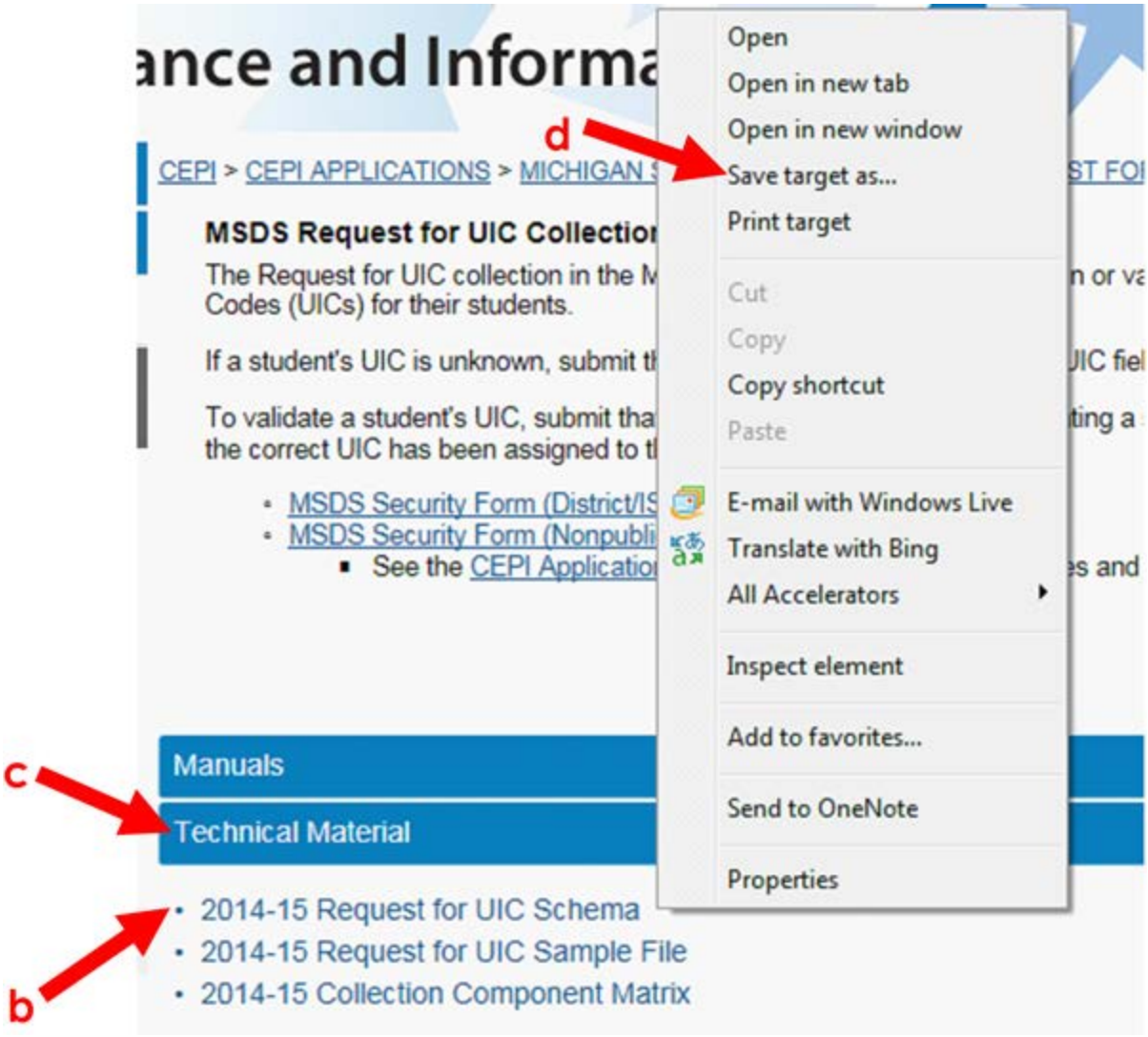
UIC Request using XML

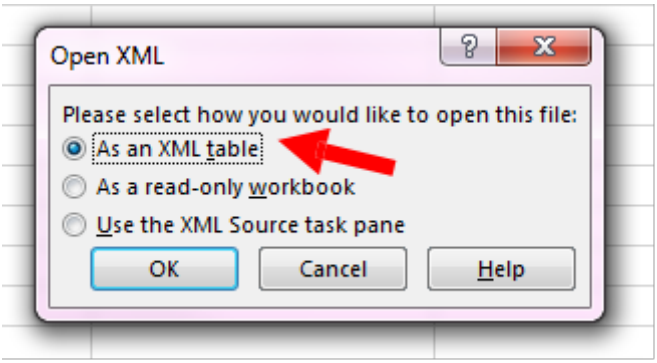
Note: This process is shown with screenshots from Microsoft Excel 2013, but it will work in Microsoft Excel 2010 as well.

1. Download the UIC Request Schema from the CEPI web page
    a. Click this link: http://michigan.gov/cepi/0,4546,7-113-986_50502_52376---,00.html
    b. Click the blue bar that says "Technical Manual" to display a list of files below.
    c. Right-click on "2014-15 Request for UIC Schema", and select "Save target as…"



    d. Save the file to your computer for use later in the process. The default name of the file will be "requestforuiccollection2.xml", but you can rename it if you choose. However, remember the name and the placement of the file.

2. Create a data extract from your data collection software into either an XML or Microsoft Excel file.
    a. The following data fields are required for each child you are requesting UICs for
        - First Name
        - Last Name
        - Date of Birth
        - Gender
    b. The following data fields are optional for the children you are requesting UICs for
        - Middle Name
        - Student Suffix
        - Birth Order
    c. If you extract your data into an XML File, go to step 3.
    d. If you extract your data into an Excel file, go to step 4.
3. If you extracted the data into an XML file, we need to format it so it can be uploaded. First, open Microsoft Excel.
    a. From Microsoft Excel, open the XML file as an XML Table.
        - Click File
        - Click Open
        - Locate the data file in .xml format and click ok
        - Choose "As an XML table" in the prompt, then click "OK"



    b. Your data should appear as a table. Ensure that you have, at a minimum, data that includes date of birth, first name, last name, and their gender.

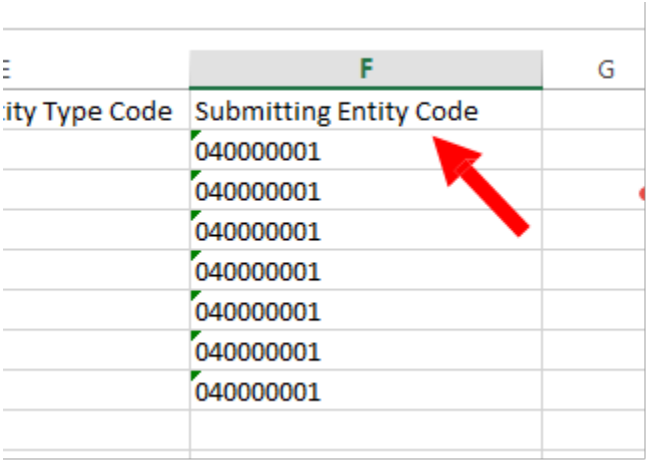
	I	J	K	L	M	N
	type	minOccurs4	Birthday	Name (First)	Name (Last)	Gender Code
	xs:string	0	11/8/2010	Paul	McCartney	M
)29_	xs:string	0	2/11/2011	Ringo	Starr	M
29_	xs:string	0	8/3/2011	John	Lennon	M
	xs:string	0	9/7/2010	George	Harrison	M
			10/29/2010	Mary	Wilson	F
			4/19/2011	Diana	Ross	F
			6/18/2011	Florence	Ballard	F

