later.

Use the **evaluation heuristics**, listed below, to assess the interfaces for two different software applications. Assign to each heuristic a value, on a scale of 0 to 4, as follows:

0 = not a problem

1 = cosmetic problem; fix if time

2 = minor usability problem; low priority fix

 $3=\,$  major usability problem; important to fix

4 = catastrophic usability problem; must be fixed before system/interface is released

Refer to the lecture notes from February 21 for more information about each heuristic.

## 1 application #1: excel

#### FIRST—Complete the following task using Microsoft Excel:

Given the calendar (below) containing actual and predicted temperatures for the first 25 days of February:

- (a) Create a spreadsheet with two columns, one containing the high temperature for each day and one containing the low temperature for each day.
- (b) Create a third column that contains the average temperature for each day (i.e., average of the low and high values).
- (c) Create a bar chart that plots the average temperature for each day.

|   |                                    |   |                                    | 42  |                                    | 1<br>Actual:<br>Precip:<br>Average:<br>Precip:  | 62   48<br>0.03<br>39   27<br>0.11 | Actual:<br>Precip:<br>Average:<br>Precip:       | 50   35<br>0.00<br>39   27<br>0.11 | Actual:<br>Precip:<br>Average:<br>Precip:       | 44 I 30<br>0.00<br>39 I 27<br>0.11 | 4<br>Actual:<br>Precip:<br>Average:<br>Precip:      | 46   35<br>0.00<br>40   28<br>0.10 |
|---|------------------------------------|---|------------------------------------|---|------------------------------------|---|------------------------------------|---|------------------------------------|---|------------------------------------|---|------------------------------------|
| Actual:<br>Precip:<br>Average:<br>Precip:       | 40 1 32<br>0.00<br>40 1 28<br>0.11 | Actual:<br>Precip:<br>Average:<br>Precip:       | 51 I 33<br>0.00<br>40 I 28<br>0.11 | 7 Actual: Precip: Average: Precip:              | 49   38<br>0.00<br>40   28<br>0.11 | Actual:<br>Precip:<br>Average:<br>Precip:       | 38   31<br>0.01<br>40   28<br>0.11 | 9<br>Actual:<br>Precip:<br>Average:<br>Precip:  | 46   31<br>T<br>40   28<br>0.10    | Actual:<br>Precip:<br>Average:<br>Precip:       | 45   34<br>0.00<br>41   28<br>0.11 | 11<br>Actual:<br>Precip:<br>Average:<br>Precip:     | 38   32<br>0,08<br>41   28<br>0.10 |
| 12<br>Actual:<br>Precip:<br>Average:<br>Precip: | 32   20<br>T<br>41   28<br>0.11    | 13<br>Actual:<br>Precip:<br>Average:<br>Precip: | 44   28<br>0.00<br>41   29<br>0.10 | 14 Actual: Precip: Average: Precip:             | 47   36<br>0.02<br>41   29<br>0.11 | 15<br>Actual:<br>Precip:<br>Average:<br>Precip: | 46139<br>0.01<br>42129<br>0.10     | 16<br>Actual:<br>Precip:<br>Average:<br>Precip: | 44   36<br>0.19<br>42   29<br>0.12 | 17<br>Actual:<br>Precip:<br>Average:<br>Precip: | 50   41<br>0.03<br>42   29<br>0.11 | 18<br>Actual:<br>Precip:<br>Average:<br>Precip:     | 48   35<br>0.02<br>42   29<br>0.11 |
| 19<br>Actual:<br>Precip:<br>Average:<br>Precip: | 44 I 35<br>0.00<br>42 I 30<br>0.11 | 20<br>Actual:<br>Precip:<br>Average:<br>Precip: | 46   31<br>0.00<br>43   30<br>0.11 | 21<br>Actual:<br>Precip:<br>Average:<br>Precip: | 45   32<br>0.00<br>43   30<br>0.11 | 22<br>Actual:<br>Precip:<br>Average:<br>Precip: | 50 1 44<br>0.00<br>-1-             | Precip:   | 58 I 45<br>Rain<br>43 I 30<br>0.11 | Precip:   | 56136<br>ers<br>43130<br>0.11      | 25<br>Forecast:<br>Chance of<br>Average:<br>Precip: | 47   27<br>Rain<br>44   30<br>0.12 |

#### SECOND—Evaluate your Excel experience:

Circle the value that you believe best fits each heuristic, as you evaluate the interface.

Then, for each, briefly explain why you gave the value that you did.

| $1.1$ Visibility of system status: $ \boxed{0  1  2  3  4 } $                          |
|--|
|  |
| 1.2 Match between system and real world:   |
|  |
| 1.3 User control and freedom:  |
| 1.4 Consistency and standards: $\begin{bmatrix} 0 & 1 & 2 & 3 & 4 \end{bmatrix}$       |
| 1.5 Error prevention:  |
|  |
| 1.6 Recognition rather than recall:  |
|  |
| 1.7 Flexibility and efficiency of use:   |
|  |
| 1.8 Aesthetic and minimalist design:   |
|  |
| 1.9 Help users recognize, diagnose and recover from errors: $ \boxed{0  1  2  3  4 } $ |
|  |
| 1.10 Help and documentation:   |

# 2 application #2: cheaptickets.com

### FIRST—Complete the following task using the http://www.cheaptickets.com site:

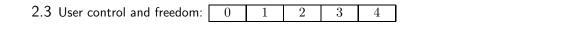
Reserve airline tickets for a trip to the destination of your choice during Spring Break (April 6-16). You can decide wherever you want to go. DON'T BUY THE TICKETS! Just complete the reservation up to the point where the site asks you to pay...

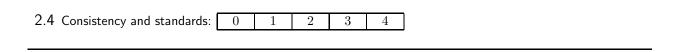
### **SECOND**—Evaluate your CheapTickets experience:

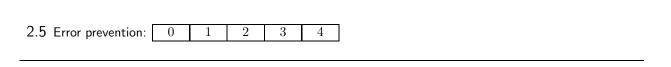
Circle the value that you believe best fits each heuristic, as you evaluate the interface.

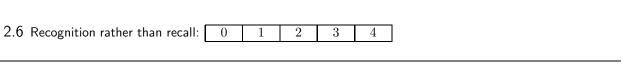
Then, for each, briefly explain why you gave the value that you did.

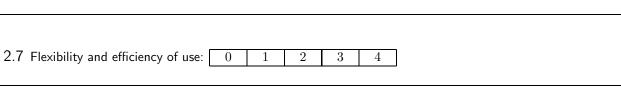
| 2.1 Visibility of system status: | 0 1        | 2   | 3 4 |     |   |  |
|----------------------------------|------------|-----|-----|-----|---|--|
|                                  |            |     |     |     |   |  |
| 2.2 Match between system and r   | eal world: | 0 1 | 2   | 3 4 | ] |  |
|                                  |            |     |     |     |   |  |











| 2.8 Aesthetic and minimalist design: $\begin{bmatrix} 0 & 1 & 2 & 3 & 4 \end{bmatrix}$ |  |
|--|--|
|  |  |
| 2.9 Help users recognize, diagnose and recover from errors: $ \boxed{0  1  2  3  4 } $ |  |
|  |  |
| 2.10 Help and documentation:   |  |
|  |  |

# 3 comparison

Think about the following...

How do the two interfaces compare with each other in terms of the evaluation? i.e., which scored more highly overall? which scored higher on which aspects?

Obviously, the two tasks you completed were quite different. Did you learn anything when doing the evaluation that would help you revise your college essay page that you created for the first homework assignment?