Workbook exercise #2: Spreadsheets using Excel

Due dates for book exercises can be found on the main grid of the course webpage:

- https://pages.cpsc.ucalgary.ca/~tamj/2020/203F/index.html#Main_grid

To be awarded credit for this exercise you need to use the starting file found at this location:

https://pages.cpsc.ucalgary.ca/~tamj/2020/203F/assignments/workbook_exercise2/

Spreadsheet name: "WBEx2_data_validation"

Data validation:
You will set up data validation rules in Cells **A2** & **B2**.

- Cell **A2**: Contact phone number must be exactly 10 digits in length. (`Worth 1.7 grade points`):
    - `0.4 GPA` for the `Input Message`
    - `0.4 GPA` for the `Error Alert`
    - `0.9 GPA` for the `Settings` to prevent erroneous data entry: `0.3 GPA` for only allowing whole numbers, `0.3 GPA` for the correct minimum value, `0.3 GPA` for the correct maximum value.
- Cell **B2**: The user is constrained to the faculties in the following list: arts, business, engineering, science, social science. Correct values can either be selected from the list or manually typed in. (`Worth 2.3 grade points`):
    - `0.4 GPA` for the `Input Message`
    - `0.6 GPA` for the `Error Alert`
    - `1.3 GPA` for the `Settings` to prevent an erroneous value for the faculty from being entered by creating a list (0.26 GPA for each faculty).

Step 1: Ensure the user only enters a Canadian phone number that is exactly 10 digits long. Only the digits can be entered (no other characters such as spaces or dashes are allowed).

> **Step 1A:** click on Cell **A2** to ensure it's the currently active cell. For Steps 1 – 3 make sure this cell is the one selected.

> **Step 1B**: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`.

> **Step 1C**: Under the '`Settings`' tab change the following:

> > Step 1Ci: Under '`Allow`' select '`Whole number`'

> > (Unless the option under the '`Data`' label has an option selected other than '`between`' specified you don't have to change it. The '`Ignore blank`' option should be unchecked.)

Step 1Cii: Under '`Minimum`' type in '1111111111' (10 ones)

Step 1Ciii: Under '`Maximum`' type in '9999999999' (10 nines)

Step 1Civ: Click '`OK`'

Step 2: Create a message that provides cues for what is a valid phone number *before* the user enters a value.

Step 2A: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`

Step 2B: Select the "`Input Message`" tab.

(Unless the checkbox for "`Show input message when cell is selected`" is not checked you don't have to change this control).

Step 2Bi: Under '`Title`' type in "Phone number: input cue"

Step 2Bii: Under "`Input Message`" type in "Enter exactly 10 digits for the phone with no extra spaces, dashes or other separators."

Step 2Biii: Click '`OK`'

Step 3: Create a message that describes the error that will occur *after* the user has entered an erroneous value.

Step 3A: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`

Step 3B: Select the "`Error Alert`" tab.

These controls don't have to be changed unless they are set to states that are different from the following:

- `Show Error alert after invalid data is entered`: Checkbox should be 'checked'

- `Style`: Only change it if an option other than '`Stop`' has been selected.

Step 3Bi: Under '`Title`' type in "Phone number: error message"

Step 3Bii: Under "`Error Message`" type in "Reminder: Type in exactly 10 digits for the phone number with no separators such as spaces or dashes."

Step 3Biii: Click '`OK`'

Step 4: Ensure the user only selects or types in a faculty from the following list: arts, business, engineering, science, social science.

Step 4A: click on Cell `B2` make it the currently active cell. For Steps 4 – 6 make sure this cell is the one that has been selected.

Step 4B: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`

Step 4C: Under the '`Settings`' tab change the following:

> These controls don't have to be changed unless they are states different from the following:
>
> - `Ignore blank`: Checkbox should be 'checked'
>
> - `In-cell dropdown`: Checkbox should be 'checked'
>
> Step 4Ci: Under '`Allow`' select '`List`'
>
> Step 4Cii: Under '`Source`' type in "arts, business, engineering, science, social science" Include the commas and the spaces.
>
> Step 4Ciii: Click '`OK`'

Step 5: Create a message that will provide input clues for the faculty *before* the user enters a value.

> **Step 5A**: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`
>
> **Step 5B**: Select the "`Input Message`" tab.
>
> > (Unless the checkbox for "`Show input message when cell is selected`" in not checked you don't have to change this control).
> >
> > Step 5Bi: Under '`Title`' type in "Faculty: input cue"
> >
> > Step 5Bii: Under "`Input Message`" type in "Select a faculty from the pull down list using the triangular shaped control (right of Cell B2)."
> >
> > Step 5Biii: Click '`OK`'

Step 6: Create a message that describes the error that occurred *after* the user has entered an erroneous value.

