## **Creating Pre-Filled Registration Forms**

Using Google Forms and Google Sheets

Don't you get tired of dealing with registration info every year, much of which doesn't change from year to year? Don't your parents get tired of providing you their families' info over and over?

Providing parents with pre-filled registration forms makes registration far easier for parents, but it also makes registration easier on you. Because you've pre-filled the forms in your preferred format, all data will be formatted the same, making any data mining far easier to accomplish. And, because registering is so easy and fast, parents are more likely to register more quickly!

Also, once you set this up, it can be used year after year. Keep your database up to date, and the only thing you'll need to do is to increase the grade level of your children by 1 and copy the formulas again down the column (explained below). An afternoon spent setting this up will provide benefits for years to come!

I pre-fill all contact info, and information on each child being registered, using last year's database as my starting point. I then ask parents to review the information and indicate that it's correct, or that they've made corrections.

Your form can contain as many fields as you like, and you can pre-fill some fields the same for all registrants, and some fields individually for registrants. It's a detailed formula, and it looks very difficult, but it's not hard if you take it in steps. The time and effort you spend now will save a lot of time later when you begin processing registrations.

To do this, you'll need:

- an online registration form created in Google Form. If you've never used Google Form, it's free and easy to learn.
- a database created in a spreadsheet.
- access to Google Sheets.

I'm assuming that you have basic skills in working with spreadsheets, for this tutorial.

Here are the basic steps to creating individualized registration forms, each of which will be explained in detail.

- 1. Create your online registration in Google Form.
- 2. Create your database in Google Sheets (or copy it from Excel into Google Sheets).
- 3. Make some tweaks to your database to tell Google Sheets how to deal with spaces in your database content.
- 4. Get a pre-filled link and indicate which parts of your form you'll pre-fill with data.
- 5. Create individualized links with individualized data.
- 6. Turn your long individualized links into simple REGISTER links (optional).

#### Step 1: Create your registration in a Google Form.

A video for this tutorial can be found at <u>https://youtu.be/eU2KdeQdkp8</u>.

For this sample, I have created a simple registration form with 7 fields of information and a question to confirm if the information is correct. In this scenario, I plan to pre-fill all 7 fields of info before sending it to parents.

### Sample Registration Form Since you registered your child(ren) last year, this form has been pre-filled out for your convenience. Please review the information carefully and make changes as needed by overwriting the entries. Clicking SUBMIT indicates that you have reviewed all information and that it's all correct. Parent 1 Name PAR1NAME Parent 1 Email PAR1EMAIL Parent 2 Name PAR2NAME Parent 2 Email PAR2EMAIL Address €. Child 1 Name CH1NAME Child 1 Grade CH1GR □ The information above is correct. □ I corrected some information.

#### Step 2: Create your database.

It's best to create your database in Google Sheet. This process is also supposed to work using an Excel spreadsheet, but I had problems with it working consistently in Excel. If your database is currently in Excel, simply copy and paste it into a Google Sheet, as this process works flawlessly with Google Sheet.

Tip: Although your column headings can contain spacings, in Step 4 we are going to pre-fill field names, and these cannot contain spaces, as spaces will cause links not to work. To keep corresponding information clear in my head, I found it easier to make all of the column headings in my Google Sheet database with no spaces, so that they directly match my pre-filled information later. You'll also find it easier to complete Step 5 if you write your column headings in all capital letters, as it will make the headings easier to locate during that step.

For this demo, I have created a short sample database that contains the 7 columns of data that correspond to the 7 questions on the form. Your database can contain as many columns as you like, and as many questions as you like. The actual registration database that I use for pre-filling registrations contains 35 columns!