4. Ensure your data file has the required information in the columns and is in the proper format.

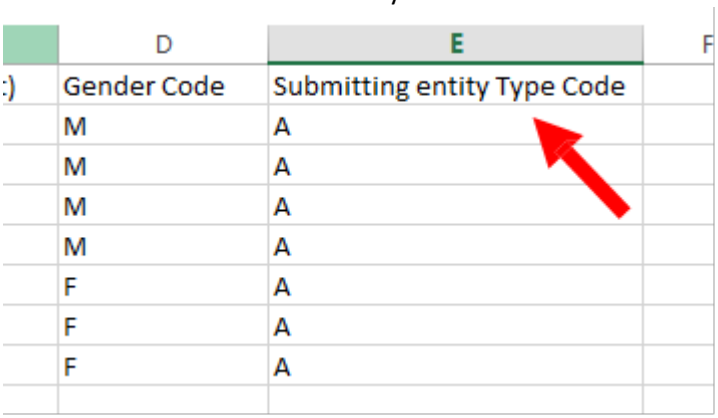
	A	B	C	D	E	F	G
1	Last Name	First Name	Middle Name	Student Suffix	Date of Birth	BirthOrder	Gender
2	McCartney	Paul			11/8/2010	3	M
3	Starr	Ringo		Jr	2/11/2011		M
4	Lennon	John	Imagine		8/3/2011		M
5	Harrison	George			9/7/2010		M
6	Wilson	Mary			10/29/2010		F
7	Ross	Diana			4/19/2011	2	F
8	Ballard	Florence			6/18/2011		F

   a. **First Name** and **Last Name** can consist of the 26 standard uppercase and lowercase English letters, spaces, hyphens (-), apostrophes (‘), periods (.), and commas (,), but cannot have any other characters.
      - Special characters (such as ã or æ) cannot be used
   b. Date of Birth has to be in yyyy-mm-dd format.
      - See appendix A for a method to change the date format if necessary
   c. Gender must be signified by an **UPPERCASE** “M” or “F.”
      - It cannot be “Male” or “Female”, or a lowercase “m” or “F”
        - See appendix B for a method to change this if necessary

5. Create a new column next to your existing data in the table with the heading “Submitting Entity Code.”
   a. Select the entire column.
   b. Change format of the cells in the column to “text” (this will prevent autocorrect from removing any numbers from the entity code).
   c. Put in your five or nine digit entity code for each row that you have data in the spreadsheet.
      i. If you do not know your entity code, you can look it up on CEPI’s Educational Entity Master (EEM) web page.



6. Create another new column next to your existing data with the heading "Submitting Entity Type Code."
    a. In this column, you'll put a single **UPPERCASE** "A" if the Submitting Entity Code (the number from step 4) has nine (9) digits, or an **UPPERCASE** "D" if your Submitting Entity Code has five (5) digits.
        i. It cannot be a lowercase "a" or "d."
    b. Copy this same letter in the column for all the rows you have data.



	D	E	F
:)	Gender Code	Submitting entity Type Code	
	M	A	
	M	A	
	M	A	
	M	A	
	F	A	
	F	A	
	F	A	

7. You should have a dataset that looks similar to this, with a row for each child you are submitting a request for UIC for.

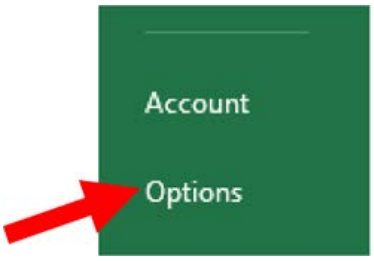
	A	B	C	D	E	F	G	H	I
1	Last Name	First Name	Middle Name	Student Suffix	Date of Birth	BirthOrder	Gender	Submitting Entity Code	Submitting Entity Type Code
2	McCartney	Paul			11/8/2010	3	M	040000001	A
3	Starr	Ringo		Jr	2/11/2011		M	040000001	A
4	Lennon	John	Imagine		8/3/2011		M	040000001	A
5	Harrison	George			9/7/2010		M	040000001	A
6	Wilson	Mary			10/29/2010		F	040000001	A
7	Ross	Diana			4/19/2011	2	F	040000001	A
8	Ballard	Florence			6/18/2011		F	040000001	A
9									

8. **Save this file as a Microsoft Excel (.xls or .xlsx) file in a secure area as it contains Personally Identifiable Information.**

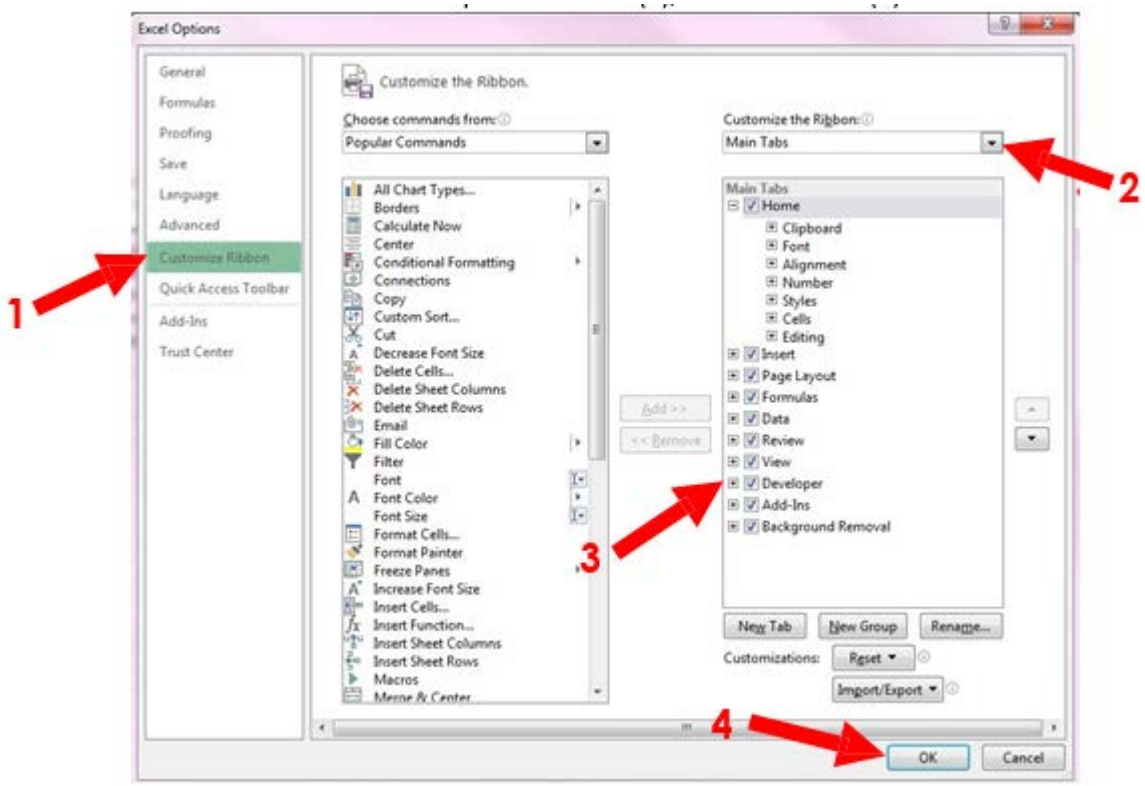
9. Open a new, blank workbook.

10. Ensure the DEVELOPER tab is showing.
    a. To show the DEVELOPER tab, click "FILE" on the top menu.

b. Click “Options” on the left menu.

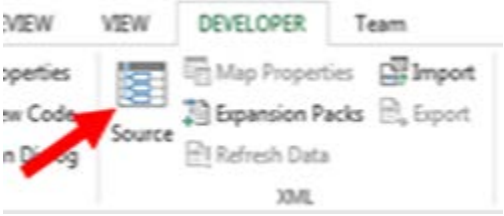


c. Select “Customize Ribbon” on the left menu (1), “Main Tabs” on the right dropdown (2), click the box next to “Developer” in the list (3), then click “OK” (4).

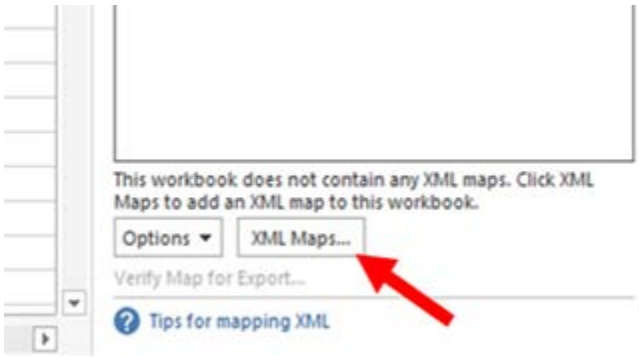


d. Here is an online video showing how to do this in Microsoft Excel 2010 (which is the same process as Microsoft Excel 2013).

