

User Manual

TOPIC: TRACKING HDR TEACHING HOURS

- SRIRAJ Y RAO – 101856783
- HEWA PERUMA KAPUGAMAGE ROSHANI NADEERA - 102878571
- SONU CHANDRAKANT GAUTAM - 103812813
- YASHODHA MALLUWA WADU - 103843033
- UDARI CHETHANA SENANAYAKE - 102626741

User Manual for Tracking HDR Teaching Hours

1. Introduction

This project involves upgrading the current manual spreadsheet system utilized by Swinburne University's Academic Operations Unit (AOU) to effectively monitor teaching hours for HDR students and generate a comprehensive summary spreadsheet covering all six schools. The system is designed to streamline decision-making processes, such as assigning and processing payments for casual staff, thereby minimizing the requirement for manual intervention.

2. System Overview

As depicted in Figure 01, the input sources comprise Excel files containing HDR student data, payment master data, and teaching hours calculations, each equipped with its own dedicated office script code that governs the entire backend operations. Through the implementation of power automation, the three Excel files are executed in conjunction with their respective office script files. This culminates in the production of a consolidated file that encompasses all essential data. Additionally, in response to client preferences, the final consolidation file can be initiated either manually or set to run automatically at predetermined intervals.

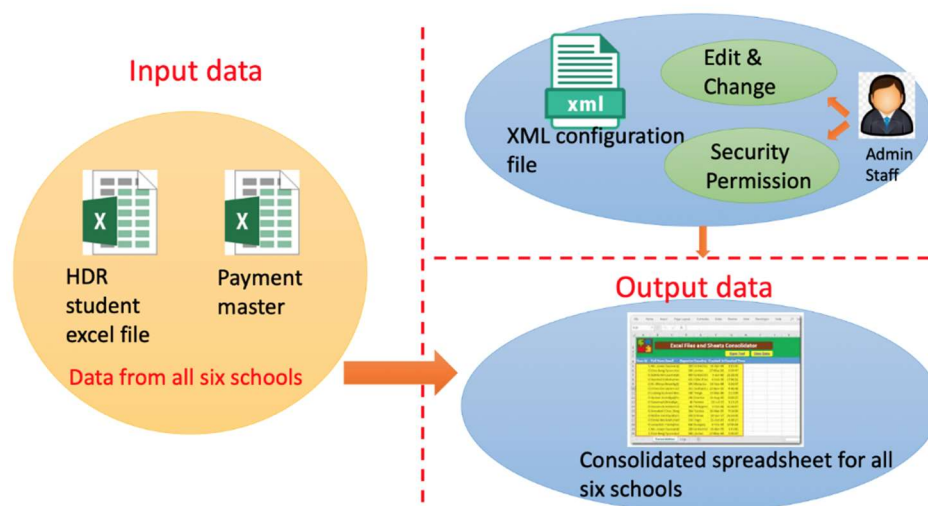


Figure 1: System architecture diagram

3. System Requirements

Hardware Requirements:

- Processor with a minimum of 1.60GHz clock speed and two or more cores.
- At least 2GB of storage.
- 4GB of RAM.
- GPU with acceleration capabilities.

Software Requirements:

- A stable internet connection for accessing cloud-based services like Power Automation and Office Scripts.
- An up-to-date web browser such as Google Chrome, Safari, Microsoft Edge, or Mozilla Firefox.
- A valid Microsoft account and an active O365 subscription.

4. Getting Started

Log in to Microsoft OneDrive using domain account credentials.

Using Microsoft Script

Step 1- Launch Excel Sheet

Open Sessional Academic Payment Template - Make sure to enter the data for Department, Unit, Activity Name, Delivery Period, Duration, Instructor ID, Instructor Name, Timetabled Weeks, Unit Convenor, First or Repeat, Pay Rate Code, and School correctly without any space and make sure there are no null values.

Navigate to For Student - Dummy Data - Sessional Academic Payment Template 2023
Click on the Automate tab like shown in Figure.

Operation: This would capture the data based on the department's wise information of the Ph.D. student along with their marking hours.

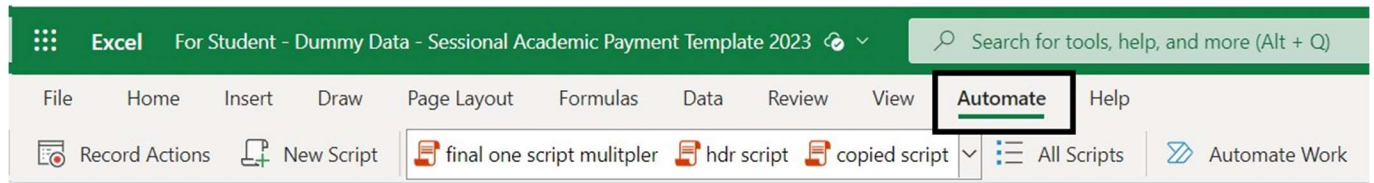


Figure 2: Excel file to indicate the office script.

Step 1.1 -

Select the correct script from the All Scripts and make sure the script is pasted correctly.

