

User Guide

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Setting Up Input Data

- First step is to make sure you have a google drive account. You can create/verify it at drive.google.com.
- First add(copy) the templated form to your google drive by going to
<https://docs.google.com/forms/d/1TNLJhRqVsJgYPVE4l6FGnRVrklkV7Mnurv422yjAn3s/copy>

Figure 1: You should see a website such as this.

Google Drive

Copy document

Would you like to make a copy of TeamBuilder?



[Make a copy](#)

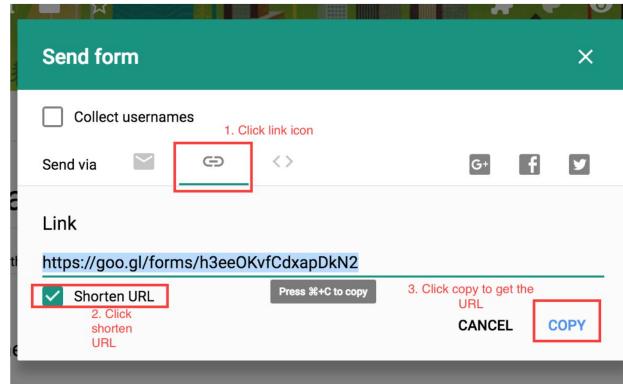
- Go ahead and **click Make a copy** and you will be brought to your copy of the form. Once you see this form you should be able to see the format of it all.
- You can then distribute the form (so applicants can put in data) by **clicking the send button** in the top right corner.

Figure 2: Click send

A screenshot of a Google Form titled "TeamBuilder". The form has a decorative background featuring a green landscape with buildings, roads, and trees. At the top left, there is a link to "Copy of Work Request". Below the title, there is a brief description: "This is the input form for team building". There are two sections: "QUESTIONS" and "RESPONSES". Under "QUESTIONS", there is a "Name" field with a placeholder "Short answer text" and an "Email" field. On the right side of the form, there is a vertical toolbar with icons for "Responses", "Forms", "Tables", "Video", and "Calculus". At the top right of the form area, there is a red-bordered "SEND" button.

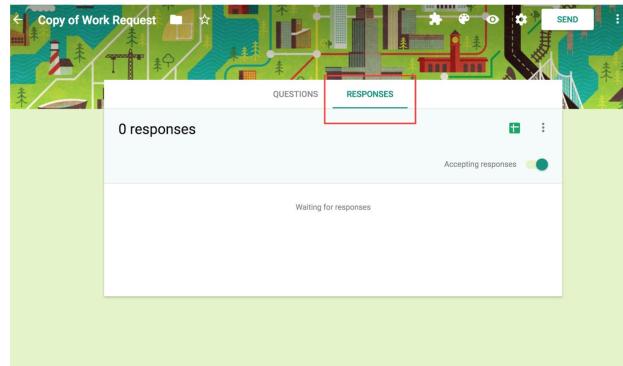
- Click the link icon and shorten url, then copy.

Figure 3: That link is the link that you want to distribute.



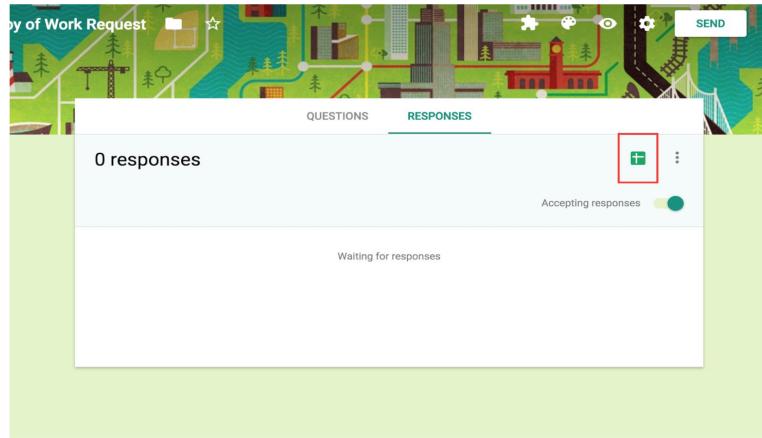
- To check results/submissions, click on the responses tab

Figure 4: Use this to keep track of submissions



- Once submissions are in, click the green box in responses

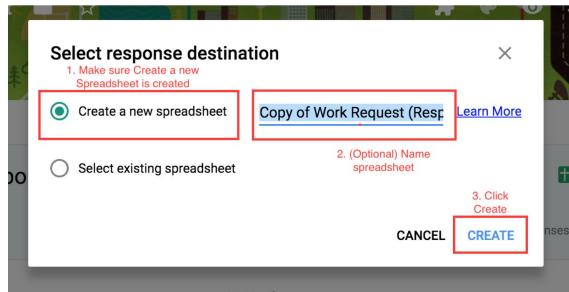
Figure 5: After data is collected, we start creating the CSV



Note that if any responses come in later after creating the excel sheet, they will be automatically added to it, you can access it just by clicking on the green icon again.