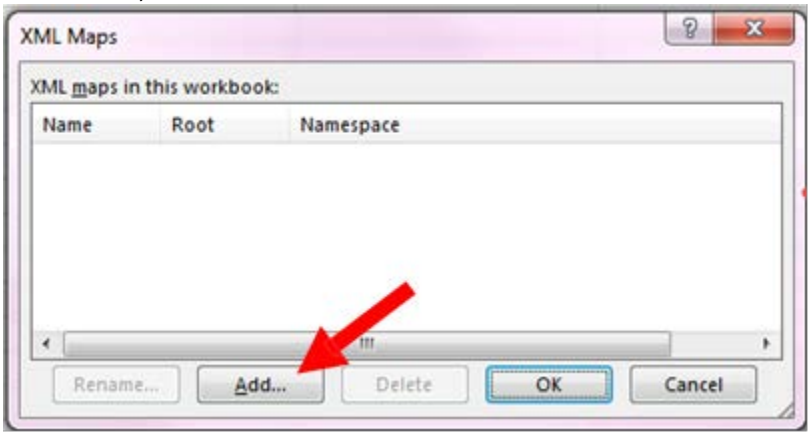
11. Under the DEVELOPER tab, click the “Source” button.



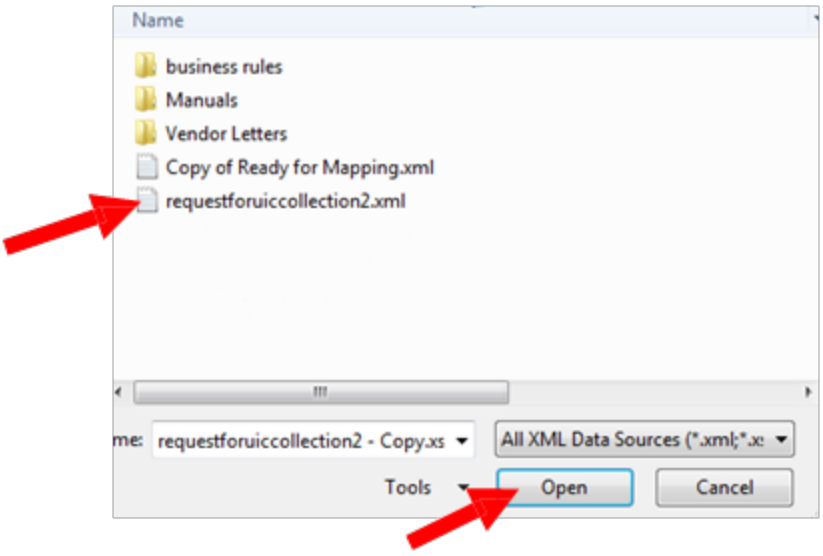
a. Click the “XML Maps…” button on the bottom of the side panel that just opened up.



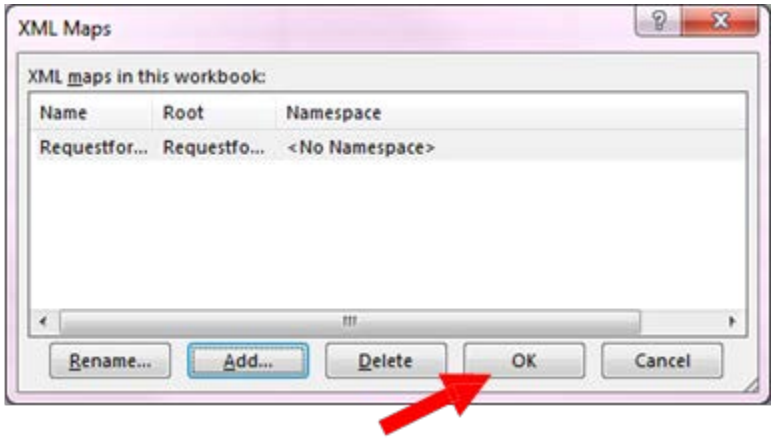
b. In the new subwindow, click “Add…”



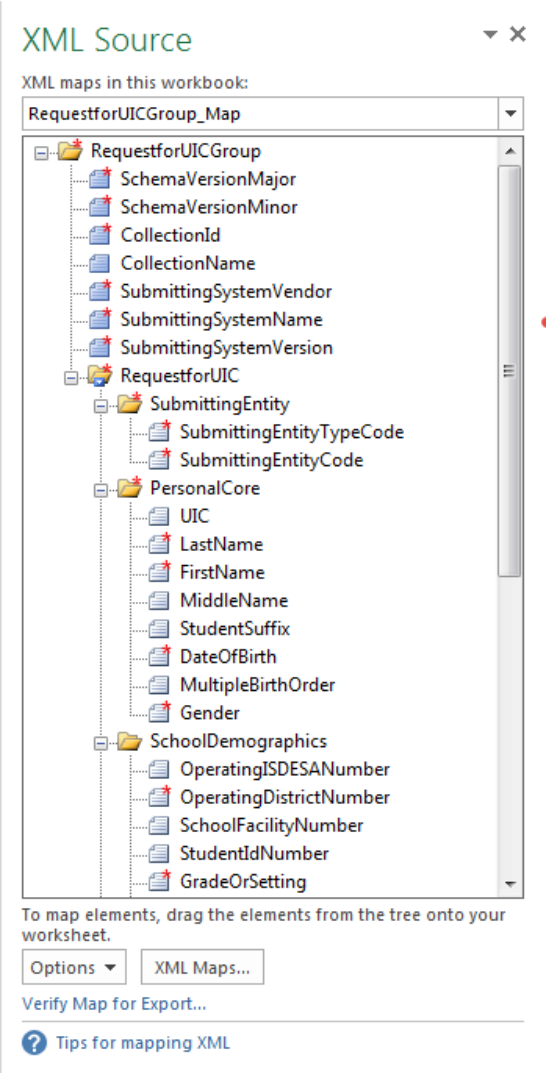
c. Locate the UIC Request Schema you downloaded at the beginning and click “open” (the default file name will be requestforuiccollection2.xml).



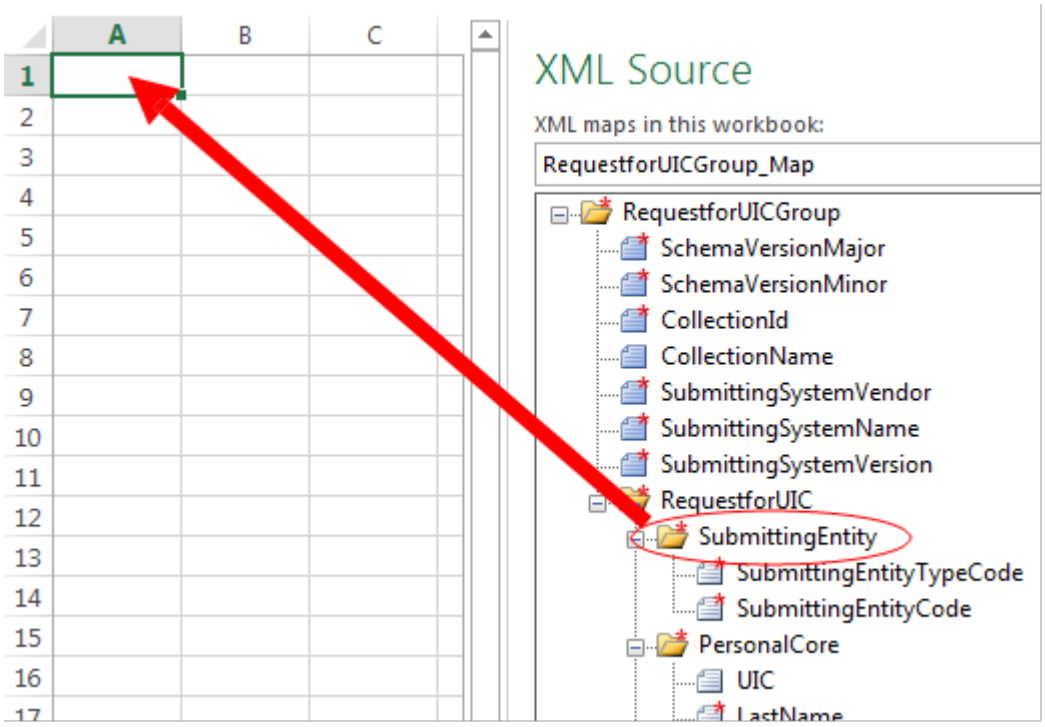
d. Click “Ok.”



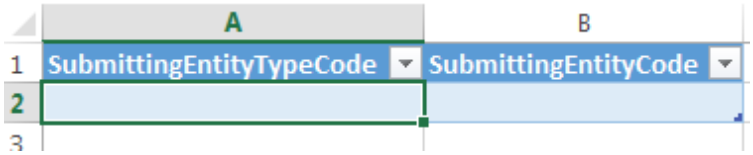
e. You should now have your XML Source, which is a list of the XML elements in a side panel.