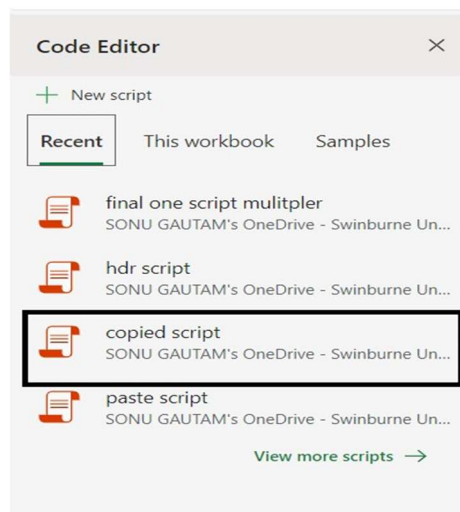


Figure 3: First script to trigger - copied script.

Step 1.2 - Run the Script Manually.

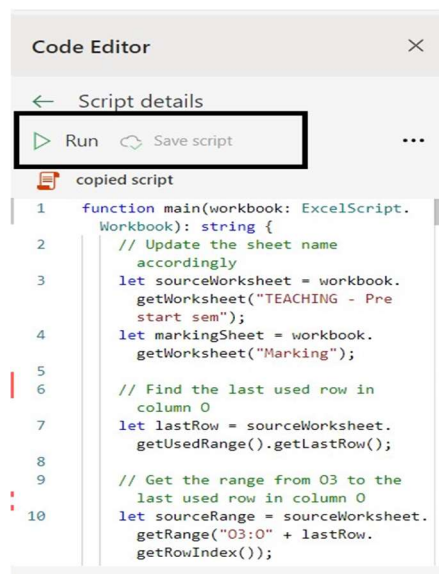


Figure 4 : Image shown to trigger the copied script

Step 2 - Launch Excel Sheet

Open Sample HDR_PHD Report Excel file - Make sure to enter Student ID, Instructor ID, and Principal_Supervisor_1 is entered correctly and make sure there are no spaces and no null values.

Operation: This script would capture the student ID and HDR supervisor of the student based on the instructor ID.

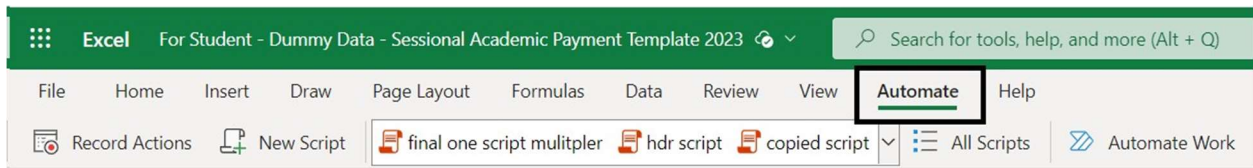


Figure 5: Image shown to locate the script.

Step 2.1 – Select the HDR script for the second script to perform its operations.

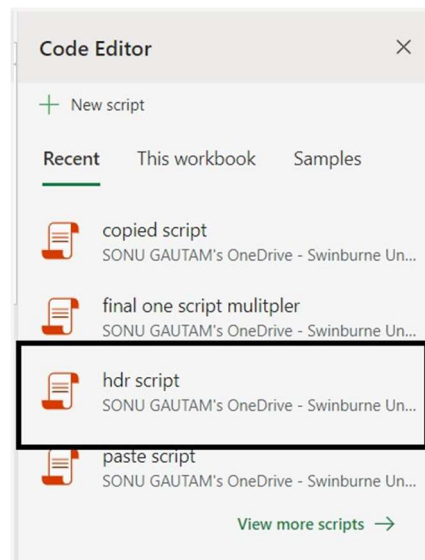


Figure 6: Image shown the next script to be selected - HDR script.

Step-2.2 – In order to run the script manually. Select the script and click on the run to execute the script.

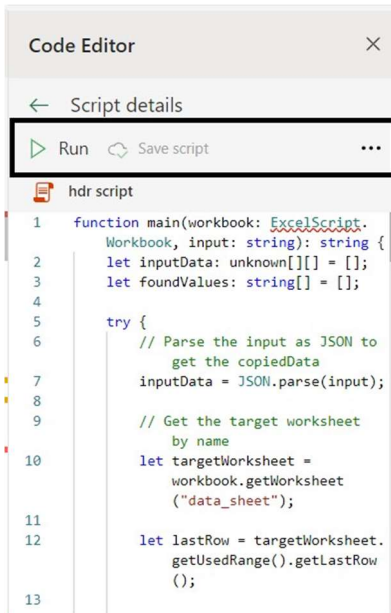


Figure 7: Image shown to run the script manually.

Step 3 - Launch Excel Sheet

In this, we would be selecting the third script used to perform the main operation of the entire project which would be the FINAL_ONE_SCRIPT_MULTIPLIER script.

Operation: This script would perform the calculation of the teaching hours for each PHD student.

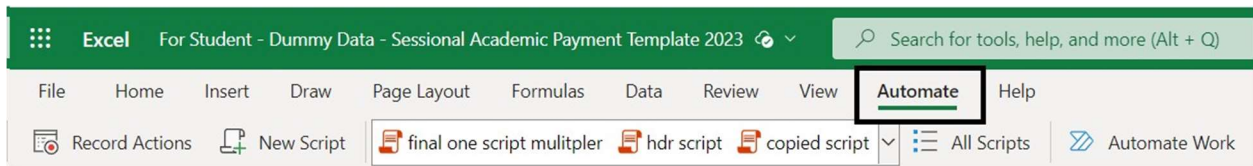


Figure 8: Image shown to select the script in the excel.

Step 3.1 - Select the script.

