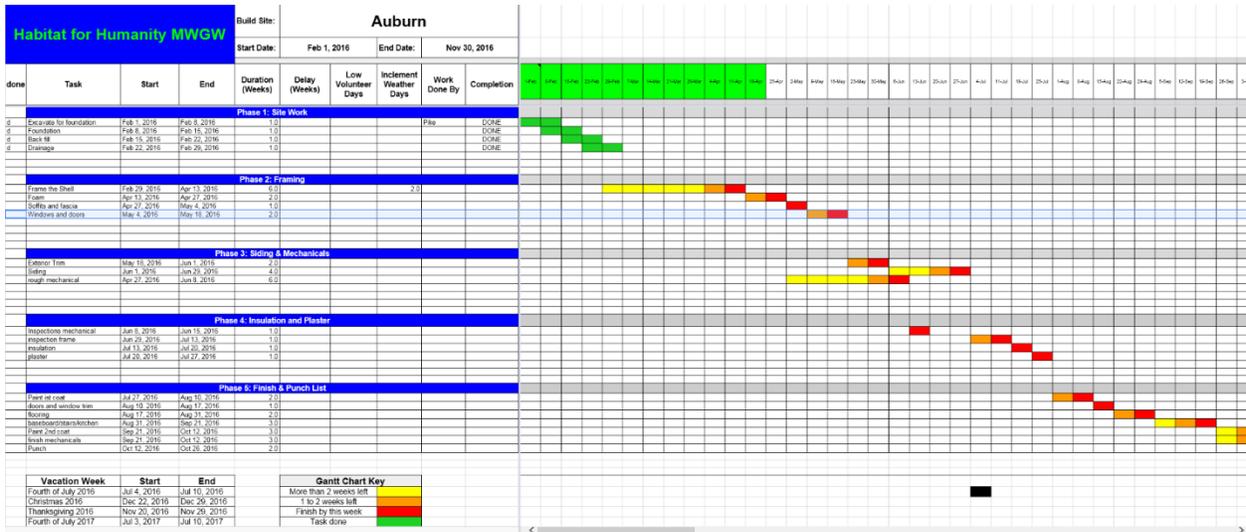


# Google Sheets Project Management User Manual



## Worcester Polytechnic Institute Interactive Qualifying Project D term March-May 2016

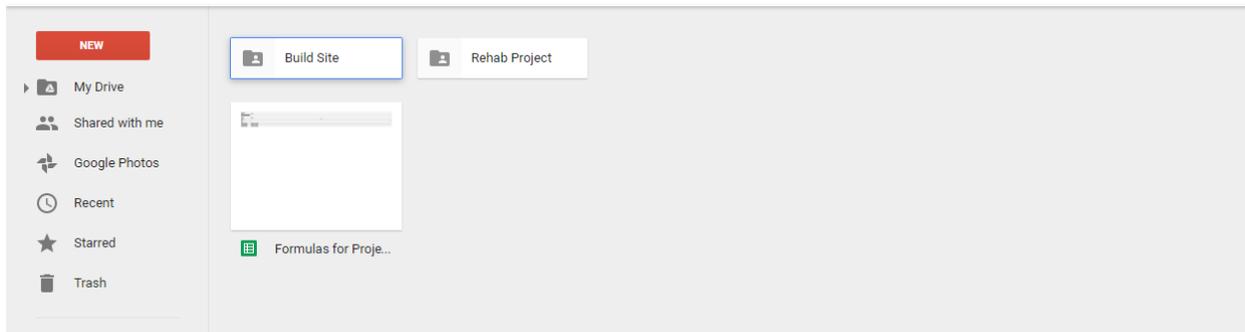
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## Accessing the documents in the Drive

1. Start navigating to [drive.google.com](https://drive.google.com) and entering the user name and password for google mail (gmail). (0:01)
2. Click on the folder that is titled “HFH MWGW Project Management”.
3. On this screen the user will notice that there are two google folders that are titled “Build Site” and “Rehab Project” and a google sheets file that is titled “Formulas for Project Management”. (0:18)



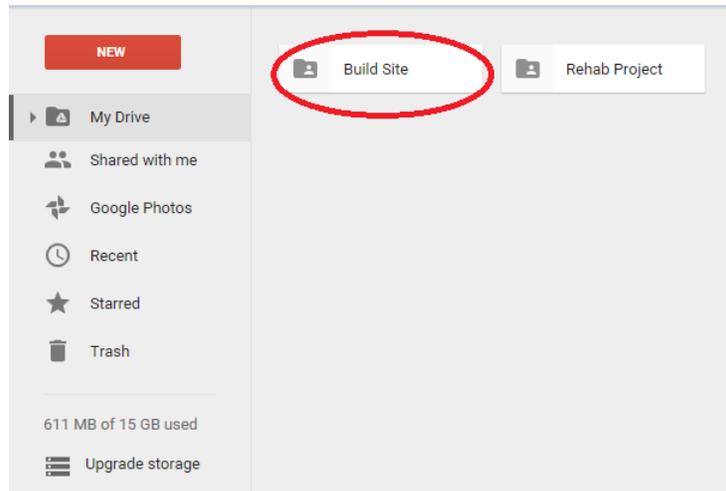
## Accessing the Drive Formulas

1. “Formulas for Project Management” does not need to be accessed unless the formulas are accidentally changed in one of the documents. These formulas are extremely long and complicated.
2. If the user happens to need to access the formulas, click on the google sheets document and the formulas will appear and are grouped by the editing sheet Column and the Gantt Chart Column.