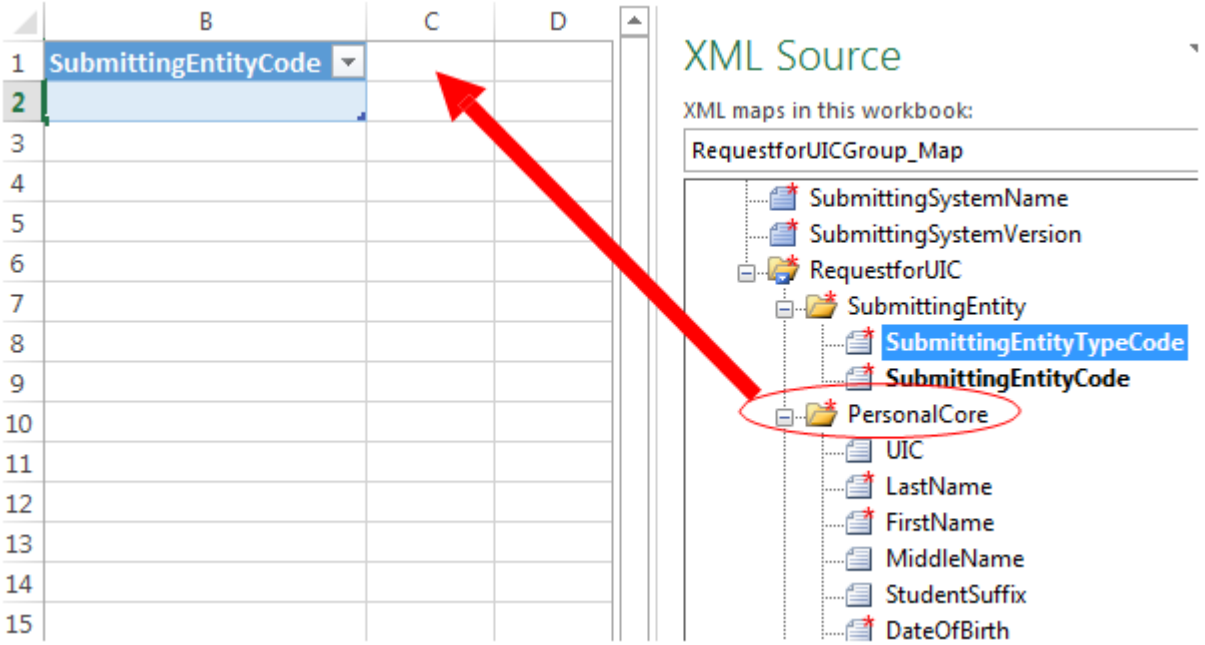
12. The next step is to map the data elements to the page.
    a. Click on the folder icon labeled “SubmittingEntity” in the XML Source list and drag it to cell A1.



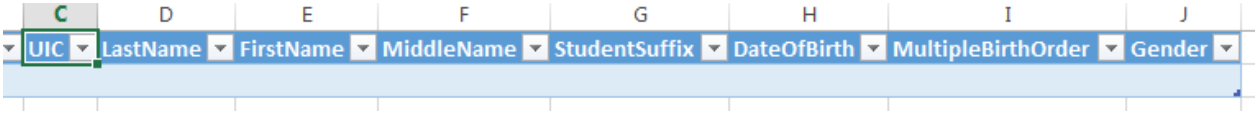
    b. Cells A1 and B1 should fill in with the text “SubmittingEntityTypeCode” for A1, and “SubmittingEntityCode” for B1. You can make the columns wider as necessary to better see the column headings.



c. Repeat step A, but with the “PersonalCore” folder icon from the XML Source list. Drag and drop it into cell C1.



d. Once again, the cells should autofill with the elements from the Personal Core data fields (UIC, LastName, FirstName, MiddleName, StudentSuffix, DateofBirth, MutipleBirthOrder, and Gender).



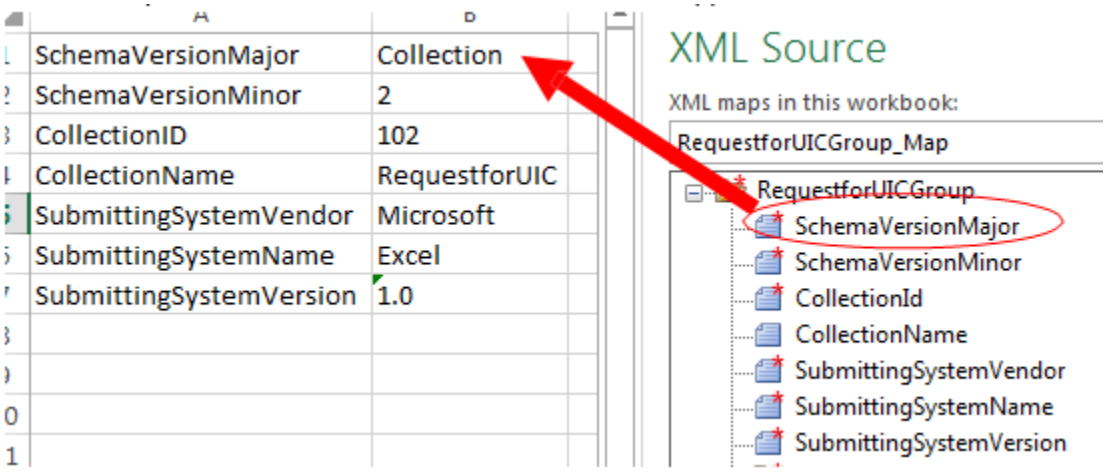
13. On a new tab, type in the information for the XML Header.
    a. Create a new tab by clicking the “+” on the bottom of the page next to the current tab.

    b. Type the following information in column A, giving each item its own row
        i. SchemaVersionMajor
        ii. SchemaVersionMinor
        iii. CollectionID
        iv. CollectionName
        v. SubmittingSystemVendor
        vi. SubmittingSystemName
        vii. SubmittingSystemVersion
    c. Highlight column B, and change the format of the cells to “text.”

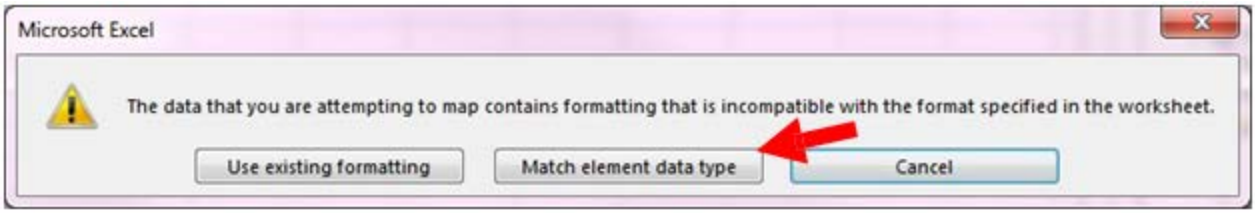
d. In column B, put the following information **VERBATUM** next to the columns you just typed.
    i. Collection
    ii. 2
    iii. 102
    iv. RequestforUIC
    v. Microsoft
    vi. Excel
    vii. 1.0
e. It will look like this:

	A	B
1	SchemaVersionMajor	Collection
2	SchemaVersionMinor	2
3	CollectionID	102
4	CollectionName	RequestforUIC
5	SubmittingSystemVendor	Microsoft
6	SubmittingSystemName	Excel
7	SubmittingSystemVersion	1.0

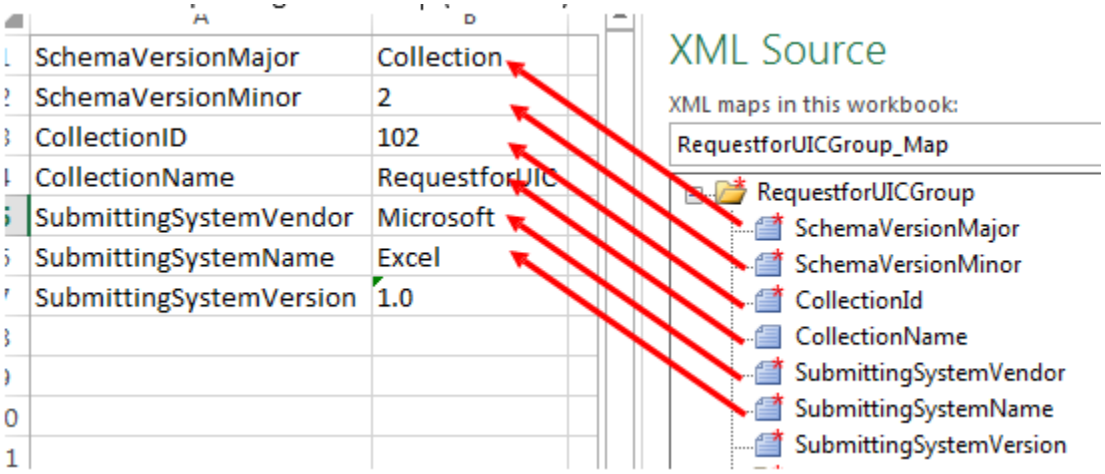
14. Now you need to map the XML header elements to the data you just entered.
    a. In the XML Source list on the right, click the icon labeled "SchemaVersionMajor." Drag and drop it onto cell B1 where the word "Collection" appears.