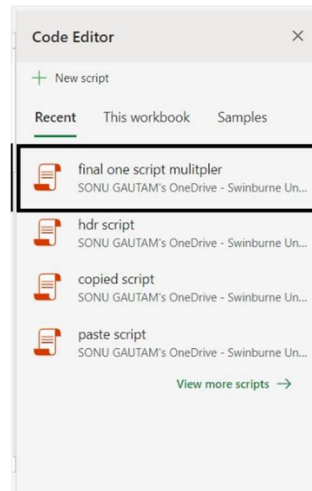


Figure 9: Select the script in this case is Multiplier script.

Step 3.2 – In order to trigger the script manually click on the run button to operate the script.

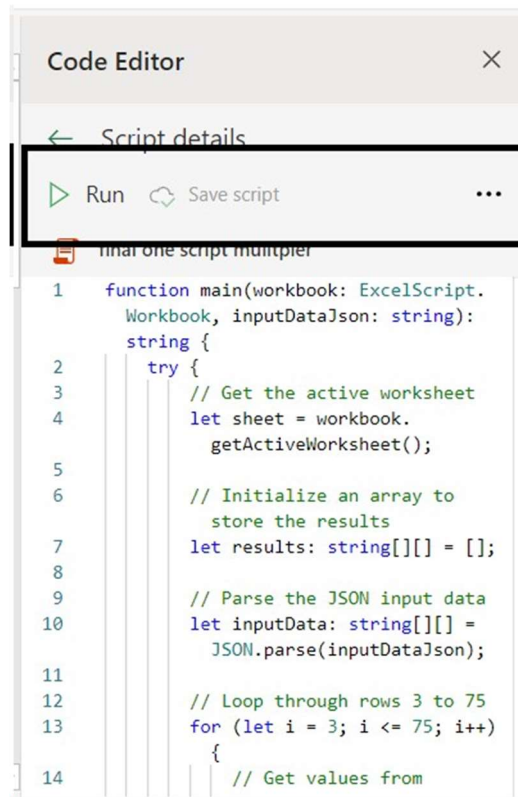


Figure 10: Image shown to run the trigger the script.

Step 4- The last step is the Tigger the final script which is the paste script where the overall data is found as per the requirements of the project.

Operation: This would paste the final data in the cell we need to paste along with checking the duplicate data and performing week operations. It also color codes the data for more than 8 hours, less than 8 hours and equal to 8 hours in the week sheet.

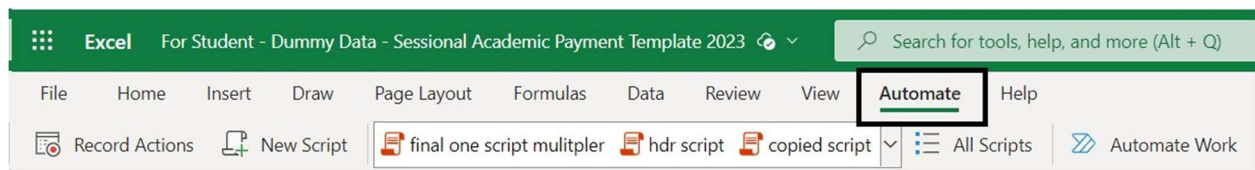


Figure 11: Image shown where the script could be located.

Step 4.1 – The final script could be selected.

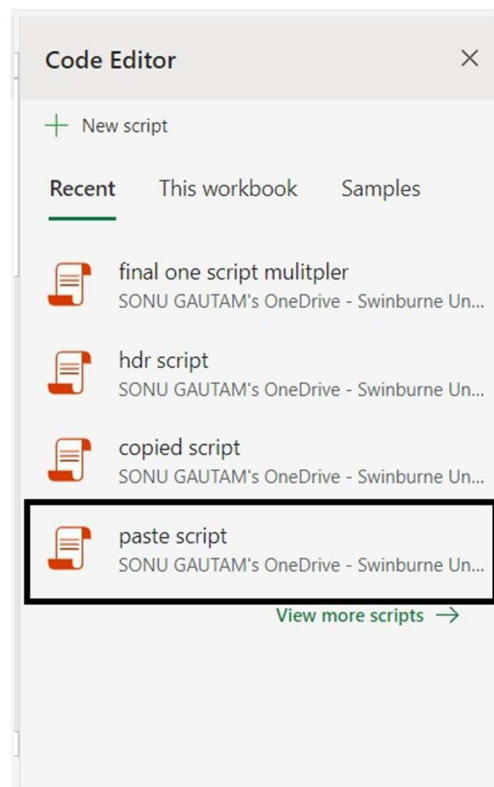
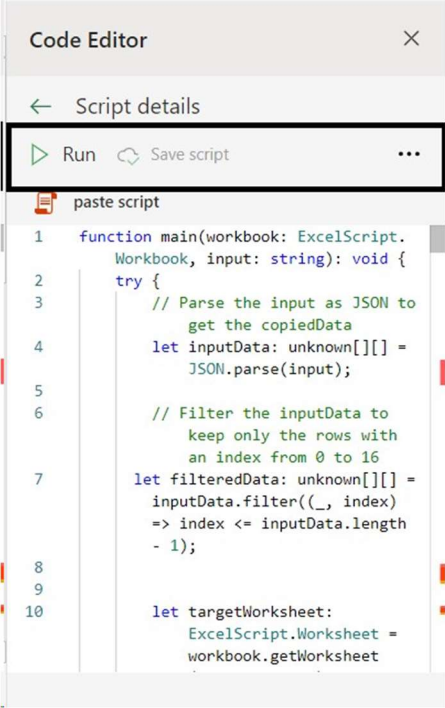


Figure 12: Select the script.