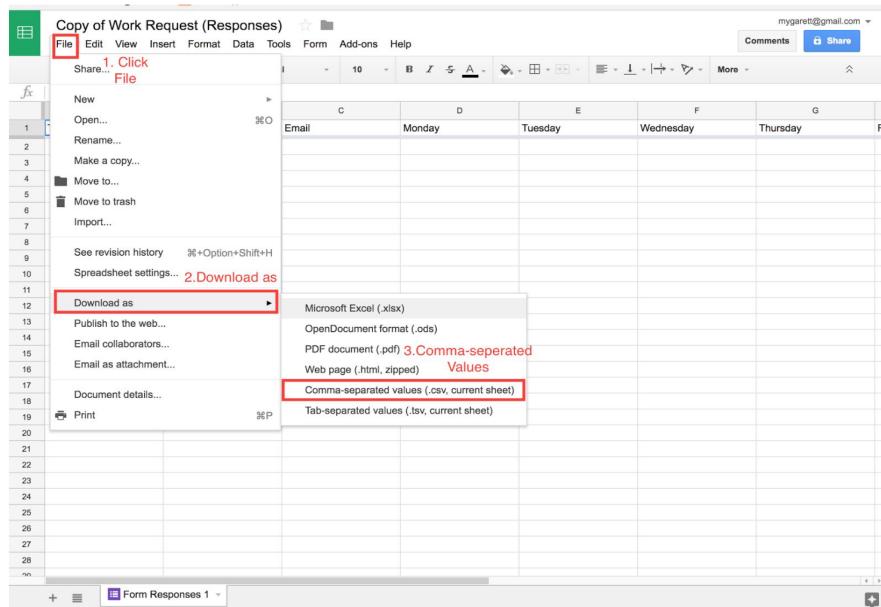
- Once clicked it will ask you to create an excel sheet or select an existing excel sheet. **Click Create and Change the name if you desire, then click create.**

Figure 6: This will create an excel sheet



- After clicking create it will bring you to a spreadsheet with all your data. We want to **export** this as an **csv file**. To do this, go to **file** then **Download as** then select **Comma-separated values**

Figure 7: We export to a CSV file



- Before we continue, you need to create a **txt file** with a student roster (just with all of their names) (below for example). New line separated, with last name first, comma, space, and first name

Figure 8: Creating the team roster

```
TeamBuilder — vim data/small_roster.txt — 80x24
1. Eppure, Alister
2. Roberts, Gorrett
3. Swift, Johnathan
4. Pan, Peter
5. Bobson, Rob
6. Peterson, Samuel

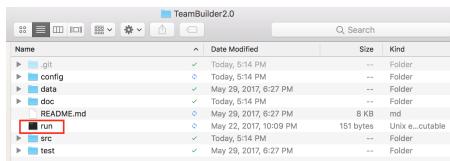
"data/small_roster.txt" 6L, 90C
```

Congratulations! You have finished setting up the desired input data. Save those files and proceed to running the GUI

Running the GUI

- In the directory, **double click on Run** to start the GUI.

Figure 9: Run will run the GUI



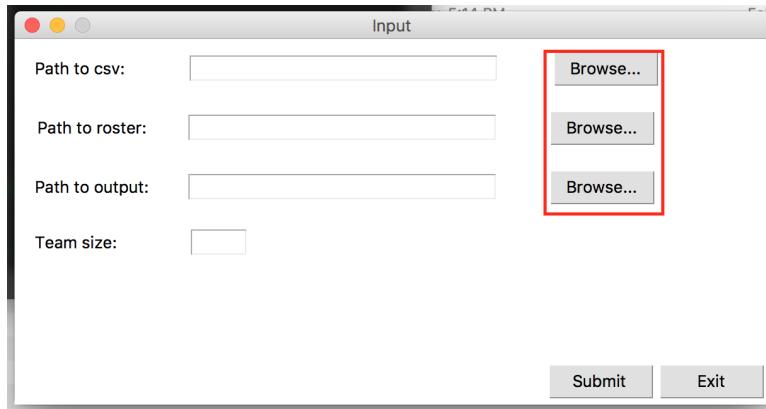
NOTE if Run is not working correctly, you can also start the GUI by opening a terminal and running

```
$ python3 src/gui.py
```