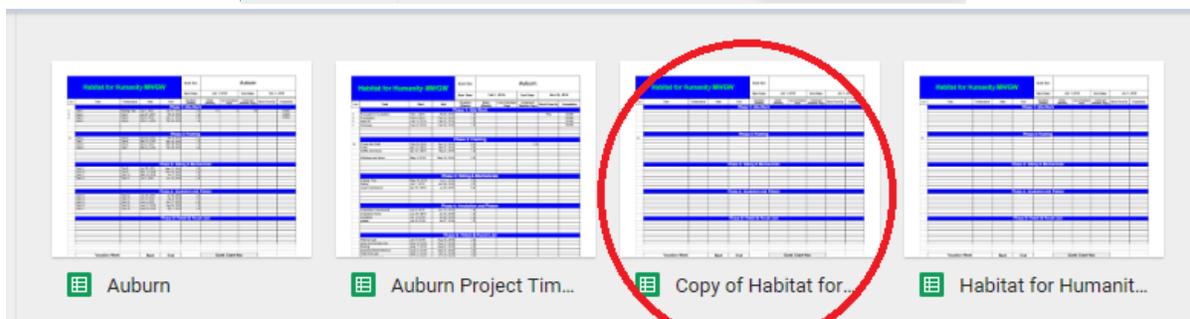
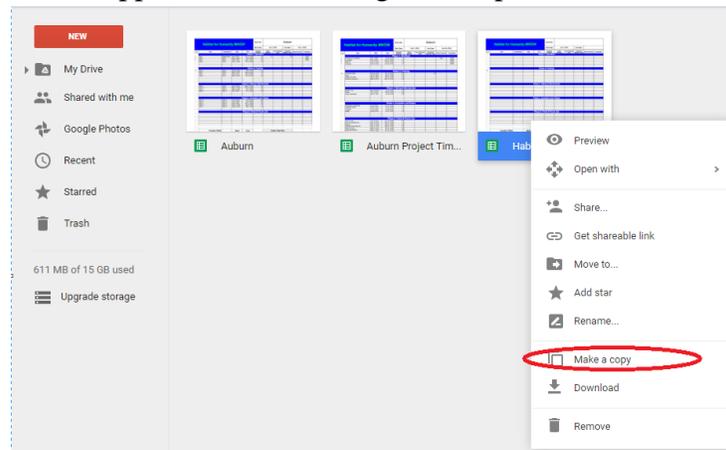
	Editing Sheet	Equation
1	Editing Sheet'	
2	Collumn	Equation
3	C6:C12,C14:C21,C23:C29,C31:C37,C39:C45	
4	E6:E12,E14:E21,E23:E29,E31:E37,E39:E45	
5	K6:K12,K14:K21,K23:K29,K31:K37,K39:K45	
6		
7	Gantt Chart'	
8	Collumn	Equation
9	A1:K60	
10	L3:FM3,L5:FM5	
11	L4	
12	M4:FM4	
13	L7:FM60	
14		
15	Conditional Fromating L7:FM60	Format cells if... is equal to 1 (yellow)
16	Conditional Fromating L7:FM60	Format cells if... is equal to 2 (Orange)
17	Conditional Fromating L7:FM60	Format cells if... is equal to 3 (Red)
18	Conditional Fromating L7:FM60	Format cells if... is equal to 4 (Red)
19	Conditional Fromating L7:FM60	Format cells if... is equal to 5 (Green)
20		
21		

## Creating a New Document

1. Click on the “HFH MWGW Project Management Folder”, then the “Build Site” folder and the user will notice there are three google sheets documents. (0:25)



2. The third sheet is the project management template and will be used whenever a new project is being started.
3. When starting a new project, right click on the template and choose make a copy. A copy of the template will appear next to the original template.