So that you can follow along, the sample database columns are headed:

- A: PAR1NAME
- B: PAR1EMAIL
- C: PAR2NAME
- D: PAR2EMAIL
- E: ADDRESS
- F: CH1NAME
- G: CH1GR

PAR1NAME	PAR1EMAIL	PAR2NAME	PAR2EMAIL	ADDRESS	CH1NAME	CH1GR
Anna Mills	amills@gmail.com	Don Mills	dmills@vt.edu	5179 Cedar Rd Blacksburg VA 24060	Kevin Mills	1
Beth Roberts	bethr@gmail.com			44 Preston Dr, Blacksburg VA 24060	Ally Roberts	3
Paula Jones	paulakjones@yahoo.com	Ryan Taylor	ryant@gmail.com	512 Main St. West, Blacksburg, VA 24060	Wyatt Jones	5
Laura Smith	laura@smith.us	Josh Smith	jsmith12@gmail.com	485 Dickerson Dr, Christiansburg VA 24073	Josiah Smith	2
Jane Richards	uujane@gmail.com				Maddie Richards	3
Carla Pierson	piersonc@aol.com	Brian Pierson	piersonb@aol.com	604 East St, Pearisburg, VA 24134	Sarah Pierson	2

#### Step 3: Polish up your database so that Google Sheets can process the data.

In Google Sheets, a space will cause a link to break, so you will need to change any data with a space into a formula that will create an unbreakable link. If none of your data contains spaces, you can omit this step.

Look at your database and identify any columns where the data contains spaces. In my sample, columns A, C, E and F contain spaces.

You will need to create a new column to the right of your data to remove the spaces. You can name these columns anything you like but, in my sample, I created 4 new columns and named them:

- H: PAR1NAME %20
- I: PAR2NAME %20

- J: ADDRESS %20
- K: CH1NAME %20

Now we'll use the SUBSTITUTE formula to correct the data.

In column H, we'll correct the data from column A. The correct formula is:

=substitute(A2,"","%20")

This formula tells Google Sheets to look at cell A2 (Par1Name) to find any spaces, and to replace any spaces found with %20; %20 tells the computer to add a space without breaking the link.

Do the same for every column of data that you need to correct. From the sample:

- I: =substitute(C2,"","%20")
- J: =substitute(E2,"","%20")
- K: =substitute(F2,"","%20")

Now highlight the corrected columns H-K and drag down the corner icon to copy the formula down your entire spreadsheet of data.

#### Step 4: Get a pre-filled link.

On your Google Sheet, create a new column. On my sample:

• L: Pre-filled link

Go to your Google Form. At the top right, click on the three dots next to Send and select "Get pre-filled link". This will open a copy of your form.

On this copy, type in the column names of the data that you want to appear. For example, my first question asks for Parent 1's Name; the corresponding data is headed PAR1NAME so I type that into the answer field for that question.

Do this for all questions that you would like to pre-fill with individualized information. If there is also information that you would like to pre-fill the same way for all registrants, you can include those answers too. In my actual registration form, I pre-select default answers – usually checked boxes - for some questions.

# Sample Registration Form

Since you registered your child(ren) last year, this form has been pre-filled out for your convenience. Please review the information carefully and make changes as needed by overwriting the entries. Clicking SUBMIT indicates that you have reviewed all information and that it's all correct.



Parent 2 Name PAR2NAME

Parent 2 Email PAR2EMAIL	
Address	
4	* *
Child 1 Name CH1NAME	
Child 1 Grade CH1GR	

□ The information above is correct.

□ I corrected some information.

Once you've filled out everything that you want to, go to the bottom of the form and click "Get Link". At the left bottom of the form, select Copy Link. Go back to your Google Sheet and paste this link into the first cell of your new column. (L2 on my sample spreadsheet.)

My sample link is https://docs.google.com/forms/d/e/1FAIpQLSfv9VHN8V-\_PYvgC\_Bu2IW6ndmshhV78GXct4sf1yjZecApgw/viewform?usp=pp\_url&entry.1162925324=PA R1NAME&entry.1341777560=PAR1EMAIL&entry.131281427=PAR2NAME&entry.2133053932 =PAR2EMAIL&entry.1458836161=ADDRESS&entry.1728545288=CH1NAME&entry.61468993 0=CH1GR

#### Step 5: Create links that use individualized data.

Create a new column (M). I've called this column Substitute Link.

We are now going to tell Google Sheets to substitute the information from the columns (with no spaces) that have data that corresponds to the pre-filled answers. We do this through a nested SUBSTITUTE formula that looks very scary, but is not difficult, if you take it one step at a time. For my sample, the formula would be:

=substitute(substitute(substitute(substitute(substitute(substitute(L2,"PAR1NAME",H2),"PAR1EMAIL",B2),"PAR2NAME",I2),"PAR2EMAIL",D2),"ADDRESS",J2),"CH1NAME",K2),"CH1GR",G2)

Let's look at a simpler example: =substitute(L2,"PAR1NAME",H2)

Here, we're telling Google Sheets to look at the pre-filled link (located at L2) and when it comes to PAR1NAME, it should substitute the data in H2.