In the directory

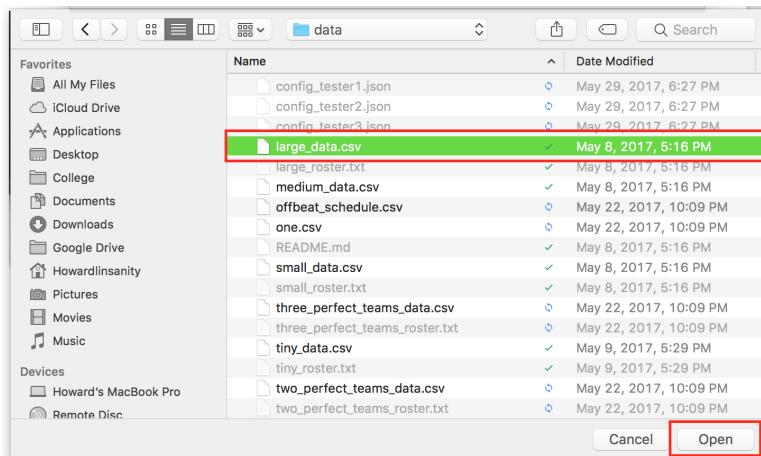
- You should then be greeted by the following screen. **Click on *Browse*** to start inputting data for all of the fields.

Figure 10: This is the setup screen of the GUI



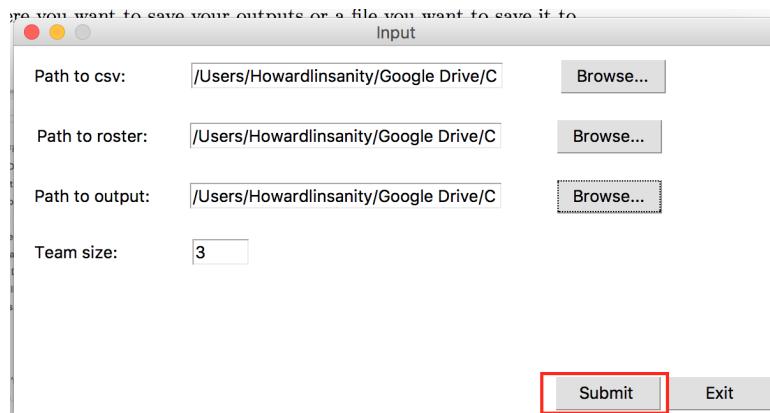
- For each fields, use the file finder to **find your data files**, and then **click open**. For Path to output, just find a directory where you want to save your outputs or a file you want to save it to.

Figure 11: Input screen



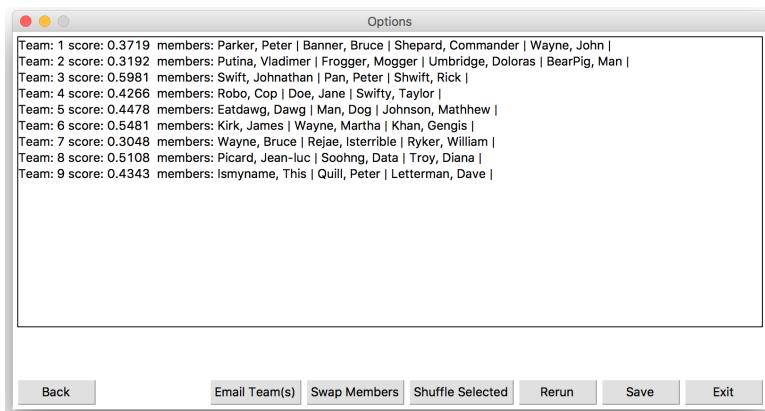
- After you put in all files and the team size, **click on Submit**

Figure 12: Let's start the algorithm!



- After running the algorithm, you should then be greeted by the results screen, which displays the teams, their scores, and a few options if you choose to twiddle with the results.