4. Click on this icon and start by renaming the google sheets project. (0:41)



## Editing the Document Title and Overall Start and End Date

1. Located in cell G1, is the place to edit the title next to the column that says Build Site. Put the name of the build site here. (1:30)

Habitat for Humanity MWGW					Build Site:	Start Date:	End Date:			
done	Task	Predecessor	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
Phase 1: Site Work										
Phase 2: Framing										
Phase 3: Siding & Mechanicals										
Phase 4: Insulation and Plaster										
Phase 5: Finish & Punch List										

2. Next, under the G1 cell is the place to enter the start date. This is the date when the first task will begin. To the right of the start date is the cell to enter the end date. This is the end date when you plan the entire house will be finished. (1:38)

Habitat for Humanity MWGW					Build Site:	Start Date:	End Date:			
done	Task	Predecessor	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
Phase 1: Site Work										
Phase 2: Framing										
Phase 3: Siding & Mechanicals										
Phase 4: Insulation and Plaster										
Phase 5: Finish & Punch List										

## Updating the Phases

1. The phases that are listed in the document are not going to be the same for each project and therefore can be easily edited. (2:25)
2. Click anywhere in the blue cell and type the title of the phase that you wish to have.

<b>Habitat for Humanity MWGW</b>				Build Site:		<b>Auburn</b>			
				Start Date:		Feb 1, 2016		End Date:	
done	Task	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
	<b>Phase 1: Site Work</b>								
d	Excavate for foundation	Feb 1, 2016	Feb 8, 2016	1.0				Pike	DONE
d	Foundation	Feb 8, 2016	Feb 15, 2016	1.0					DONE
d	Back fill	Feb 15, 2016	Feb 22, 2016	1.0					DONE
d	Drainage	Feb 22, 2016	Feb 29, 2016	1.0					DONE

3. There is no need to use the backspace key. The text that you want will automatically replace the existing text.



## Updating Start, End and Task Duration and Linking Tasks

- Next, enter a date in the same row as the task in the first column. The first task will most likely have the same start date as the overall project. (2:55)
- Then enter the duration of the task in the duration column located two columns to the right of the start column. Enter the duration in weeks as indicated in the column heading. (3:05)

Habitat for Humanity MWGW				Build Site:						
				Start Date:	Jan 1, 2016	End Date:				
Task	Predecessor	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion	
<b>Phase 1: Site Work</b>										
<b>Phase 2: Framing</b>										
<b>Phase 3: Siding &amp; Mechanicals</b>										
<b>Phase 4: Insulation and Plaster</b>										

- Once the first task has been entered, it is very easy to link tasks together so that they change when previous tasks are updated. (3:50)
- On the second task, enter the task name and then enter an equal symbol in the start date of task two.

done	Task	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 1: Site Work</b>									
d	Excavate for foundation	Feb 1, 2016	Feb 8, 2016	1.0				Pike	DONE
d	Foundation	=	Feb 15, 2016	1.0					DONE
d	Back fill	Feb 15, 2016	Feb 22, 2016	1.0					DONE
d	Drainage	Feb 22, 2016	Feb 29, 2016	1.0					DONE

- Then click on the end date of the first task or the task that it needs to be linked to. The date will appear in the start date of task 2.

done	Task	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 1: Site Work</b>									
d	Excavate for foundation	Feb 1, 2016	Feb 8, 2016	1.0				Pike	DONE
d	Foundation	=	Feb 15, 2016	1.0					DONE
d	Back fill	Feb 15, 2016	Feb 22, 2016	1.0					DONE
d	Drainage	Feb 22, 2016	Feb 29, 2016	1.0					DONE

- The cell number will appear and then press enter.
- Repeat this process for each task if they need to be linked together.

done	Task	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 1: Site Work</b>									
d	Excavate for foundation	Feb 1, 2016	Feb 8, 2016	1.0				Pike	DONE
d	Foundation	Feb 8, 2016	Feb 15, 2016	1.0					DONE
d	Back fill	Feb 15, 2016	Feb 22, 2016	1.0					DONE
d	Drainage	Feb 22, 2016	Feb 29, 2016	1.0					DONE

- If the tasks do not need to be linked, simply enter the date and do not use the equal sign to link them. This will create an independent task.



## Using the Work Done By Column

1. The user can add who completed the task if the work needs to be done by an outside contractor. This can be done in the column that is titled “work done by”. It is located all to the left of the completion column. (5:45)

Habitat for Humanity MWGW				Build Site:	Start Date: Jan 1, 2016		End Date:			
done	Task	Predecessor	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 1: Site Work</b>										
<b>Phase 2: Framing</b>										
<b>Phase 3: Siding &amp; Mechanicals</b>										
<b>Phase 4: Insulation and Plaster</b>										
<b>Phase 5: Finish &amp; Punch List</b>										