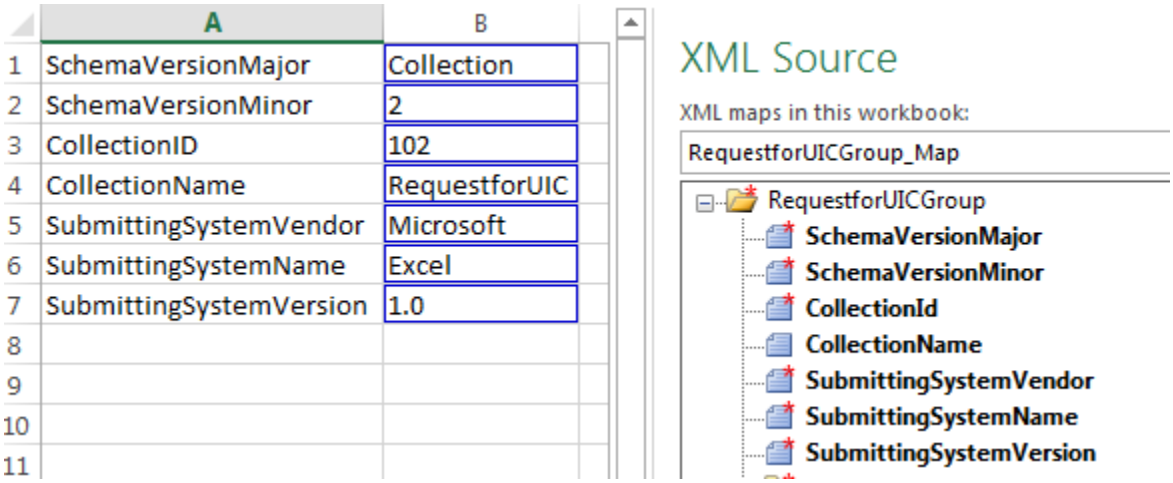
    b. If a message pops up that states, "The data that you are attempting to map contains formatting that is incompatible with the format specified in the worksheet," click "Match element data type."



c. Repeat the above process for the rest of the header elements. Drag and drop them onto their corresponding header data (column B).



d. If done properly, the elements in column B will be outlined in a blue line, and the elements in the XML Source list will now be bolded.

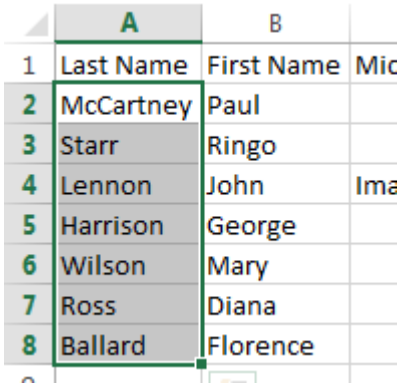


15. Now, to add the data from your database excerpt to the mapped spreadsheet

a. Bring up your spreadsheet with the child data on it.

	A	B	C	D	E	F	G	H	I
1	Last Name	First Name	Middle Name	Student Suffix	Date of Birth	BirthOrder	Gender	Submitting Entity Code	Submitting Entity Type Code
2	McCartney	Paul			11/8/2010	3	M	040000001	A
3	Starr	Ringo		Jr	2/11/2011		M	040000001	A
4	Lennon	John	Imagine		8/3/2011		M	040000001	A
5	Harrison	George			9/7/2010		M	040000001	A
6	Wilson	Mary			10/29/2010		F	040000001	A
7	Ross	Diana			4/19/2011	2	F	040000001	A
8	Ballard	Florence			6/18/2011		F	040000001	A
9									

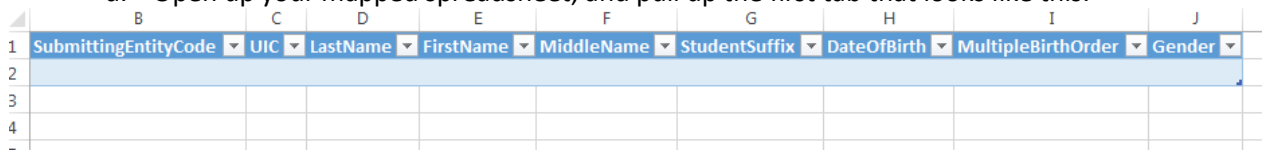
b. Select all of the last names of the children, making sure that you DO NOT select the header cell labeled “Last Name.”



	A	B	
1	Last Name	First Name	Mic
2	McCartney	Paul	
3	Starr	Ringo	
4	Lennon	John	Ima
5	Harrison	George	
6	Wilson	Mary	
7	Ross	Diana	
8	Ballard	Florence	

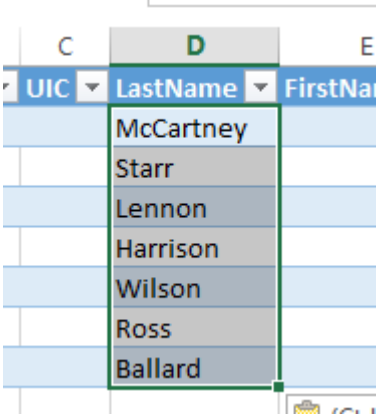
c. Copy these cells by pressing Ctrl+c on your keyboard.

d. Open up your mapped spreadsheet, and pull up the first tab that looks like this:



	B	C	D	E	F	G	H	I	J
1	SubmittingEntityCode	UIC	LastName	FirstName	MiddleName	StudentSuffix	DateOfBirth	MultipleBirthOrder	Gender
2									
3									
4									

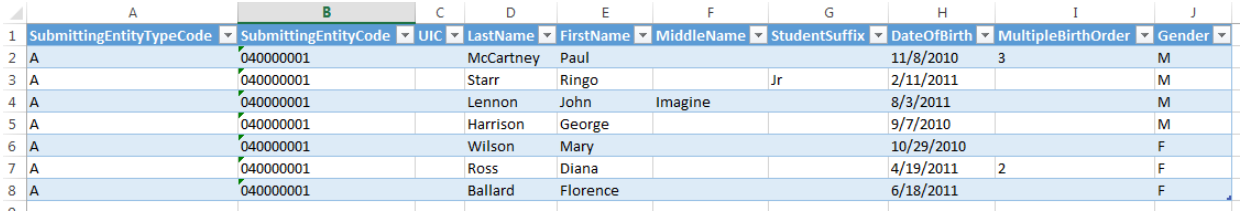
e. Paste the information that was copied by selecting the cell directly below the cell labeled “LastName” (in this case, cell D2), and press Ctrl+v.