Step 4.2 – When selected the paste script is open either editing in the code could be make or select the run button to run the existing script logic



The image shows a 'Code Editor' window with a title bar containing a close button. Below the title bar is a 'Script details' header with a back arrow. A toolbar below the header contains a green 'Run' button (highlighted with a black box), a 'Save script' button with a cloud icon, and a three-dot menu. The main area is labeled 'paste script' and contains the following code:

```
1 function main(workbook: ExcelScript.  
  Workbook, input: string): void {  
2   try {  
3     // Parse the input as JSON to  
      get the copiedData  
4     let inputData: unknown[][] =  
        JSON.parse(input);  
5  
6     // Filter the inputData to  
        keep only the rows with  
        an index from 0 to 16  
7     let filteredData: unknown[][] =  
        inputData.filter( (_, index)  
          => index <= inputData.length  
            - 1);  
8  
9  
10    let targetWorksheet:  
        ExcelScript.Worksheet =  
        workbook.getWorksheet
```

Figure 13 : Image shown to run the script to display the final output.

Power Automation Integration

Setting up automated tasks using Power Automation

- I. Create a folder in Microsoft OneDrive and paste all input excel files as shown in the figure.

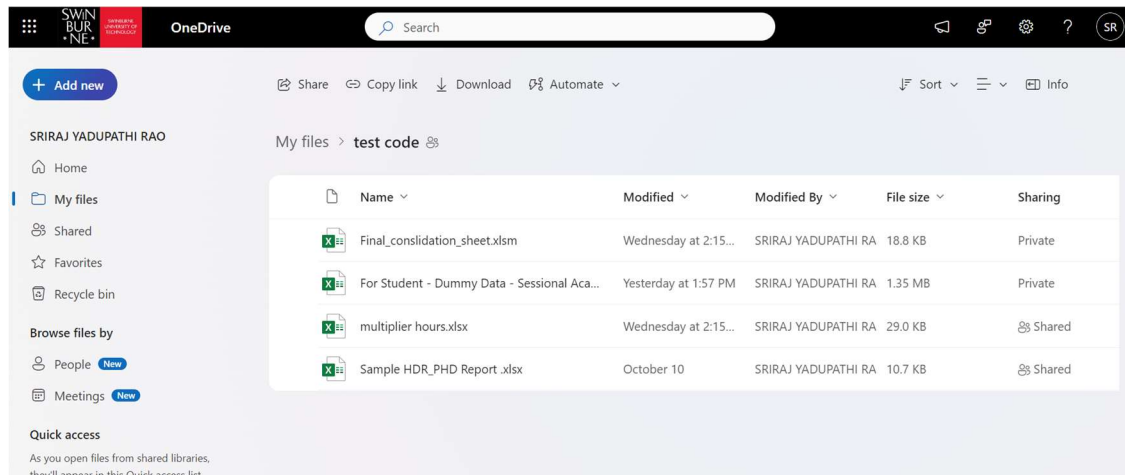


Figure 14: All input excels stored in One drive

- II. Make sure there is respective script file in corresponding excel file and save it.
- III. Then open the power automation and select the **+create** icon in the left menu bar as shown in the figure.

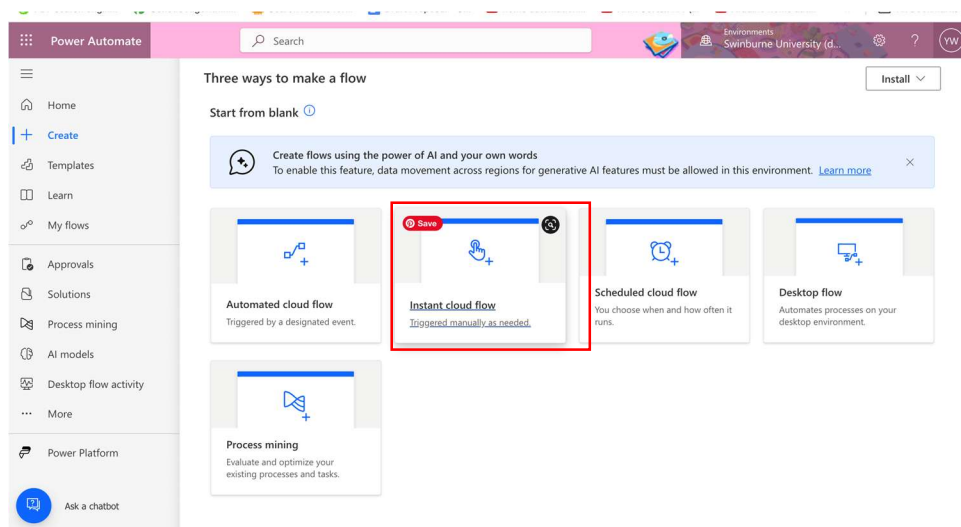


Figure 15: Power automation to select the instant flow.

