

# 1 Overview

The use of group projects in higher education is common. However, students often don't have a digital place for their team to collaborate on files. Google Drive, with its online office suite and file storage, is an ideal solution to this problem. However, due to confusion regarding permissions or simple lack of knowledge, this tool is not always utilized.

Instructors could create project spaces for each team manually, however, such a task would be time consuming and effectively impossible with a large class. "Create Group Project"<sup>1</sup> automates this process so that it is practical, even in a very large section.

The feature set is as follows:

1. Create a folder for each "team" (group) such that each member of the team has read/write access. The instructor retains ownership of the folder for easy grading.
2. (Optionally) Create a set of default subfolders for each team
3. (Optionally) Copy a set of default files into each team's folder

## 2 Simple Usage

### 2.1 The Spreadsheet

This application is driven by a very simple spreadsheet. The first sheet of your notebook (created in Google Spreadsheets) should contain three columns: Name, E-Mail and Team. Your header row (first row) must contain these three columns. All three values are required for every student in your class.

	A	B	C
1	Name	E-Mail	Team
2	Julie Doe	julie@doe.com	Dodgers
3	John Doe	john@doe.com	Dodgers
4	Jane Doe	jane@doe.com	Yankees
5	Jordan Doe	jordan@doe.com	Yankees

Figure 1: List of students in Google Spreadsheets

### 2.2 The Application

Once you have created an appropriate spreadsheet, as described in section 2.1, you can use the application to generate the folder for each group.

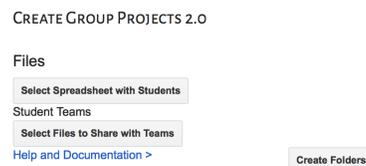


Figure 2: The application interface. Select the appropriate spreadsheet by clicking "Select Spreadsheet with Students". Optionally, you can select a set of files (discussed in section 3.1).

<sup>1</sup>Available at <http://bensresearch.com/CGP/>

Simply select the spreadsheet that contains the list of names, e-mails and teams, then click “Create Folders”. This will create a folder for each team with the appropriate permissions.

### 2.3 The Folder



Figure 3: An empty folder generated by the application. This folder’s permissions have been modified such that each team member has read/write access.

Once the application has run, each team has their own folder, where each team member has been granted read/write access. Take Figure 3: This folder was generated for the team “Dodgers”. A look back at Figure 1 indicates that there should be two team members with read/write access. A look at the permissions, indicates exactly that (Figure 4).

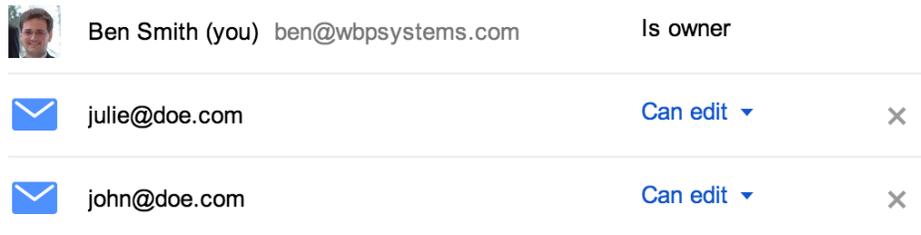


Figure 4: Here we see the permissions of the folder shown in Figure 3.

You might also note that the instructor (Ben Smith, in this case) still owns the folder. This allows the instructor to grade the assignment, remove permissions past the due date (if they so choose), or numerous other actions.

## 3 Advanced Usage

While the most basic usage solves one of the key problems associated with group projects, instructors might also want default folders or files for each team.

### 3.1 The Spreadsheet

As described in Section 2.1, an instructor should always start with a list of names, e-mails and teams. However, if the spreadsheet contains a second sheet, the application will use this information to create a set of default folders (Figure 5). This will populate each team’s folder with a set of subfolders. This feature can be used to designate a turn-in folder, steps in the project, or different roles for each team member.

	A
1	Folders
2	Final Project
3	Work Product

Figure 5: The second sheet of the spreadsheet can contain a list of default folders the instructor wishes to create for each team.

### 3.2 The Application

When running the application, you can also include a set of default files. Just like before (Section 2.2), you must select the spreadsheet containing the list of students. However, if you click on the button titled “Select Files to Share with Teams” (Figure 6), a file picker will appear. You can select as many files from your Google Drive account as you like and any file you select will appear below the file selection button. Once you click “Create Folders”, each folder will be generated with a *copy* of all of the selected files.

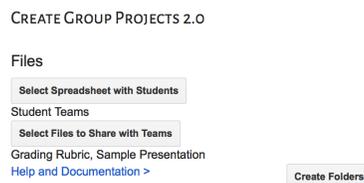


Figure 6: Along with the appropriate spreadsheet (containing the names of the students), the instructor can select a set of files to include in each team’s folder by clicking “Select Files to Share with Teams”.

### 3.3 The Folder

As described in Section 2.3, a folder for each team is generated with the appropriate permissions. However, due the list of default folders (Section 3.1) and selected files (Section 3.2), the folder contains a set of sub folders and the two selected files (Figure 7).

 **Dodgers**

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My Drive ▶ **Dodgers**

<input type="checkbox"/>	TITLE	OWNER 	LAST M... 
<input type="checkbox"/> 	 Sample Presentation Shared	me	8:39 am me
<input type="checkbox"/> 	 Grading Rubric Shared	me	8:39 am me
<input type="checkbox"/> 	 Work Product Shared	me	8:39 am me
<input type="checkbox"/> 	 Final Project Shared	me	8:39 am me

Figure 7: Due to the list of default folders (Section 3.1) and selected files (Section 3.2), the folder created for each team contains two files and two folders.