The long formula follows the same principle, except that we are substituting 7 fields at the same time.

So,

=substitute(substitute(substitute(substitute(substitute(substitute(L2,"PAR1NAME",H2),"PAR1EMAIL",B2),"PAR2NAME",I2),"PAR2EMAIL",D2),"ADDRESS",J2),"CH1NAME",K2),"CH 1GR",G2)

tells Google Sheets to go to the pre-filled link in L2, and make the following substitutions:

- the data in H2 for PAR1NAME (spaces removed)
- the data in B2 for PAR1EMAIL
- the data in I2 for PAR2NAME (spaces removed)
- the data in D2 for PAR2EMAIL
- the data in J2 for ADDRESS (spaces removed)
- the data in K2 for CH1NAME (spaces removed)
- the data in G2 for CH1GR

*Tip: if you're getting an error, check for spaces; there should be none. Also check to be sure you have the same number of open parenthesis ( as closed parenthesis ).* 

My actual registration form substitutes 35 columns of data, so the formula is very long. However, if you take it methodically, it's not hard to write. This is also when writing your column headers and pre-filled answers in capital letters pays off, as it makes it much easier to spot the answers that need to be replaced with individualized data.

Tip: See the end of this document for a hint on more easily creating very long formulas, using Excel or Google Sheets and Notepad that will minimize typos and be much quicker to write!

#### Step 6: Turn your long formula into a register link (optional).

Now we'll amend this long formula that you've created to turn it into a hyperlink that says "REGISTER".

At the beginning of the formula, after the equal sign, type: HYPERLINK(

At the end of the formula, before the last ), type: ,"REGISTER")

#### The sample formula now reads:

=hyperlink(substitute(substitute(substitute(substitute(substitute(substitute(L2,"PAR1N AME",H2),"PAR1EMAIL",B2),"PAR2NAME",I2),"PAR2EMAIL",D2),"ADDRESS",J2),"CH1NAME ",K2),"CH1GR",G2),"REGISTER")

Now copy (highlight and fill down) the formulas in the Pre-Filled Link (L) and Substitute Link (M) columns to populate the entire database. To try it out, click on a REGISTER link; the link will appear above the cell. Click on it to follow to an individualized registration form.

Tip: If you get an error message, there's probably a typo in your formula, or a missing cell reference. Check the formula carefully, comparing the pre-filled link with your substitution link. An easy way to compare the two is to copy both formulas into Notepad. Highlight the capped

column headings and make sure you've named the pre-filled field and the substitution field with the same name.

#### What to do with these links now

Distribute the links to families by sending them their individualized "REGISTER" link. I copy mine into a Mailchimp email that lists the family's last name and their link. The family clicks their link to review their info and complete registration.

Then get ready for the thanks that follow when parents don't have to fill out all of that registration info again and again!

Keep your database up to date and you'll only need to change the children's grades to be ready for next year. Copy (fill down) the SUBSTITUTE formulas again, as Google Sheets won't pick up the changed information on its own. Then you'll be ready to send out new links next year. Put a little time into this now and it will pay off for years to come!

## Writing Very Long SUBSTITUTE Formulas

A video for this tutorial can be found at <a href="https://youtu.be/6iKxKv8gRNU">https://youtu.be/6iKxKv8gRNU</a>

Do you need to write a very long formula? Although there are multiple ways that you can do this, here's my workaround on writing long formulas, made much easier by using Excel or Google Sheets and Notepad.

1. Copy your database headings. Click into a new spreadsheet on the first cell (A1). Right-click and choose Paste Special; click transpose. Your column headings are now listed in 1 column.

2. In column B, list the corresponding column for this data on your database spreadsheet. Be sure and choose the columns with no spaces, if you've created them.