- IV. Then select the **instant cloud flow** from the flow methods.
- V. After that insert the flow name as below figure
- VI. Then select the icon for a selected file **One drive for Business** as shown in the figure

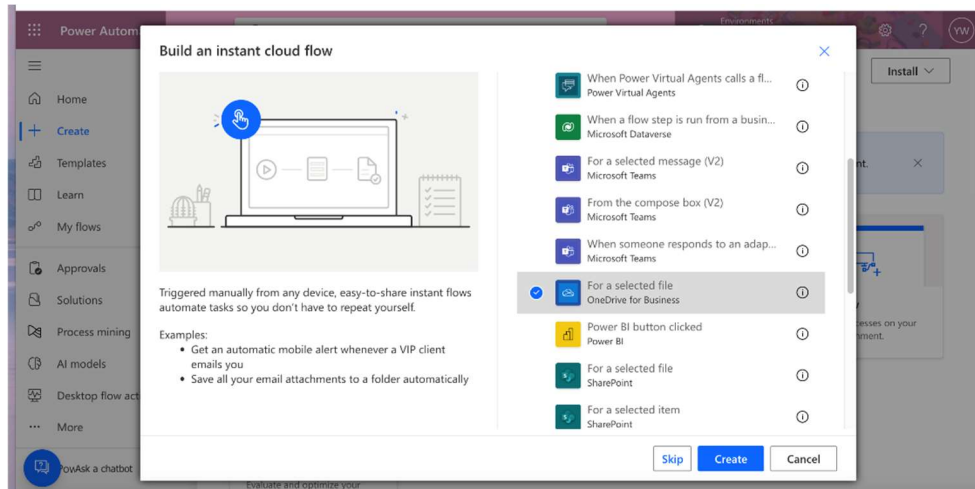


Figure 16: Image shown next step to select in power automation

VII. Then select **+Add an input.**

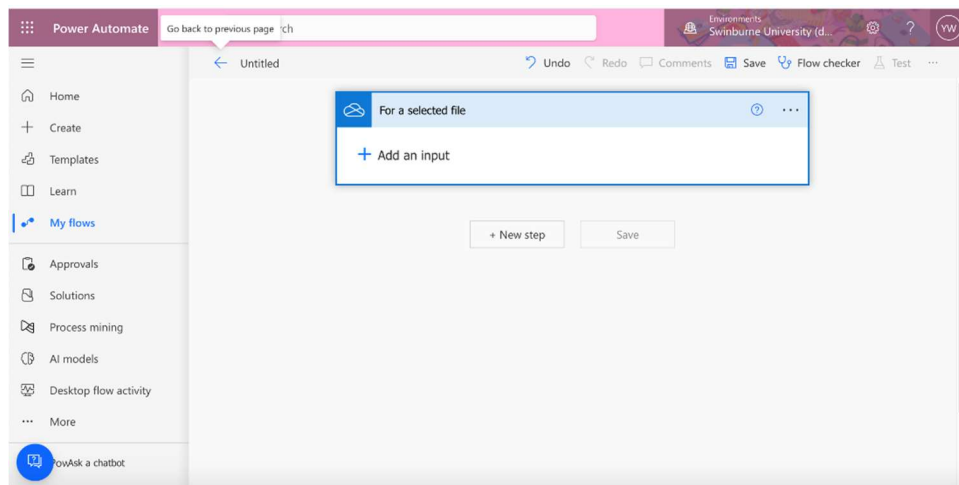


Figure 17: The location to select the path of your one drive as initial input for power automation.

VIII. Then selected saved folder in OneDrive as shown in the figure. After that first import the Sessional academic payment Template sheet with first script named copied script.

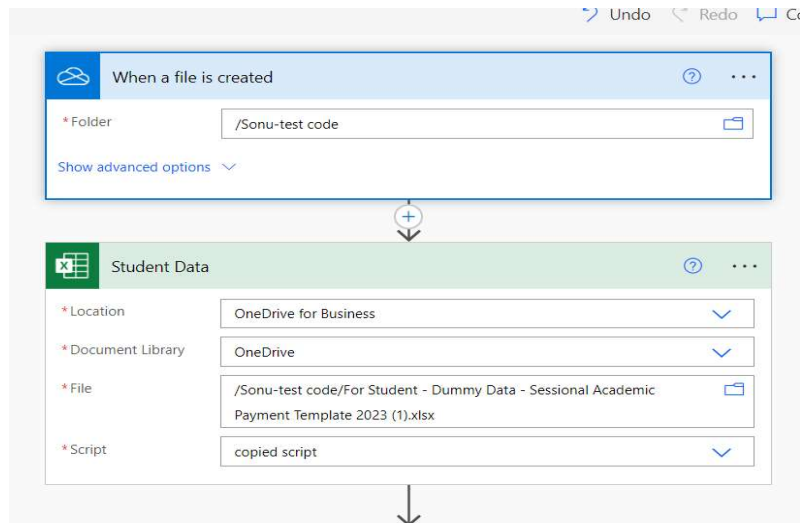


Figure 18: Second step of power automation

- IX. Then as shown in the below figure, HDR PHD report with HDR script and multiplier excel sheet with multiplier script.

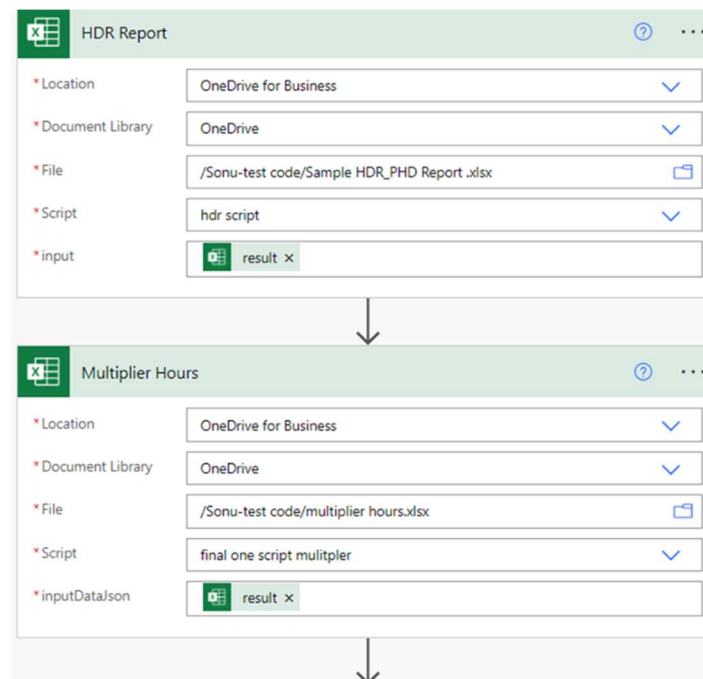


Figure 19: Third and fourth step of selecting the power automation flow.