	C	D	E
	UIC	LastName	FirstNa
		McCartney	
		Starr	
		Lennon	
		Harrison	
		Wilson	
		Ross	
		Ballard	

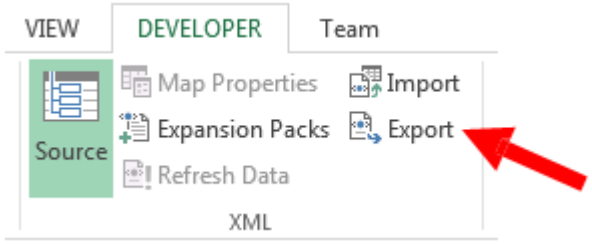
f. Repeat to copy and paste all of the data from your excerpt spreadsheet into your mapped spreadsheet. Make sure to leave the column titled “UIC” (in this case, column C), blank.

g. Your spreadsheet should now look similar to this:

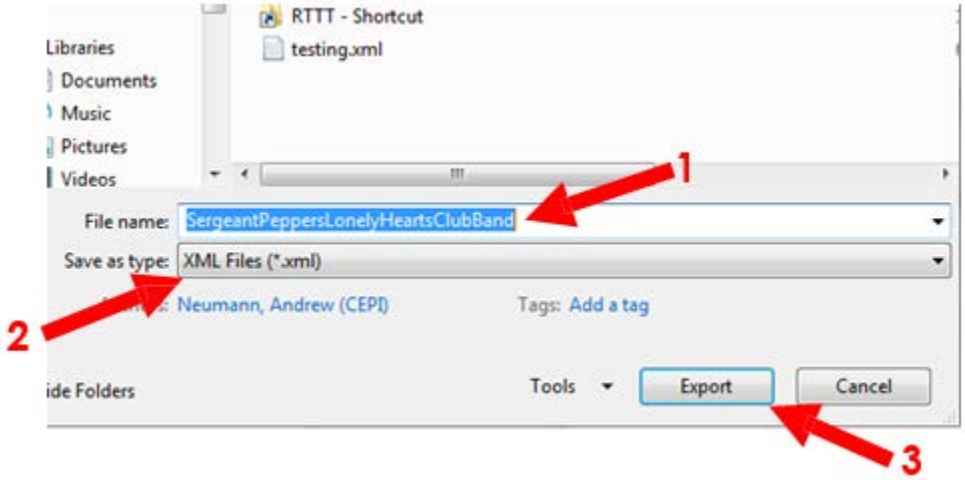


	A	B	C	D	E	F	G	H	I	J
1	SubmittingEntityTypeCode	SubmittingEntityCode	UIC	LastName	FirstName	MiddleName	StudentSuffix	DateOfBirth	MultipleBirthOrder	Gender
2	A	040000001		McCartney	Paul			11/8/2010	3	M
3	A	040000001		Starr	Ringo		Jr	2/11/2011		M
4	A	040000001		Lennon	John	Imagine		8/3/2011		M
5	A	040000001		Harrison	George			9/7/2010		M
6	A	040000001		Wilson	Mary			10/29/2010		F
7	A	040000001		Ross	Diana			4/19/2011	2	F
8	A	040000001		Ballard	Florence			6/18/2011		F

16. Export your data into an XML Excerpt.
    a. In the options menu, at the top of the page, under DEVELOPER, click the "Export" button that is located next to the "Source" button.



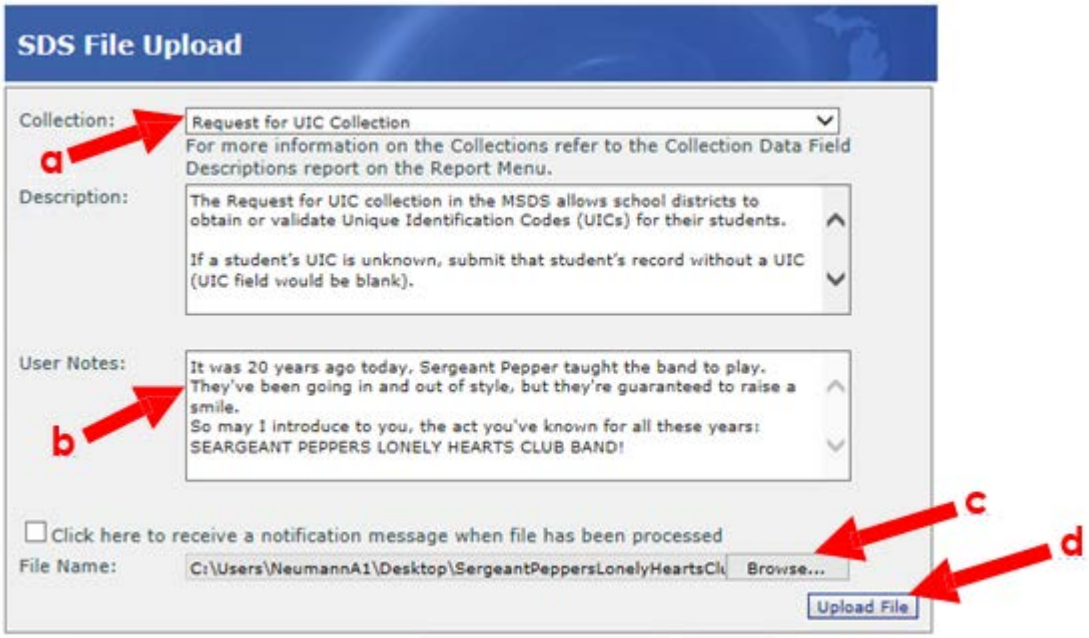
    b. Name your file (1), ensure that the Save as type: is "XML Files (*.xml)" (2), and click "Export" (3). ***Note: Make sure this file is saved to a secure location as it will contain Personally Identifiable Information!***



17. Go to the Michigan Student Data System (MSDS) web page. Login using your SSO login information.

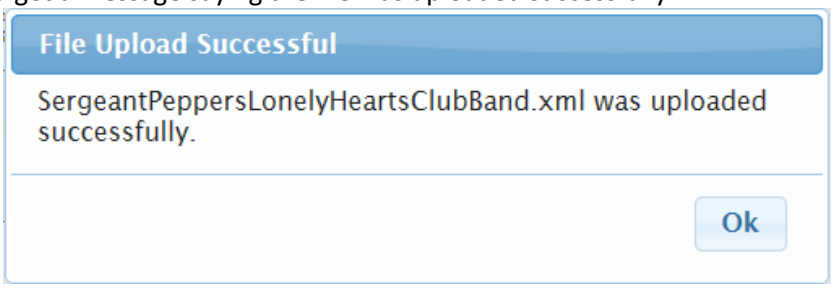
18. Under "Student Data Submission…," on the left menu, click on "Upload File."

19. Upload the XML file.



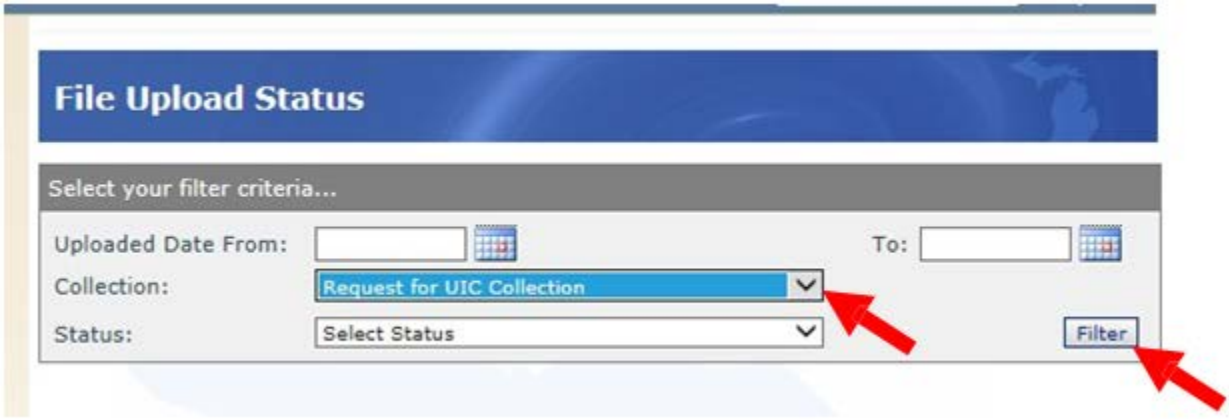
a. Under Collection, choose "Request for UIC Collection." The Description will fill in automatically.
b. Put in any notes for the file. These are notes to assist you in identifying different upload files (e.g. different groups/buildings).
c. Click Browse, select the file, and then Ok.
d. Click Upload File.