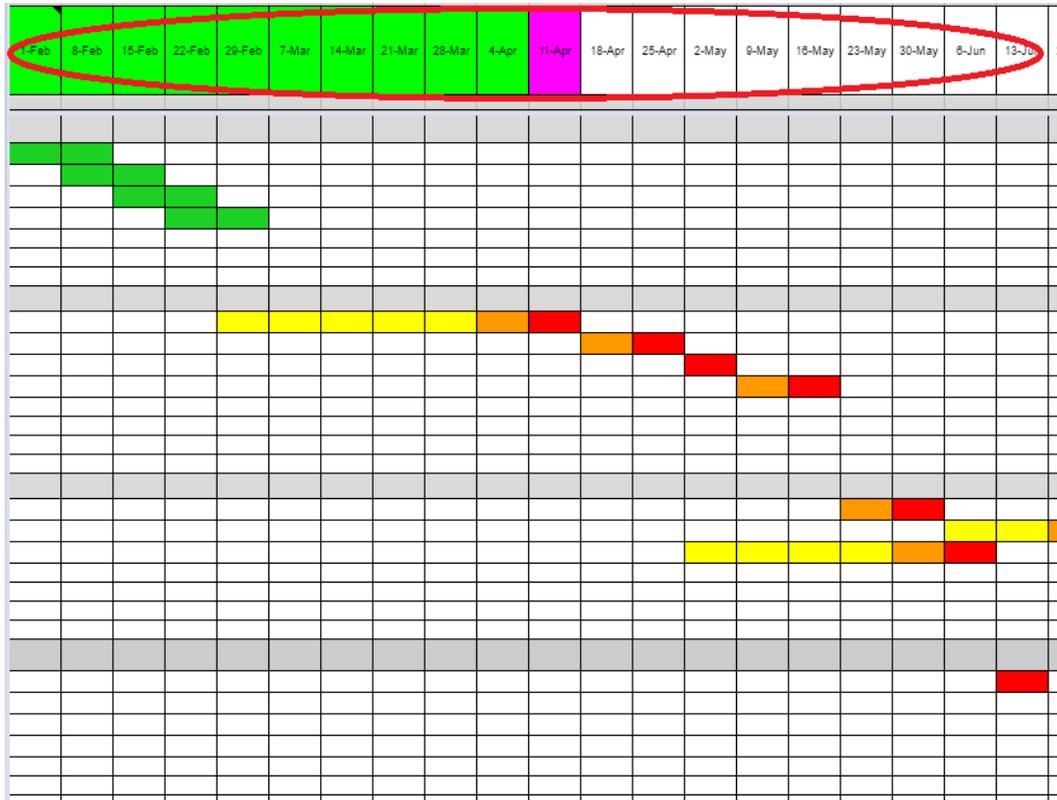






## Gantt Chart Features

1. While the editing is being done in the editing sheet, the visual is also being updated in the Gantt chart sheet. While there is no editing that can be done on this sheet, each feature should be explained to ensure the user understands the lay out.

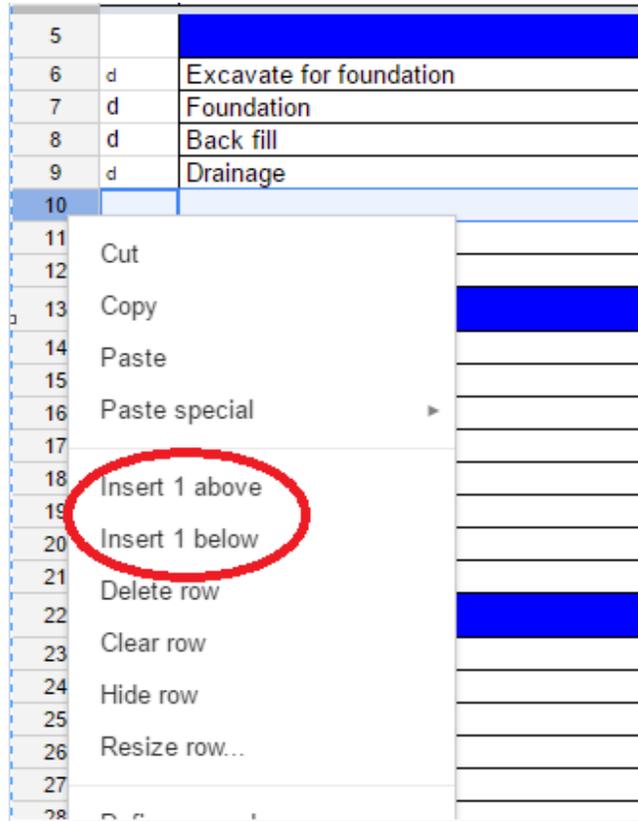


2. Located on the top of the chart is the top timeline row which labels the date of each cell below it. The green highlight means that the week has already passed. The purple highlight means that it is the current day and the red means that this date has passed the final deadline.
3. As the dates are changed for each task in the editing sheet, each subsequent task in the Gantt chart is moved back.
4. Each task turns green once it is completed. A yellow box indicates that there are two weeks until completion, orange means 1-2 weeks until completion and red means there is less than one week until completion. (6:55)
5. The predecessor column is a feature of the Gantt Chart and the editing sheet. This shows the task that comes directly before the one that is being working on. (8:30)

## Frequently Asked Questions

How do I add a new row in a phase with more than seven tasks?