Figure 13: Results screen



Options and Features

Now that you have the teams assembled and scored, you now have these tools and options to modify the team selection.

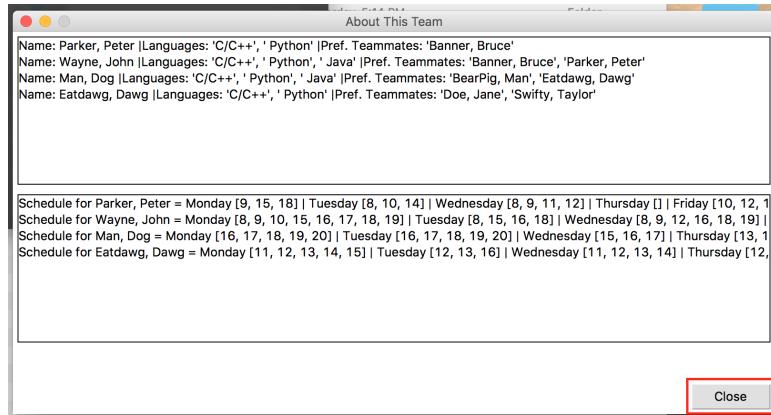
- To **inspect** the individual teams, **double click** a team to open up the team inspection teams

Figure 14: Note: If you double click in a way such that the last click "un-selects" a team, you may be asked to try again



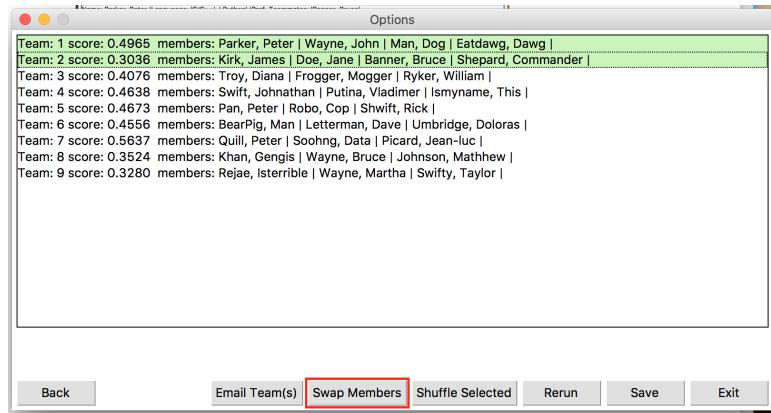
The following information may be useful in swapping out individual members, which we will get to next

Figure 15: To go back to the main screen, hit close



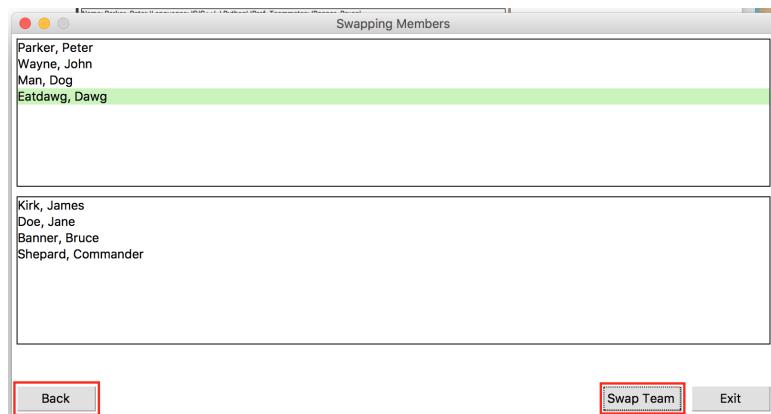
- To swap individual members between two teams, **click on two teams** and then click on **Swap Members**

Figure 16: Select exactly 2 teams before clicking Swap Members



You will then be greeted by the following screen, and to swap members, **select an individual**, and then **click on Swap Team**

Figure 17: When you are done, click on **Back** to return to Options



- To randomly reshuffle certain teams (switching members among a set of teams), **select the teams** you would like to reshuffle, and then **click on *Shuffle Selected***

Figure 18: Select exactly 2 teams before clicking Swap Members



- If you would like to rerun the whole algorithm and remake the groups from scratch, **click on *Rerun***

Figure 19: Rerun



- When you are done tweaking groups, you can save the results into a file by **clicking on *Save***.