20. Make sure you get a message saying the file was uploaded successfully.



21. Go to “Uploaded File Status” on the left menu.

22. Select “Request for UIC Collection”, then click filter.



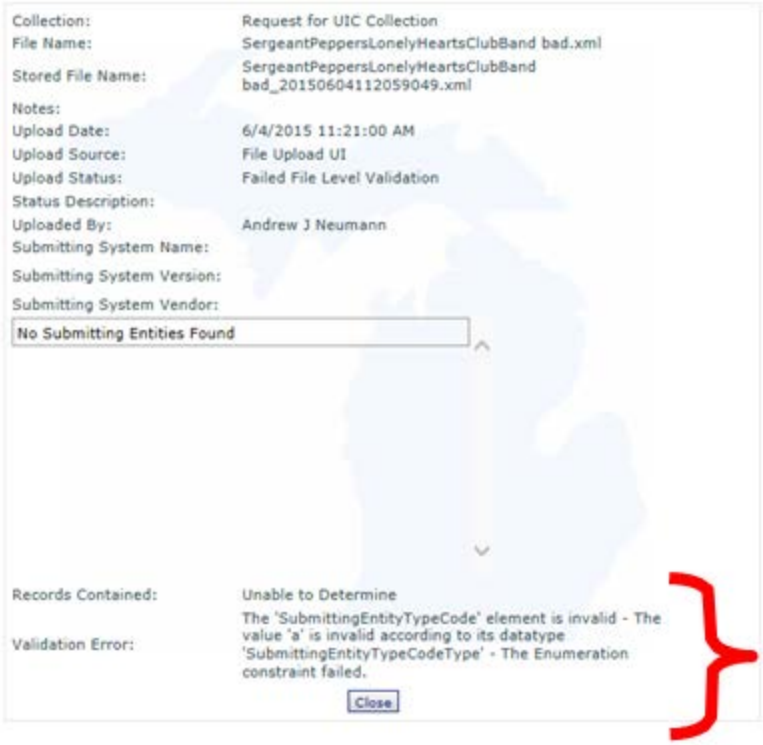
23. The next screen will tell you the status of the file you just uploaded.

Collection	Zip File Name	File Name	Notes	Uploaded Date	Source	Status	Uploaded By User	Cancel Upload?
Request for UIC Collection		SergeantPeppersLonelyHeartsClubBand.xml		06/04/2015 11:22 AM	File Upload UI	Written to Queue – Available for Processing	Andrew J Neumann	Cancel Upload
Request for UIC Collection		SergeantPeppersLonelyHeartsClubBand bad.xml		06/04/2015 11:21 AM	File Upload UI	Failed File Level Validation	Andrew J Neumann	
Request for UIC Collection		SergeantPeppersLonelyHeartsClubBand.xml		06/04/2015 11:19 AM	File Upload UI	Processed Successfully	Andrew J Neumann	

a. The column labeled “Status” will tell what state the file is in.
b. If it is processing, press “F5,” or refresh your browser to update the page periodically. The larger the data file, the longer it will take to process.
c. If the process is not successful, it will state “Failed….” with a reason.
d. If the process is successful, it will state “Processed Successfully.”

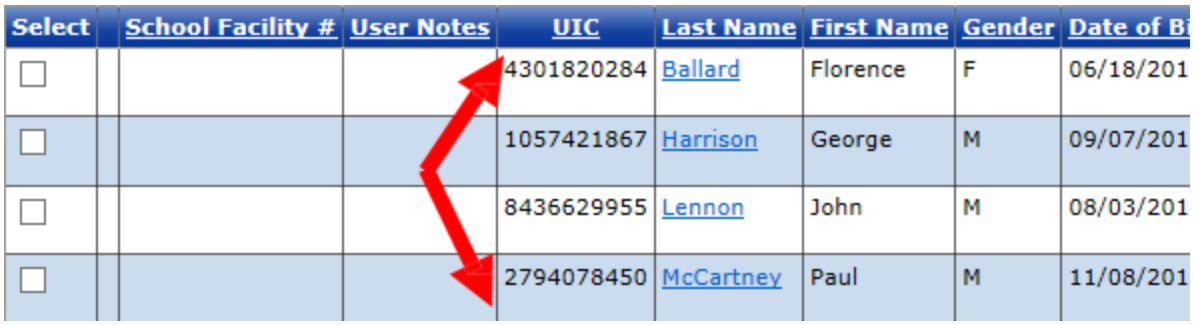
24. If the file uploaded successfully, go to step 25. If it failed, click the file name to find out more about what caused the file to not upload properly.

a. The next screen will tell you more information about the file. At the bottom, it will describe why the file was unable to upload. In this case, the Entity Code Type was a lowercase "a", which caused the file to fail. If you can, fix the issue in the file, and try to upload again.



25. Once the file is uploaded, go to the "Data Staging Area" by clicking on the left menu.

26. Here will be the UICs assigned to the children you uploaded, as well as the list of children you need to resolve.

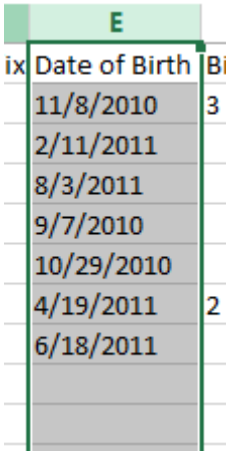


Select	School Facility #	User Notes	UIC	Last Name	First Name	Gender	Date of Bi
☐			4301820284	Ballard	Florence	F	06/18/201
☐			1057421867	Harrison	George	M	09/07/201
☐			8436629955	Lennon	John	M	08/03/201
☐			2794078450	McCartney	Paul	M	11/08/201

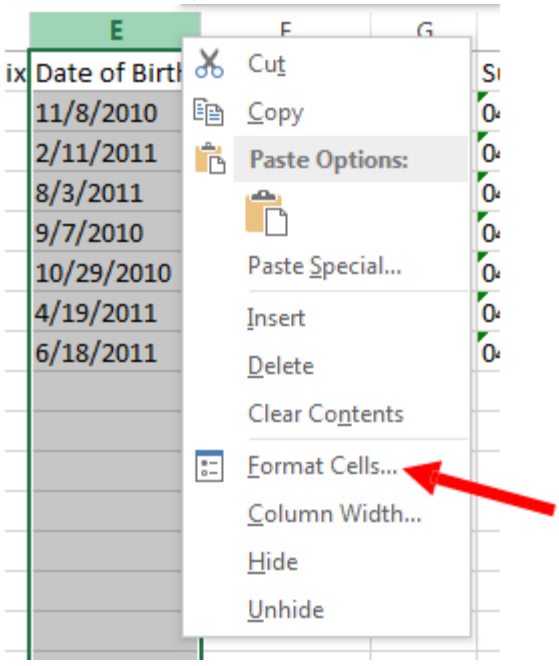
Appendix

Changing the date format for XML Upload

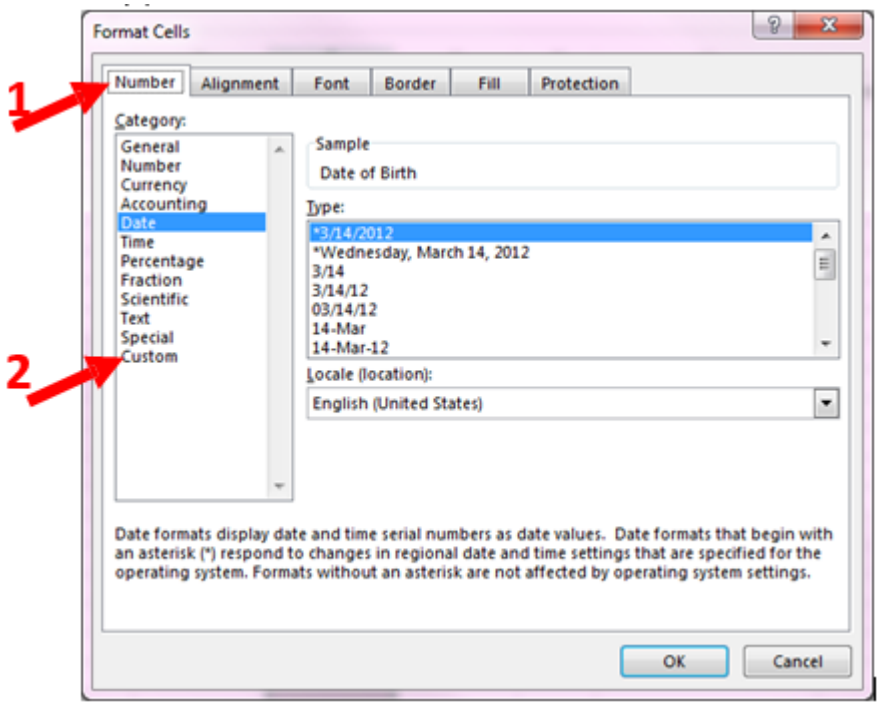
1. Start by selecting the entire date column in your data (not on the mapped document, but the original data).



