Comp 3020 – Human-Computer Interaction I
Assignment #1
Handed out on: September 23th 2015
Due on: October 14th 2015, midnight

PART I – Introduction to online resources for C#.NET (10%)
Get familiar with the many online resources for development in C#.NET.

Using your own words answer the following questions:
(a) "Creating a simple form": what is the method for showing a message box?
(b) "Event Handling": what is an event handler?
(c) "Creating a Windows Application project": what are the necessary steps in creating a Windows Forms application project?
(d) "Keeping a windows form on top": (a) describe one approach for maintaining a form as the topmost window in an application. (b) Give one example of when such a form would be useful.
(e) "Menus and context menus": describe each of the following - menus, context menus, status bars, and toolbars.

PART II– GUI components in .NET (30%)
This part of the assignment is designed to get you familiar with .NET components. **Create a separate .NET project for each question**.
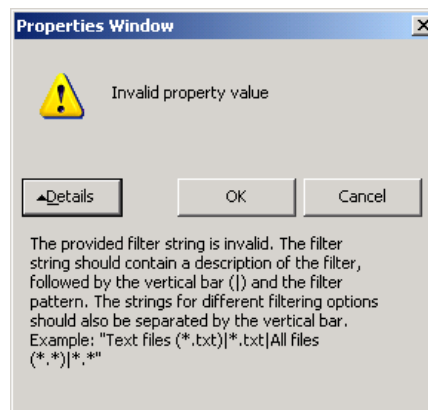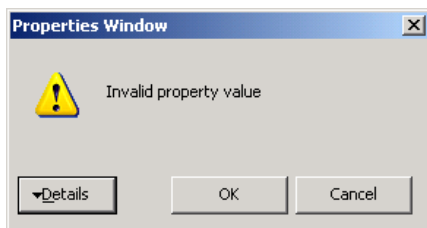
(a) ListView
Use a list view control to show data in a tabular manner. (Add at least 20 rows of data.)

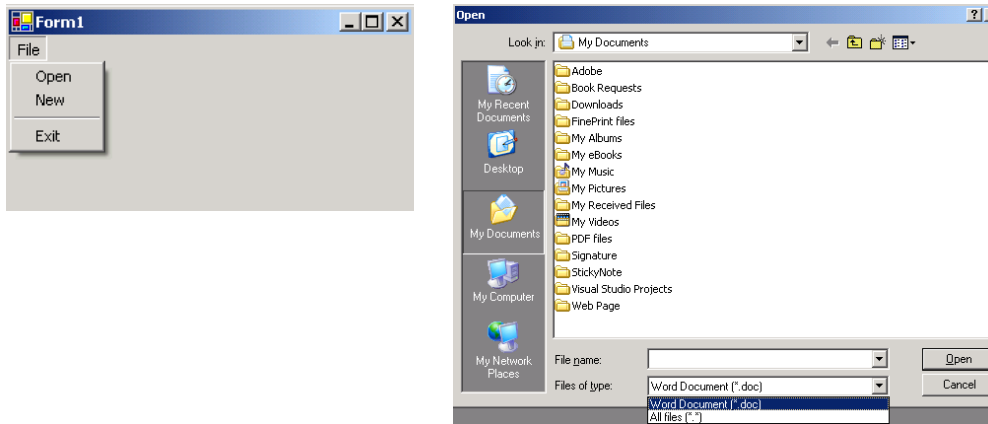| Course Number	Name	Instructor	# of Students
CS3020	HCI	PPI	80
CS3380	Databases	MIA	95
CS2080	Algorithms	NKA	45
…			

(b) Details Dialog Box
Implement a Form that behaves exactly like the Details Dialog Box shown below. It should have a "Warning" image and label, and the same number and alignment of buttons. Upon requesting details, the form should expand as shown below. The user should also be able to close the detail view when done reading the message. (NOTE: You do not need to replicate the specific images or arrow shapes in this sample).

(c) Menu/Open Dialog

Design a menu as shown in the image below. Upon clicking on the Open item the Open Dialog appears. The Open Dialog should allow the user to select only "Word Documents (*.doc)" or "All Files (*.*)" (as depicted in the image below).

PART III – Scenarios and Task Analysis (60%)

Using the specific problem given in the "Project Description" (a separate file available on course page), complete the following steps in designing your software project:

(a) **User Profile:** provide a set of user profiles for your system. Include at least 3 primary users, 1 secondary user and 1 tertiary user.

(b) **Usability Criteria:** List the 3 most important usability goals of your system. For each usability goal suggest at least two usability criteria you can use to evaluate whether the goal has been met successfully. Describe why each goal is appropriate for your system and provide rationale for each criterion you choose.

(c) **User Experience Goals:** List 2 user experience goals for this system. Provide the rationale for each choice.

(d) **Identify Needs:** gather and identify a list of requirements for your system, including at least 5 different requirements. A starting point will be to envision what your users may require of your system. **You are required to find and contact at least 2 participants to consult as primary users for this system**. You may use structured questionnaires, interviews, observations, or any other method/combination of methods discussed in class. Provide the rationale for choosing the methods you used for requirements gathering. Also include in your response a brief, anonymous description of each participant and a copy of your materials (i.e. the questionnaire or interview questions, etc.).

(e) **Scenarios:** based on your set of user requirements, choose two different user profiles and produce 1 scenario for each, capturing how the user is expected to interact with the system.

(f) **Task Analysis:** using the scenarios generated from your data gathering activities, perform a hierarchical task analysis on 4 main tasks associated with your system. **Note:** Your main tasks should be something other than data management routines (adding/deleting/editing).

Hand-In: PART I, PART II & PART III: Place all of your executable files in a single folder named "Execs". Include this folder, your word document, and source code in one zip file named a1.zip per group. Upload your zip file to the dropbox on the UM Learn course page. *be sure to include your group number with both member names and student numbers in the word document*.