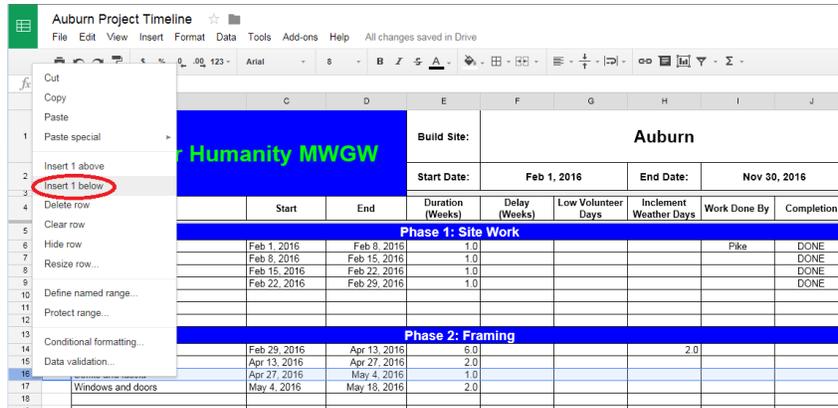
1. Move the cursor over to the left of the screen and right click the row that needs an addition row above or below while in the editing sheet. Then click the option insert 1 above or insert 1 above. (9:15)



2. A new row will appear but the equations will not work in this row. Highlight the row, and move to the bottom right corner of the highlighted area. Move the cursor over the small blue box and wait until the cursor turns into a cross. Pull the highlighted area to the top or bottom.

Phase 1: Site Work									
d	Excavate for foundation	Feb 1, 2016	Feb 8, 2016	1.0				Pike	DONE
d	Foundation	Feb 8, 2016	Feb 15, 2016	1.0					DONE
d	Back fill	Feb 15, 2016	Feb 22, 2016	1.0					DONE
d	Drainage	Feb 22, 2016	Feb 29, 2016	1.0					DONE
Phase 2: Framing									

3. The equations have been copied to the next row and the user needs to click on the Gantt Chart sheet to finish copying the formula.
4. In order to get this inserted row to show up on the Gantt Chart, navigate to the Gantt Chart page and choose to add a row in the same spot. Do this by follow the same instructions for adding a row that was just discussed. (10:25)



- Then select the entire row that is above the row that was just added by hitting control, shift and the right arrow key at the same time. This will highlight the entire row in the Gantt Chart.

	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 2: Framing</b>								
14	Feb 29, 2016	Apr 13, 2016	6.0			2.0		
15	Apr 13, 2016	Apr 27, 2016	2.0					
16	Apr 27, 2016	May 4, 2016	1.0					
17	May 4, 2016	May 18, 2016	2.0					

- Once the row is highlighted, repeat the same process by dragging the small blue box in the bottom right hand corner of the highlighted area. The information will be copied onto the Gantt Chart sheet from the editing sheet. **Do not edit the Gantt Chart page!!!**

How do I move a task because I have entered them out of order?

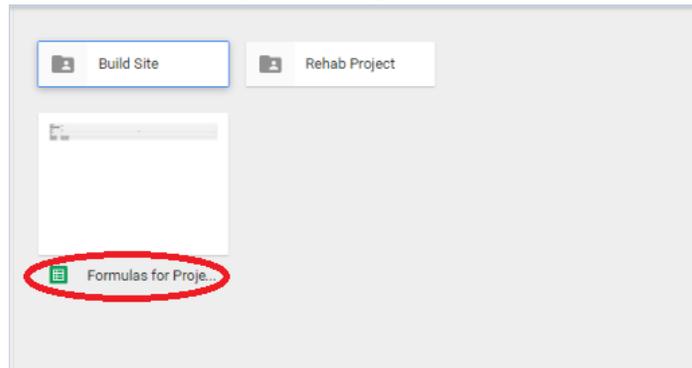
- Highlight the row that needs to be moved.
- Move the cursor over the highlighted row until the hand appears.

Task	Start	End	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days	Inclement Weather Days	Work Done By	Completion
<b>Phase 2: Framing</b>								
Frame the Shell	Feb 29, 2016	Apr 13, 2016	6.0			2.0		
Foam	Apr 13, 2016	Apr 27, 2016	2.0					
Soffits and fascia	Apr 27, 2016	May 4, 2016	1.0					
Windows and doors	May 4, 2016	May 18, 2016	2.0					

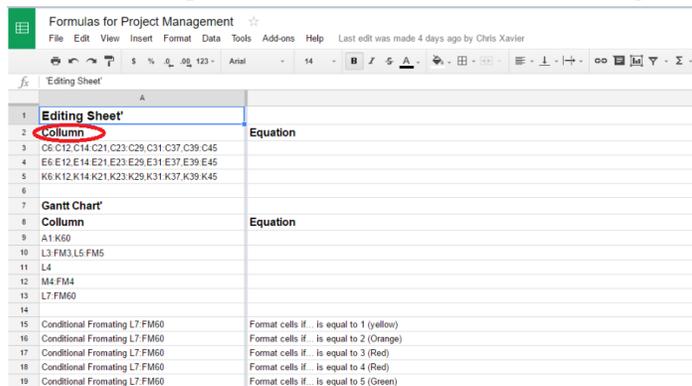
- Move the cursor to the desired spot while holding down the mouse.
- Let go of the mouse click to drop the above information into the highlighted boxes.