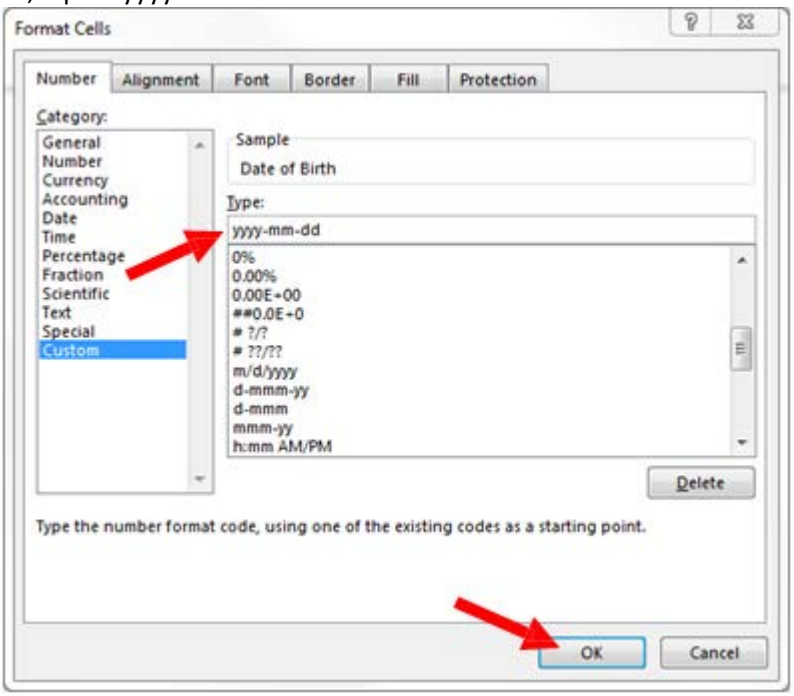
2. Right-click on the letter above the column, and select “Format Cells…”



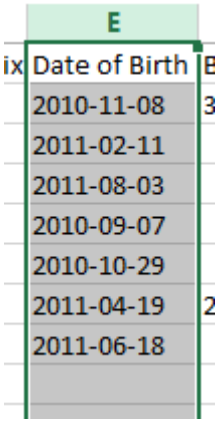
3. On the list that appears, make sure that the tab is on “Number” (1), and click “Custom” on the list (2).



4. In the “Type” field, input “yyyy-mm-dd” and then click “OK.”

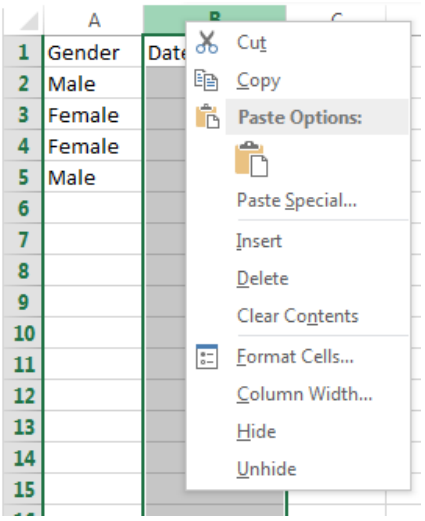


5. The dates for the Date of Birth have been changed to the correct format for the XML upload. Copy and paste the data into the XML mapped file (step 15 in the "UIC Request using XML instructions v2.0").

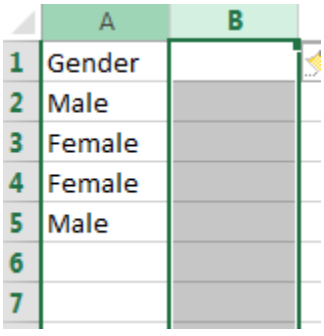


How to change "Male" and "Female", or "m" and "f" to "M" and F"

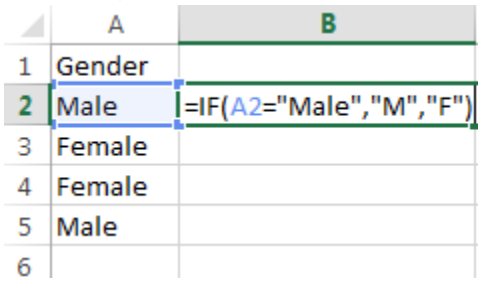
6. Insert a column next to the column you want to change.
   a. Right-click on the column to the right of the column that contains the data, then click "Insert."



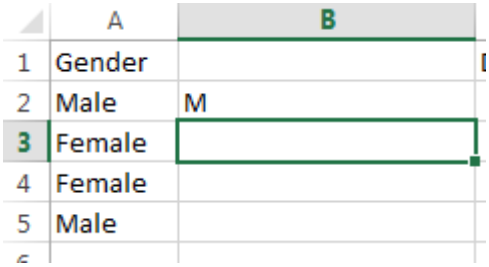
   b. A blank column should appear.



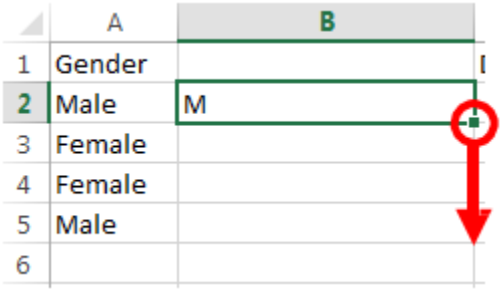
7. Insert a formula in the new column to change “Male” and “Female” to “M” and “F.”
   a. If the column with “Male” and “Female” is column A, then in cell B2, type the formula **=IF(A2=”Male”,”M”,”F”).**



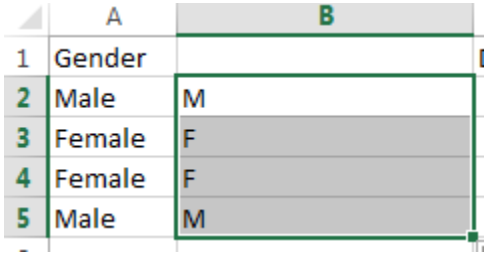
   b. Press “Enter” on the keyboard. The cell should display an “M” if the original data had “Male”, or “F” if the original data had “Female.”



   c. Click back on the cell with the formula. Click the small square on the bottom right of the cell, and drag it down to the bottom of the data table.



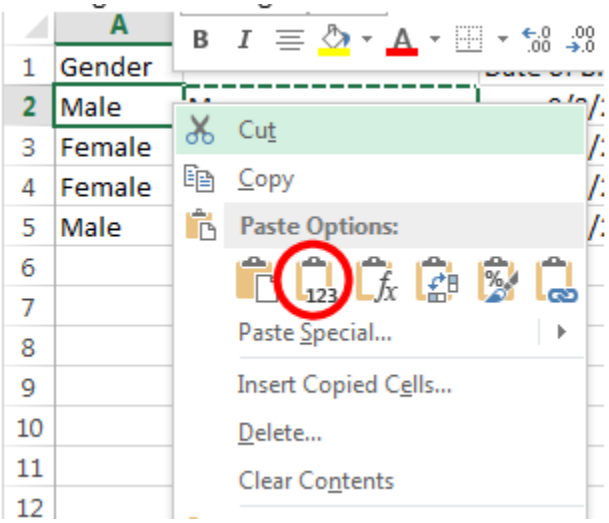
   d. The formula will be copied down the table and will create an “M” or “F” accordingly.



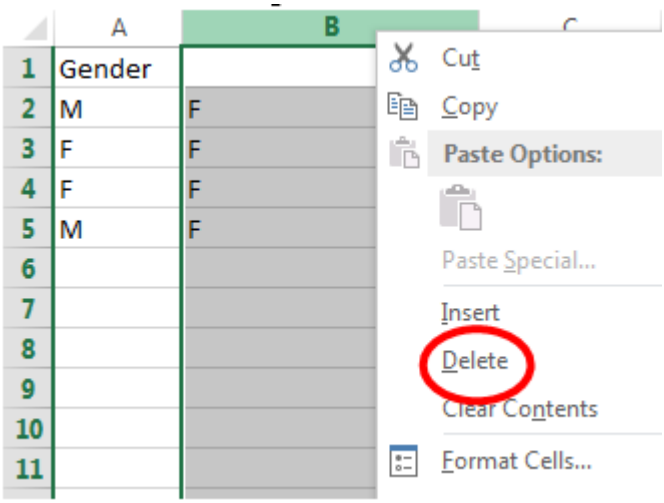
   e. Copy the already selected cells by pressing Ctrl+c.
   f. On the top cell, with data in the original “Male” and “Female” column, right-click

and select the “Paste Values” button.

i. Note: This will change the values of the column you created to show all “F”, disregard this change.



g. Delete the column that the formula was created in by right-clicking the letter above the column and clicking “Delete…”



h. Your data now is displayed as “M” and “F” in place of “Male” or “Female.”