

MENU DESIGN

Menu: A list of items from which a user selects one or more items.

Example: Shown below is a two dimensional (multi-list) breakfast menu for a small restaurant. The person at the service counter marks the items selected by the customer.

<u>Main Items</u>	<u>Drinks</u>
<input type="radio"/> Scrambled Egg	<input type="radio"/> Coffee
<input type="radio"/> Sausage	<input type="radio"/> Coke
<input type="radio"/> Toast and Jelly	<input type="radio"/> Milk
<input type="radio"/> None	<input type="radio"/> None

Question:

- ? Is there a good reason for having the "None" item in each list?
- ? Why is coffee listed first in drinks-section and why does drink-section appears second (right)?
- ? How many different breakfasts can be ordered based on the above menu?

Evaluation Criteria of Menu-design:

- (1) *Exclusiveness* (disjointness of the list items): can we choose more than one item in the same list?
- (2) *Completeness* (of each list): does it include all items offered. Also, are all lists present?
- (3) *Organization* (ordering of items within a list): does it make it easier for the customer to choose? (The designer may want to direct the customer to choose particular items.)
- (4) *List-placement*: corresponds to the order in which the customer is likely to make decisions about different category of items?

EXERCISE

1. How will you incorporate the small/large options for each item in the restaurant menu?
2. The proposal submission web-pages for NSF (National Science Foundation) has a menu of three items as shown below for controlling access to the proposal by the Sponsored Research Office (SRO) of LSU. The person preparing the proposal selects one of circles for the SRO access control to the proposal.
 - Allow SRO to only *view* the proposal but not submit
 - Allow SRO to *view and edit* but not submit the proposal
 - Allow SRO to *view, edit and submit* the proposal

What problems do you see with this menu in terms of the evaluation criteria (1)-(3)? Show a better menu design for the access control (in regard to viewing, editing, and submitting).

3. Consider a more general situation than Problem 2, where one gives controlled access to others (one person at a time) for editing and viewing a document that has clearly identifiable segments like "summary", "body", "financial data or budget", "figures", "tables", "special text", etc. Design a menu such that the menu is both easily extendible (e.g., new category of identifiable document segments may be added) and flexible in terms of the level of access allowed for each document segment.
4. If we want a 5th grader to choose two even numbers from a list of the numbers {4, 6, 12} {1, 7, 17, 19}, what would be a good way and a bad way to present these numbers?

MENU FOR A STUDENT TO DISPLAYING HIS/HER COURSE-PERFORMANCE DATA

- The student selects items from this menu; it can be saved for future use (say, for displaying performance-data for other course). Some menu-items for tests and homeworks are initialized "×".
- Student Name area will be filled based on the student-login information; Semester and Acad. Year are filled in based on the current date, but can be modified.
- The Course Name pull-down menu will show all relevant courses.
- When the performance-data is displayed, one of the options in that display would be "Choose another course".
- A teacher has a limited choice to make some selection-items in Tests/Homeworks inapplicable for a course (e.g., percentages are not assigned for individual homeworks); these options are then marked dark. The whole line is deleted if all are marked dark.

Display Menu for Student's Course-Performance Data

Student Name:

Course Name: ▾ Semester: Acad. Year:

	Tests	Homeworks
Total Score:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
% of Total grade:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
My Score:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Max Score:	<input type="checkbox"/>	<input type="checkbox"/>
Min Score:	<input type="checkbox"/>	<input type="checkbox"/>
Class Average:	<input type="checkbox"/>	<input type="checkbox"/>
Rank in Class:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

A COURSE-PERFORMANCE DATA DISPLAY

Student: Sukhamay Kundu

Course: Software Engg, **Semester:** Fall **Year:** 2008

Grading scale: A=85-100, B=75-84, C=65-75, D=55-64, F=0-54

Performance-data for tests and homeworks: Current grade = B

Tests(90%)	#1(20%)	#2(20%)	#3(25%)	#4(25%)
My score (Total):	90(100)	30(50)
Class average:	87	40
Homeworks(10%)	#1	#2	#3	#4
My score (Total):	10(10)	10(15)	5(15)	10(10)
Class average:	9	8	12	10

All test score (Total) = 120(150),	Weighted-value = 72(90%)
All homework scores (Total) = 35(60),	Weighted-value = 6(10%)
Total = 78(100%)	

Do you want to choose another course (y/n): ☐