

Coding Environment and Submission

For the Hackathon, you will be using the following software tools:

- Google Colab (Python notebooks) for coding
- Google Classroom for sharing materials

We have provided details below on how to set up the Google Colab environment, so you have access to the dataset and a starting notebook.

1. Google Classroom

A Google Classroom environment has been set up for the sharing of materials and resources and for ease of communication during the hackathon. You can post questions to the facilitators during the day of the hackathon. If at any point, you feel stuck, please reach out and we will assist.

To set up Google Classroom, follow the instructions below:

- Navigate to https://classroom.google.com/ in a browser.
- Select the '+' button on the top right corner and select 'Join class'.
- Enter the following Class code: sw5ucjo
- You will be added to the classroom and have access to all the resources under Classwork.
- A classroom folder will automatically be created in your Google Drive.

In addition to the Google classroom environment, the facilitators will be available in person on the day of the Hackathon for questions and guidance.

2. Environment Set Up

- Navigate to: <u>https://colab.google/</u> and sign in with your Google account, and select **Open Colab.**



Figure 1 – Google Colab

- Select **GitHub**, and enter the following URL:



- o https://github.com/jules-deponte-entelect/SACAIR-Hackathon-2023-Getting-Started.git
- NOTE: Make sure to select the repo called: SACAIR-Hackathon-2023-Getting-Started
- Select the notebook called: SACAIR Hackathon Getting Started.ipynb

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Figure 2 – Open Colab and select GitHub. Choose the SACAIR Hackathon Getting Started.ipynb notebook

- Run the first cell. This will clone the repo to the environment. Wait until the cell finishes running. Once it is done, you will find a folder called **SACAIR-Hackathon-2023** in your Google Drive account. This contains the data and starter code for your project.



Figure 3 – Run code from the SACAIR Hackathon Getting Started.ipynb notebook



- Once the above code has finished running, please close this window, and navigate to your Google Drive folder. Please rename it to **SACAIR-Hackathon-2023-<YOUR_TEAM_NAME>**.
- From there, open the notebook called **Eskom Data.ipynb**, run the starter code and get devving!

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Figure 4 – SACAIR Hackathon 2023 folder.

- The starter code will mount your Google Drive to the notebook and allow you to use the data stored in the Google Drive.

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Figure 5 – Starter code from Eskom Data.ipynb

3. Submitting Your Project

When you're done with your project, ensure that all your files, notebooks, presentation, etc. are stored in your Google Drive as a folder with the following naming convention: **SACAIR-Hackathon-2023-**<**TEAM_NAME>**.

Copy the folder into the Google Classroom folder in Google Drive. This will count as your submission. If the folder name does not contain your team's name (or your name), we will not be able to score you!



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