- X. Then select the final consolidation file with paste script as shown in the figure.

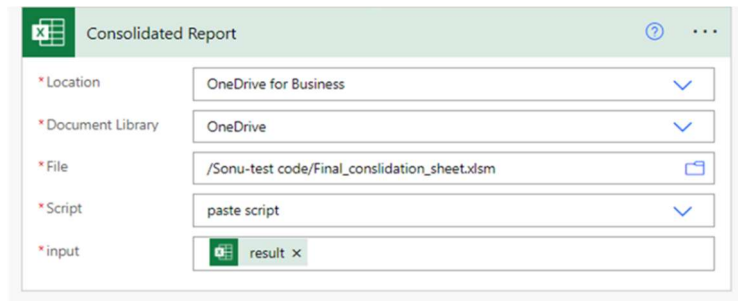


Figure 20: Final step in the power automation

- XI. Then run it automatically predefined time and shows whether the test succeeded or failed.

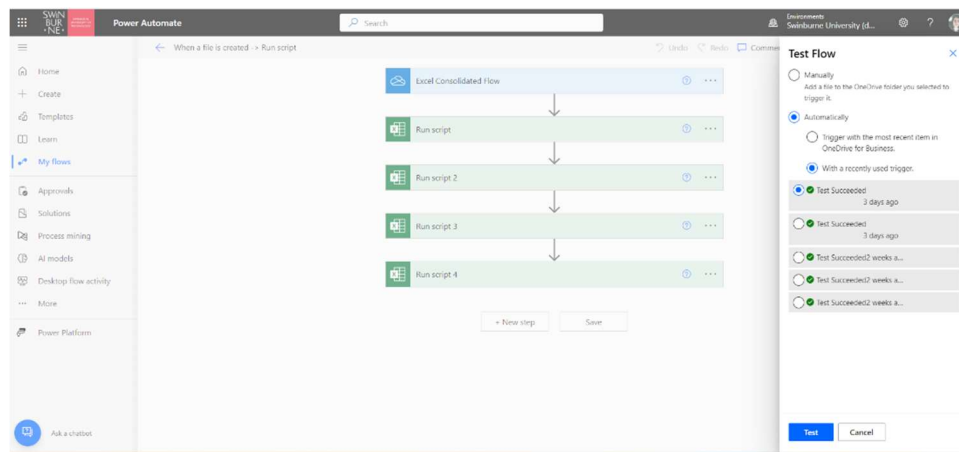


Figure 21: Test result shown.

- XII. Or run the flow manually. In the first time you need to run it manually

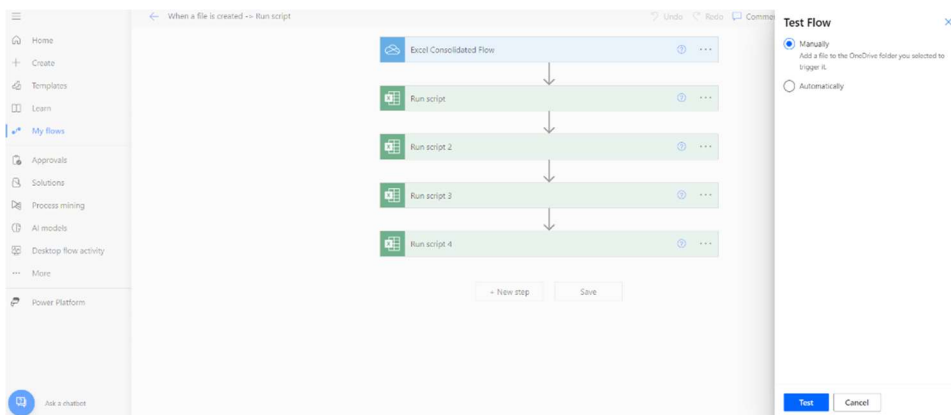


Figure 22: Testing the flow

Managing User Accounts

Assigning roles and permissions

When adding or removing users, the manager or director has full access to assign the role and permissions to view or edit consolidation file and power automation workflow. As shown in the figure, by right clicking on consolidation file you can find the manager access.