What do I do if I accidentally change the code in the cells? (11:00)

1. If the user accidentally changes the code in the cells refer to the Formulas document located in the HFH MWGW Project Management Folder.



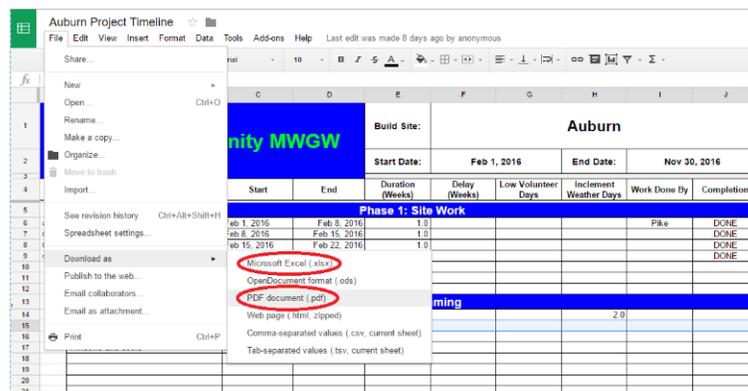
2. Find the formula that corresponds to the formula that was changed.



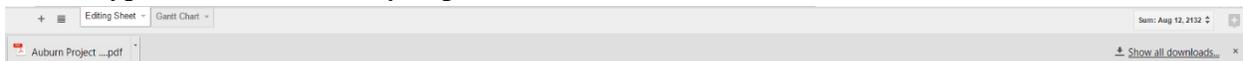
3. Copy the formula and paste it in the correct cell.

How do I download and print the sheet? (12:10)

1. Click the File button that is located in the top right hand corner of the screen and then choose Download as.



2. Then choose either to download the file as an excel file or a pdf document based on the type of document that you prefer.



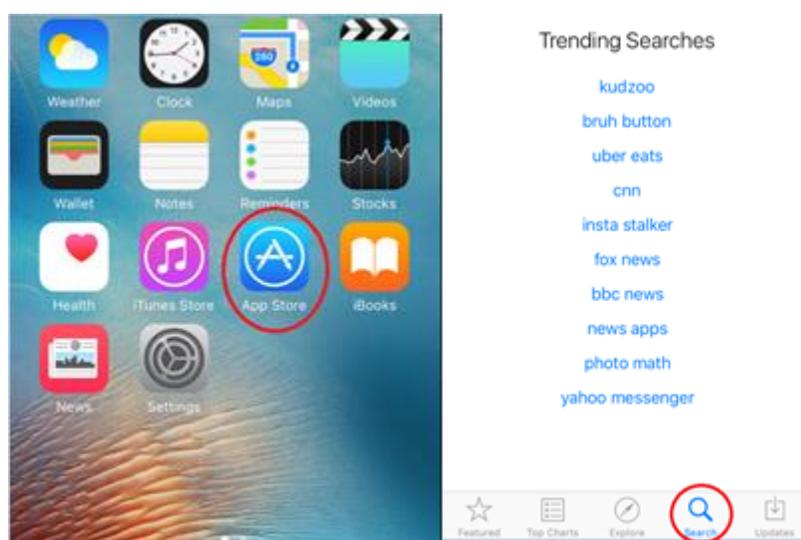
3. This download button will appear at the bottom of the screen and click it to view the downloaded document.

## Using Google Sheets Mobile App

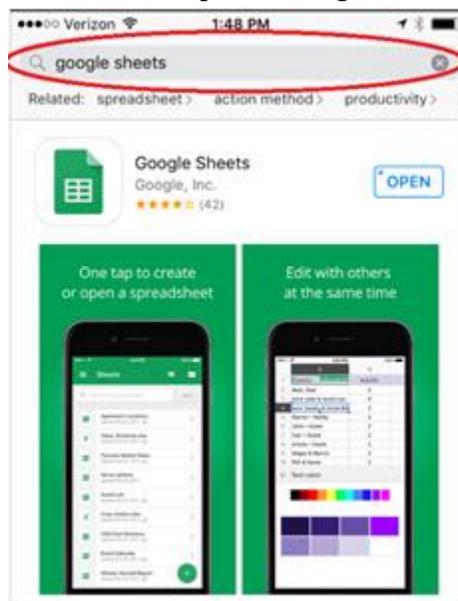
Google sheets has a version that can be accessed on your smartphone using the google sheets app.

