

Introduction

In this MP, you will work with a data set containing the results from the Olympic Games held between the years 2000 and 2012 (four summer games and three winter games). This data set is broken up into four separate sheets within one Excel workbook:

- **OlympicAthletes**, a sheet with data on each athlete who won at least one medal at an Olympic Game. The athlete's total medal count is shown for each Olympic Game.
- **OlympicLocations**, a sheet with data on each of the locations where the Olympic Games were held. This includes the city, country, and attendance.
- **OlympicSports**, a sheet with every Olympic sport that was played in 2000-2012, including data on if the sport is a Summer or Winter game.
- **OlympicCountries**, a sheet with each country that has won at least one medal in the Olympic Games played between 2000 and 2012.

Unlike most of the MPs this semester, this MP does not have a specific answer that you are expected to arrive at. Instead, you will generate a report on the **Overview** sheet in the Excel workbook that must display a few key statistics and also consist of some data that you found interesting to calculate yourself.

This MP will not be graded by a computer. Rather, your peers will be grading your submission and determining if the report makes sense. Therefore, it is up to you to create an Excel report that is readable by others, similar to what will be required in many 400-level classes at Illinois and what will likely be required of you in a future job (*even as a faculty member in Computer Science, I am using Excel spreadsheets on a weekly basis*).

Remember: This MP is a **solo assignment**. You should review the academic integrity policy on the course website if you have any concerns about what is reasonable to do when completing this MP

Getting Started

Similar to the previous MPs and the labs, we have prepared a base file for you to work from. You can find these files on the CS 105 website, under the "Assignments" tab, and under the "MP7" link. Unlike other assignments, this file is not zipped and does not need to be extracted. Instead, you can open the file directly with **Microsoft Excel**.

Requirements

The requirement for this MP is to create a report that is easily understood by your CS 105 peers, that includes (at least) the following information:

- The ability to choose* a country name, which is used to:
 - Display the total number of gold, silver, and bronze medals won (for all years),
 - Display the overall total of medals won (for all years),
 - Display the name of the athlete who won the most gold medals (for all years),
 - Display the name of the athlete who won the most total medals (for all years).
- The ability to choose* a year, which is used to:
 - Display the host city and country for the given year,
 - Display the number of athletes and nations participating for the given year,
 - Display the country with the athlete who won the most gold medals (and the name of the athlete),

- Display the country with the athlete who won the most total medals (and the name of the athlete),
- Display the country who won the most medals.
- Using both the country and year information,
 - Display the athlete that won the most gold medals for the selected country in the selected year,
 - Display the athlete that won the most total medals for the selected country in the selected year.

Additionally, you must also show **at least two other pieces of information in your report** that is not listed in the requirement list above. These two extra pieces of information must be formulas whose values change when the input changes. These formulas may reference the year and country input that is required as part of the MP or you can have the user input a new field and calculate values using the new input field. *(As an example, there is a lot of interesting information that can be calculated when a user chooses a specific sport.)*

Since this report will be viewed by peers, you should make sure it is very clear to another user how to enter data and where the results are shown. To do this, **you may want to explore Cell Formatting options** (right click a cell, click “Format Cells...”, and you will find a menu that allows you to change the font, background color, text color, cell border, and other stylistic options). Additionally, since this MP is human-graded, you can add new data to your other sheets or even add additional sheets to your Excel workbook. However, **your entire report must be displayed on the Overview sheet.**

**: Instead of requiring a user to type in data into a cell, you can provide a user a drop-down list. This is not required, but it does look nice. Find out how to do it here: <http://office.microsoft.com/en-us/excel-help/create-a-drop-down-list-HA102809802.aspx> or do an internet search for “Excel dropdown list”.*

Scoring and Submission

Since this MP is graded by your peer, your name, NetID, UIN, or other identifiable information **must NOT** within your report. If your report contains this information, your score **will be reduced by 50%.**

The **50 points** for this MP will be assigned in the following way:

- **20 points**, the required tasks are all completed, correct, and easily identifiable by others
- **20 points**, each piece of information that you must come up with yourself must be completed, correct, and easily identifiable. *(Each extra piece of information is worth 10 points, for a total of 20 points.)*
- **10 points**, for providing an honest assessment of peer submissions within the CS 105 peer grading system. *(Each peer assessment is worth 2 points, for a total of 10 points.)*

You will be using the CS 105 submission system to submit your MP. You can find the submission link on the MP7 page on the CS 105 website.