Step -1:

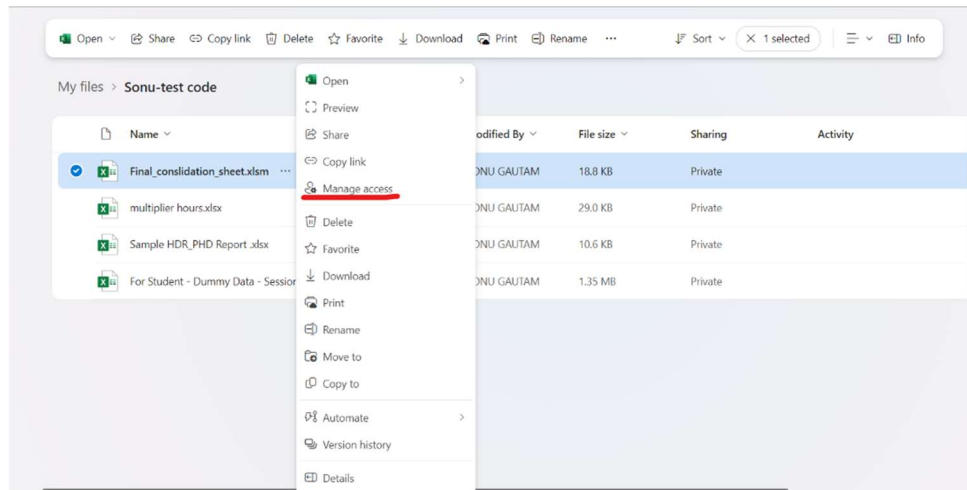


Figure 23: Manage access image

Step-2: You can either grant them edit or view option in order to provide access to the file.

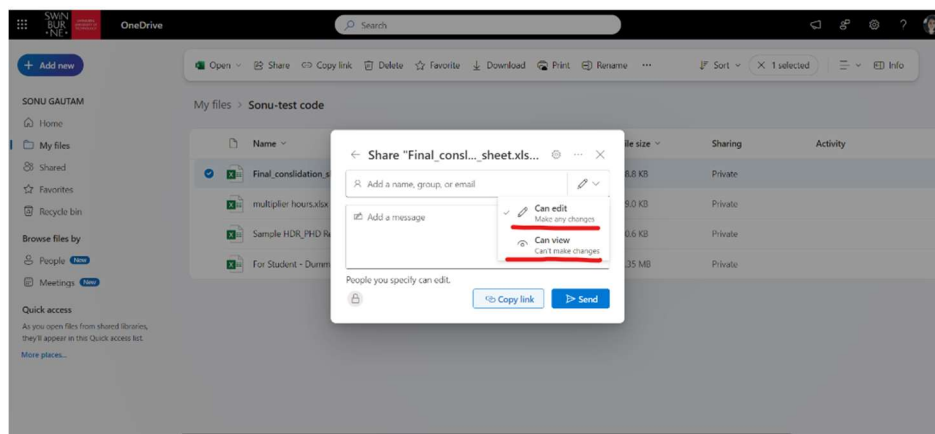


Figure 24: Access granting options.

Step – 3: This is the edit option wherein the user will be able to edit the data in the input file.

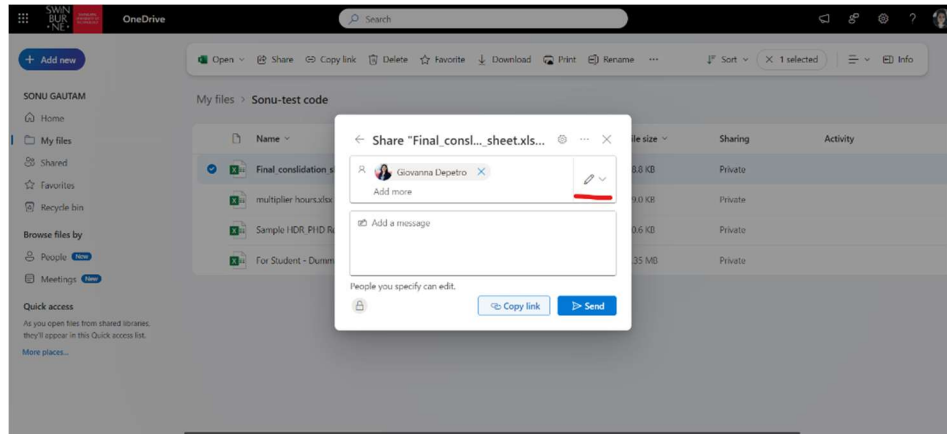


Figure 25 : Edit option image.

Step – 4: This is the view option wherein the user will be able to only view the data but can't edit or make changes into the file.

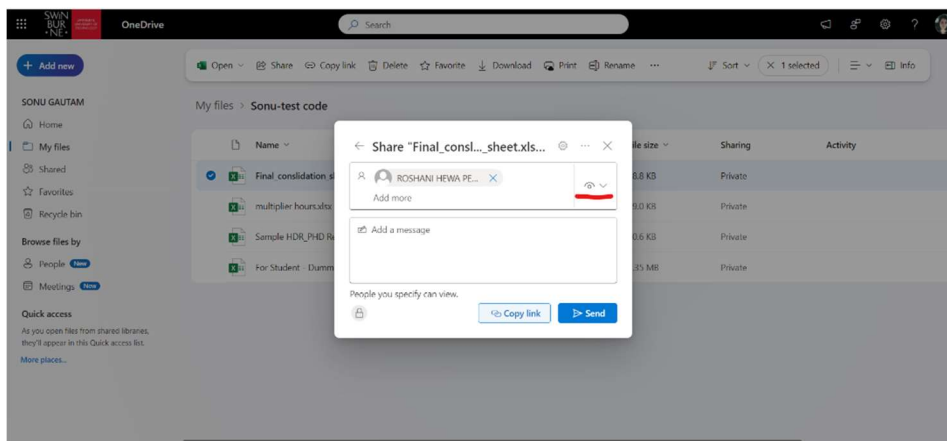


Figure 26: View only option.