### iPhone App Download:

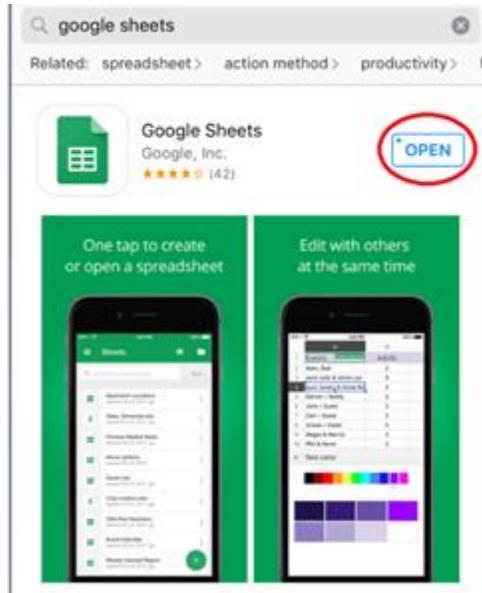
1. Access the App Store through the App on your phone and select the search tab on the bottom of the screen.



2. Search “google sheets” in the search bar, press the “get” button and then press “install”.



3. Open the google sheets app and sign into google mail (gmail).



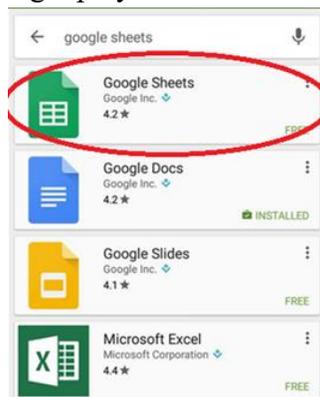
4. Using this app, all of your spreadsheet documents on google drive can be accessed and edited in real time.

## Android App Download:

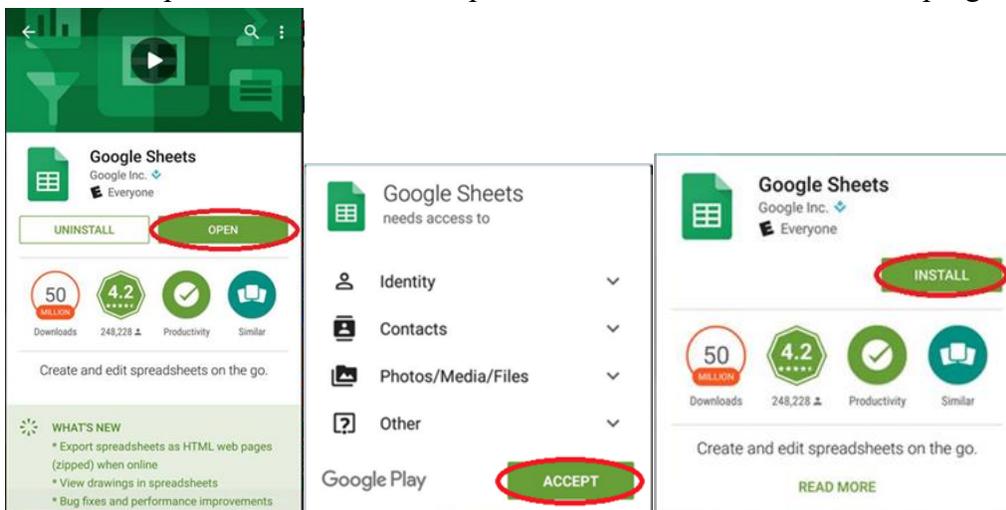
1. Access the Play Store app on an android phone and select the google play search bar at the top of the screen.



2. Search “google sheets” in the google play bar and click the google sheets icon.



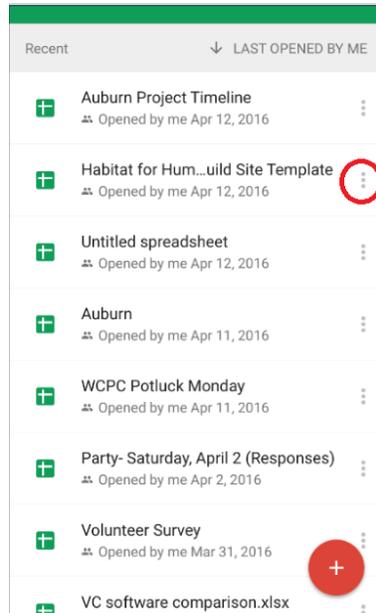
3. Click “open”, then choose “accept” and then choose to “install” the program.



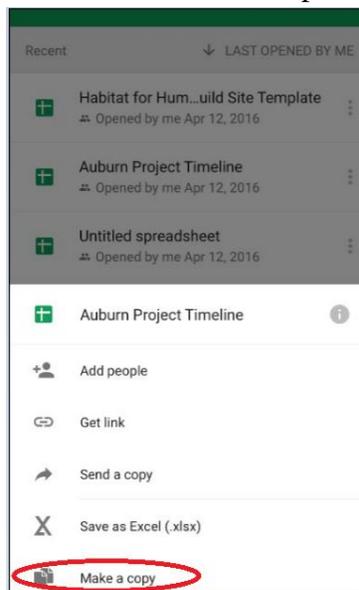
4. Sign in with google email (gmail) credentials. Using this app, all spreadsheet documents on google drive can be accessed and edited in real time.