Figure 20: The output file will be saved into the output destination selected during setup



Congratulations! You have now formed your group, but if you wish to inform and email your teams, do not hit exit yet.

Informing Teams

After you have created teams it is natural that you will want notify those individuals on the team who their new teammates are. In this project we have included a simple text only emailer to handle this for you. You can do this through cmdline or through the GUI that has been created. Regardless of how you wish to use the emailer you must first configure the email settings in the config directory.

Configure

To configure the emailer find the config.json file located within the config directory. Open this and locate the email settings.

Figure 21: The following is an explanation of each setting

```
Name: the name you want to appear in the message as the sender.  
From: the email address you are using to send out the emails.  
Source: this points to the email template that is used for the email.  
SMTPServer: the SMTP server that you want to use.  
Port: the port of the SMTP server.
```

Command Line Usage

To email the created teams you will want to first run the program to generate teams. When you do this you will have a text file of output. Using this output is how you will email the teams out. From the main directory of the repository run the command

```
$ python3 src/inform.py ../output.txt
```

In the above hypothetical the output.txt is located in the main directory. The inform.py will look for the file relative to its location on the file system. This is why in the example above the argument points to the parent directory.

You will next see a prompt requesting your login/password for the SMTP server. After supplying them the emails will be sent. The format of the email is determined by the email template. Details on changing this is located below.

GUI Usage

To access the emailer within the GUI version of the program, you start it as normal. Once you have generated the teams and adjusted them as you want, to email the teams first select all the teams that you want to email. Next locate the email button at the lower edge of the window. Hit it and then a new window will appear asking for the login/password for the SMTP server specified in the config settings. After entering this info hit send and the emails will be sent.

Figure 22: Select the teams that you want to notify



Figure 23: Then input your credentials and then hit Submit

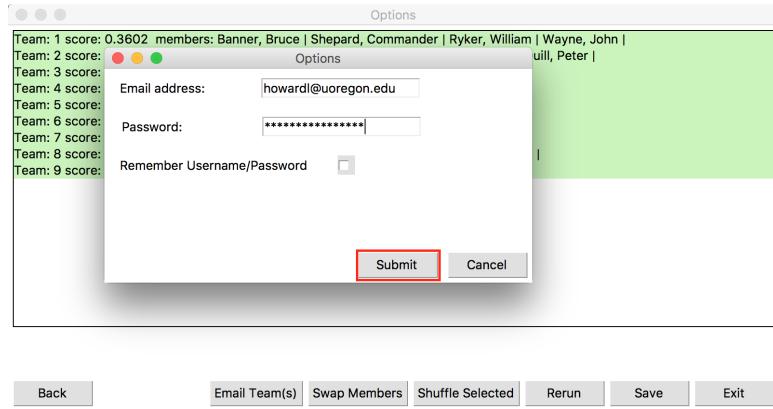
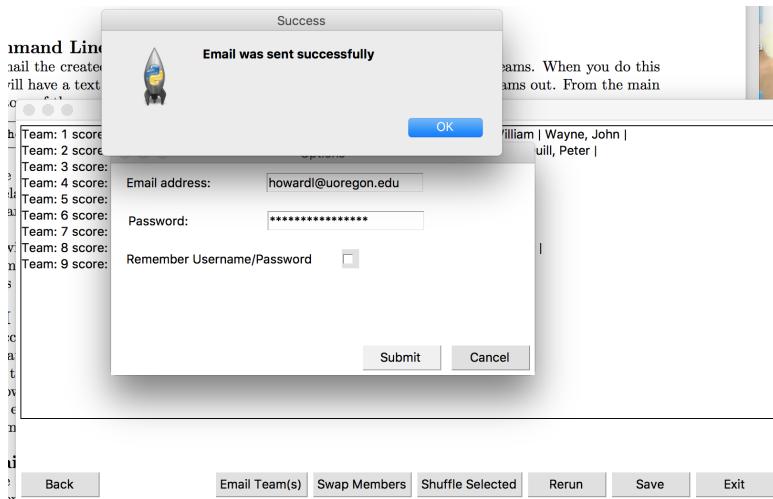


Figure 24: You should then receive a confirmation



The format of the email(s) is determined by the email template. Details on changing this is located below.

Email Template

There is an `emailtemplate.txt` located in the config directory. This template controls what the emails that are sent out look like. You may change this up as you wish but it is limited currently to plain text. Instructions on what you can do to alter the template are located within the file.

Have fun team building!!!