Providing access in the power automation

Similar way the access is provided in the excel , power automation also has a feature which allow option to select user who they wish to access to the power automation and below is the figure to grant access to the power automation.

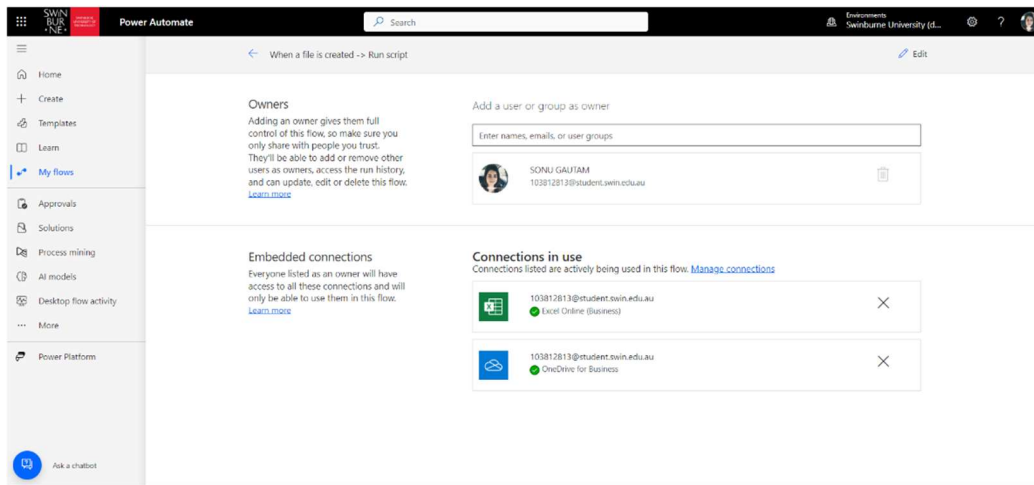


Figure 27: Selecting the user in order to grant access

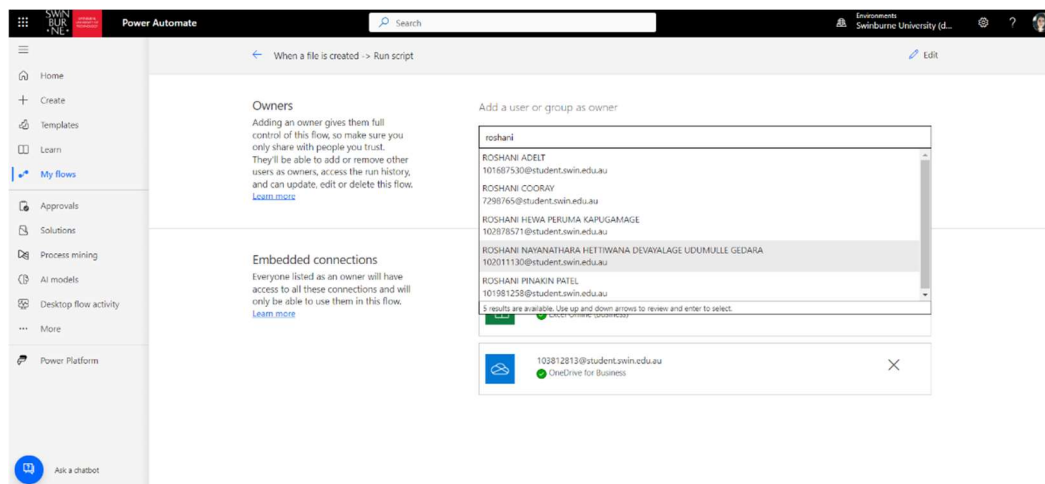


Figure 28: Selecting the user to grant access

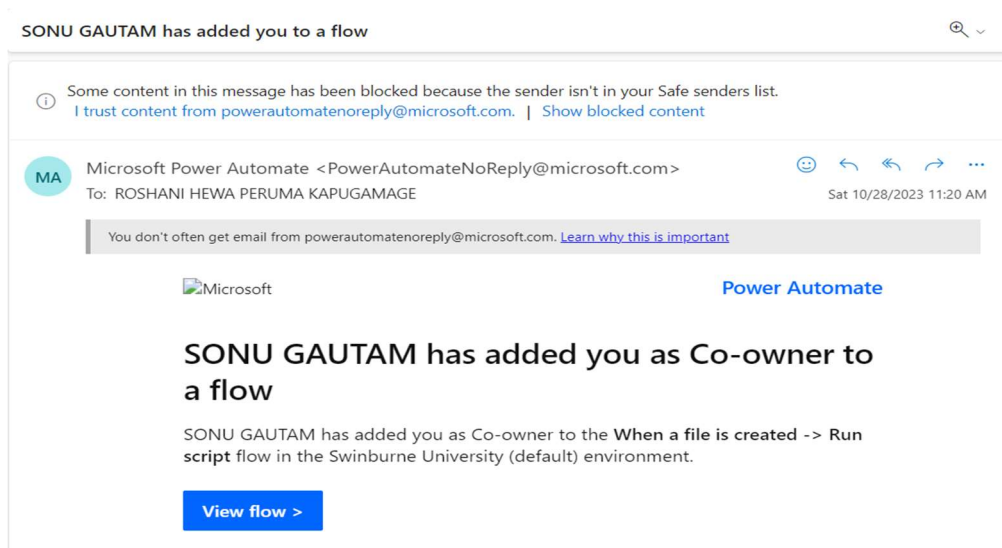


Figure 29: Message after granting access to the power automation