## Accessing your Timelines

1. Begin by selecting the 3 dots icon on the right of the screen next to the Habitat for Humanity Build Site Document.



2. Then select the option that says make a copy. The general procedure will follow exactly how the user would work the software on the computer.



3. **VERY IMPORTANT!!!!** The guide will walk the user through the basics of using the Google Sheets software using the mobile app. However, it is recommended that if changes are necessary, make them on the computer. The computer will make the task much easier to do. **VERY IMPORTANT!!!!!!**
4. When you open the sheet, it will look the same as the document that was opened on the computer.

## Creating a Title, Start and End Date

1. Notice that the top row with the titles for each column are locked meaning that the headings of each column will remain at the top when scrolling.
2. Start by editing the build site name in cell G1 and then enter the start date and end date of the build site just below it.

	E	F	G
1	Build Site:		
2	Start Date:	Feb 1, 2016	
3			
4	Duration (Weeks)	Delay (Weeks)	Low Volunteer Days
5	Phase 1: Site Work		
6	1.0		
7	1.0		
8	1.0		
9	1.0		
10			
11			
12			
13	Phase 2: Framing		
14	6.0		
15	2.0		
16	1.0		
17	2.0		
18			
19			
20			
21			

	H	I	J
1	Auburn		
2	End Date:	Nov 30, 2016	
3			
4	Element	Weather	Work Done By
5			
6			Pike
7			DONE
8			DONE
9			DONE
10			DONE
11			
12			
13			
14		2.0	
15			
16			
17			
18			
19			
20			
21			

## Editing Start and Duration for Each Task

1. Next, enter the tasks in the far left column and the start date for each task in the column directly to the right.

	C	D	E
1	City MWGW		Build Site
2			Start Date
3			
4	Start	End	Duration (We
5			Phase 1
6	, 2016	Feb 8, 2016	
7	3, 2016	Feb 15, 2016	
8	15, 2016	Feb 22, 2016	
9	22, 2016	Feb 29, 2016	
10			
11			
12			
13			Phase 2
14	29, 2016	Apr 13, 2016	
15	13, 2016	Apr 27, 2016	
16	27, 2016	May 4, 2016	
17	4, 2016	May 18, 2016	
18			
19			
20			
21			
22			Phase 3

Editing Sheet ▾ Gantt Chart +

## Editing the Delay Columns

1. The other delay columns can be editing exactly the same as editing using Google Sheets on the computer.

	G	H	I
1			
2	Jan 1, 2016		End Date
3			
4	Delay (Weeks)	Low Volunteer Days	Arrival w/ Days
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			

Editing Sheet ▾ Gantt Chart +

## Completion Column

1. The work done by column can also be editing the same way.
2. A “d” can be typed in the column to the far left and done will appear in the completion column.

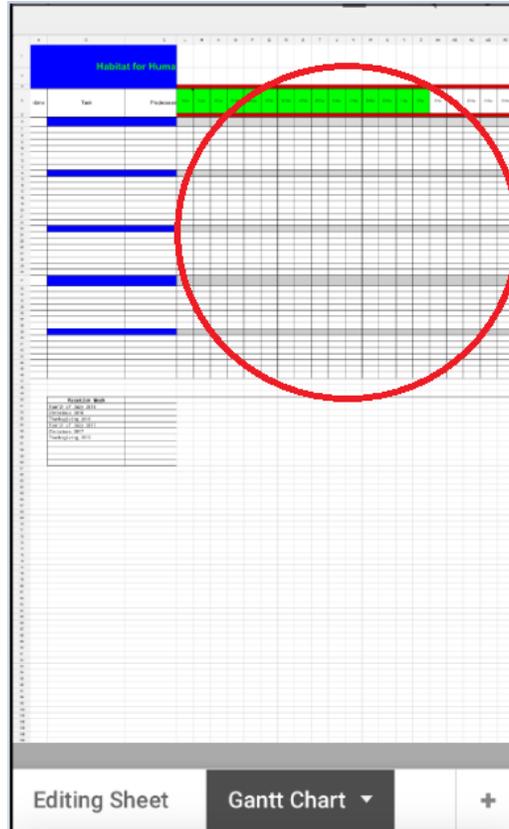
	A	B
1		Habitat for
2		
3		
4	done	Task
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

	J	K
1		
2	te:	
3		
4	leather	Work Done By Completion
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		

## Gantt Chart

1. Once all of the tasks have been entered in the editing sheet, all of the tasks and chart in the Gantt Chart tab can be viewed.
2. Click on the Gantt Chart tab and view the chart to the right.



5. The features of the Gantt Chart are the same in the Google Sheets app as when using a computer. The Gantt Chart will appear small on the mobile app but it is very easy to zoom in and out. Remember only edit when on the editing sheet.