3. In column C, type ". In column D, type ". *There might be another way to make this work, but I couldn't get the quotation marks to work correctly through a formula. I found this worked fine.* 

4. In column E, write this formula: =C1&A1&D1&","&B1&"2),"

Tip: If you're putting your data in the same columns as I've listed, you can literally just paste that formula into E1.

Explanation:

If column A is PAR1NAME and the database column with no spaces showing the results of PAR1NAME is in column AJ, the result in column E will read: "PAR1NAME", AJ2), *Note: the number 2 at the end of the formula was chosen because the database content in this sample begins on line 2. If your database begins on a different line number, substitute that number.* 

5. Copy down columns C, D, and E

#### 6. In column F, type substitute(

This is what my spreadsheet looks like:

	A 1				e de etitute (
PAR1NAME	AJ			"PAR1NAME",AJ2),	substitute(
PAR1EMAIL	B			"PAR1EMAIL",B2),	substitute(
PAR1CELL	С			"PAR1CELL",C2),	substitute(
PAR2NAME	AK	н		"PAR2NAME",AK2),	substitute(
PAR2EMAIL	E			"PAR2EMAIL",E2),	substitute(
PAR2CELL	F			"PAR2CELL",F2),	substitute(
ADDRESS	AL	н		"ADDRESS",AL2),	substitute(
CH1NAME	AM	н		"CH1NAME",AM2),	substitute(
CH1BDAY	1	н		"CH1BDAY",I2),	substitute(
CH1GR	J	н		"CH1GR",J2),	substitute(
CH1DIET	AN	н		"CH1DIET",AN2),	substitute(
<b>CH1ALLERGY</b>	AO	н		"CH1ALLERGY",AO2),	substitute(
CH1SPECIAL	AP	н		"CH1SPECIAL",AP2),	substitute(
CH1OTHER	AQ	н	0	"CH1OTHER",AQ2),	substitute(
CH1REG	AR	н		"CH1REG",AR2),	substitute(
CH2NAME	AS	н		"CH2NAME",AS2),	substitute(
CH2BDAY	Q			"CH2BDAY",Q2),	substitute(
CH2GR	R			"CH2GR",R2),	substitute(
CH2DIET	AT	н		"CH2DIET",AT2),	substitute(
CH2ALLERGY	AU	н		"CH2ALLERGY",AU2),	substitute(
CH2SPECIAL	AV	н		"CH2SPECIAL",AV2),	substitute(
CH2OTHER	AW	н		"CH2OTHER",AW2),	substitute(
CH2REG	AX	н		"CH2REG",AX2),	substitute(
CH3NAME	AY	н		"CH3NAME",AY2),	substitute(
CH3BDAY	Y	н		"CH3BDAY",Y2),	substitute(
CH3GR	Z	н		"CH3GR",Z2),	substitute(
CH3DIET	AZ	н		"CH3DIET",AZ2),	substitute(
CH3ALLERGY	BA	н		"CH3ALLERGY",BA2),	substitute(
CH3SPECIAL	BB	н		"CH3SPECIAL",BB2),	substitute(
CH3OTHER	BC	н		"CH3OTHER",BC2),	substitute(
	BD	н			× *
CH3REG		н		"CH3REG",BD2),	substitute(
INSCO	BE			"INSCO",BE2),	substitute(
POLICY	AG			"POLICY",AG2),	substitute(
TEENCELL	BF			"TEENCELL",BF2),	substitute(
VOL	BH			"VOL",BH2),	substitute(

7. Now open Notepad. Copy column F into Notepad.

Tip: you want to use a text editor like Notepad for this step. Do not use Word or a word processing program, as it will try to put spaces into your formula, and spaces will cause the link not to work.

Before the first entry, type =. Remove all of the returns at the end of the rows and your entry will now read:

=substitute(substitute

You'll need to direct Google Sheets to the location where substitutes are being made, or your pre-filled link. At the end of this formula, type in the cell location of your pre-filled link. My link is located at BI2 so the end of my formula reads:

... (substitute(substitute(BI2

8. Copy column E and paste it into Notepad below the substitute string. Remove the line returns. The entry now reads:

=substitute(substitute

9. After the = sign and before the word substitute, type HYPERLINK(. At the end of the formula, type "REGISTER")

=HYPERLINK(substitute(

You've now created a very long (35 entries!) formula and minimized the chances of typos.