> **Step 6A**: Select the Data Validation feature: `Data -> Data Tools: Data Validation -> Data Validation`
>
> **Step 6B**: Select the "`Error Alert`" tab.
>
> > This control doesn't have to be changed unless it's set to a state that is different from the following:
> >
> > - `Show Error alert after invalid data is entered`: Checkbox should be 'checked'
> >
> > Step 6Bi Change the Style to: '`Warning`'.

Step 6Bii: Under '`Title`' type in "Faculty: error message"

Step 6Biii: Under "`Error Message`" type in "Select the following from the pulldown list: arts, business, engineering, science, social science."

Step 6Biv: Click '`OK`'

Step 7: Test the Data Validation rule for the telephone number.

Step 7A: Click in Cell `A2` to make it active.

Step 7B: Check how invalid input is handled.

Step 7Bi: Type in 2109455 and press enter.

Step 7Bii: The error message that you previously created should appear. Select '`Cancel`'.

Step 7Biii: Type in abc123 and press enter.

Step 7Biv: The error message that you created in a previous step should appear. Select '`Cancel`'.

Step 7Bv: Mouse-over cell `A2` and the "`Input cues`" that you created previously should appear in a yellow popup.

Step 7C: Check how valid input is handled.

Step 7Ai: Type in 4032109455 and press enter. This value should be accepted.

Step 8: Test the Data Validation rule for the faculty.

Step 8A: Click in Cell `B2` to make it active.

Step 8B: Check how invalid input is handled.

Step 8Ai: Type in 'Humanities' and press enter.

Step 8Aii: When the popup appears select '`Yes`'.

Step 8Aiii: Type in 'Kinesiology' and press enter.

Step 8Aiv: When the popup appears select '`Cancel`'.

Step 8C: Check how valid input is handled.

Step 8Ci: Type in 'Arts' and press enter.

Step 8Cii: Select one of the faculties from the list such as science.

Submitting your work:

- The file must be electronically submitted using D2L.
- You don't need any special naming conventions for this exercise. Keep in mind only the latest file is the one that will be marked, everything else will be ignored (because it is not fair to your marker to sort through multiple versions of your files). Whatever name you have for the latest make sure that it's what you truly want marked!
- D2L configuration for this course
  - Multiple submissions are allowed for this assignment: You can (and really should) submit work as many times as you wish before the due date. Due dates are strict, only what is in D2L by the deadline is what will be marked. **Other methods of verifying that your work was completed on time (e.g. checking timestamps, emailed files etc.) will NOT be accepted**.
- Do not use compression utilities (such as zip) or archiving utilities (such as tar) otherwise your submission may not be marked. The space savings in D2L is not worth the extra time required by the marker to process each submission.
- Make sure that you [check the contents of your submitted files] (e.g., is the file okay or was it corrupted, is it the correct version etc.). It's your responsibility to do this! (Make sure that you submit your assignment with enough time before it comes due for you to do a check).

Important points to keep in mind:

1. **Extensions** may be granted for reasonable cases by the course instructor with the receipt of the appropriate documentation (e.g., a completed Statutory declaration form that has been signed by appropriate Deponent, you can get an appointment via the Office of the Registrar). Typical examples of reasonable cases for an extension include: illness or a death in the family. Cases where extensions will NOT be granted include situations that are typical of student life: having multiple due dates, work commitments etc. Teaching Assistants (the people working in the 203 lab room) will not be able to provide extension on their own and must receive written permission from the course instructor first. (Note: Forgetting to submit/not properly submitting your assignment or a component of your assignment in does not constitute a sufficient reason for special grading considerations).
2. **Collaboration**: Assignments must reflect individual work, group work is not allowed in this class nor can you copy the work of others. To avoid problems students should not see each other's assignment solution.
3. **Execution**: the submission must work on the machines on campus Windows computers. (For the remote learning semester since access to the lab computers is more challenging: the requirement is that your document works on any Windows computer). It's up to you to test and check this is the case. Non-functional submissions will receive only partial credit (if any at all).

4. **Late submissions**:

Submission received:	On time	Hours late : >0 and <=24	Hours late: >24 and <=48	Hours late: >48 hours
Penalty:	None	-1.5 GPA	-3.0 GPA	No credit

Marking:

- If you have questions about your marking then the first person to talk to is your marker and that will be the person who teaches the tutorial in which you are officially registered. [Tutorial information] If you still have questions after this first step then feel free to contact your course instructor, just let me know that you talked to your TA first.
- Marking feedback. This workbook exercise has far fewer features than an assignment so there is a need for a marking spreadsheet. If any feedback is needed then you can find it directly in the D2L Dropbox folder for this exercise along with the numeric score.