

Project: Message Scheduler, Taylor's University Golf Club Weekly Session Registration (WhatsApp) Cronjob Method

For Mac Users

Pre-requisites:

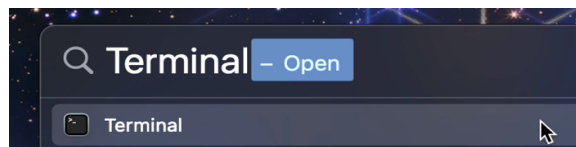
1. Make sure Visual Studio Code is installed. Installation guide: <https://www.youtube.com/watch?v=2RoWZXcbPjw>
2. Make sure python is installed. Installation guide: <https://www.youtube.com/watch?v=M323OL6K5vs&t=353s>
3. Go to System Settings > Privacy & Security > Accessibility > Check the box on terminal, google chrome or safari (choose one), python launcher and visual studio code.

After Downloading the files on GitHub

1. Proceed to open the file in visual studio code.
2. Open terminal
3. Type: `pip install -r requirements.txt` in terminal

Open Cronjob Scheduler (Mac Users)

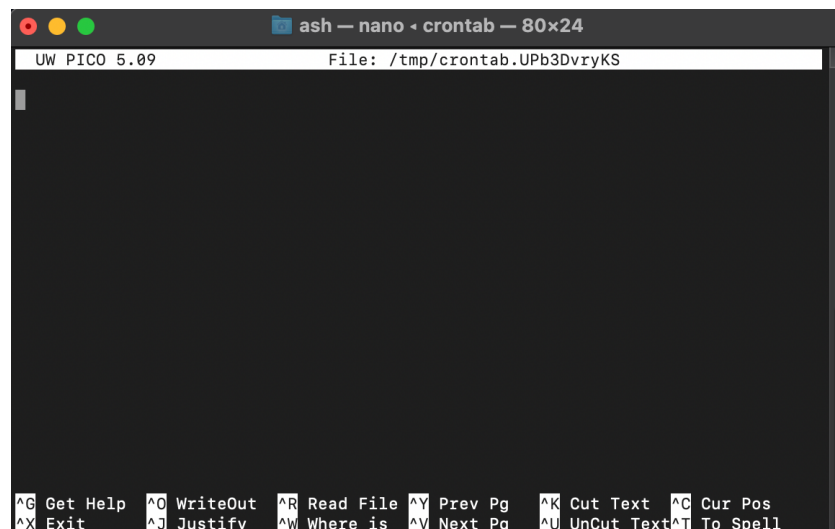
1. Press 'Command' + 'Space' and start typing "Terminal"
2. Click on the "Terminal" to open it.



3. Type in: `env EDITOR=nano crontab -e` in terminal

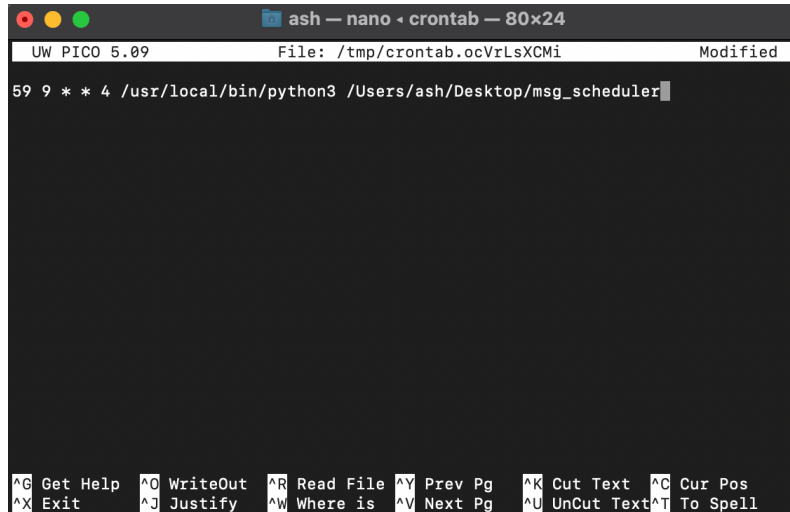
```
ash@Ashleys-MacBook-Pro-5 ~ % env EDITOR=nano crontab -e
```

4. The crontab will appear



5. Schedule time

For my schedule to send out weekly message on Thursday at 10:00 AM, I will add the following entry to the crontab: **59 9 * * 4 /usr/local/bin/python3 /Users/ash/Desktop/msg_scheduler**
We schedule the crontab to **59 9** rather than **0 10** at 10:00 AM, as it allows us to have 1 minute standby time in advance to prevent delay errors that might occur due to loading time.



```
ash - nano - crontab - 80x24
UW PICO 5.09 File: /tmp/crontab.ocVrLsXCMi Modified
59 9 * * 4 /usr/local/bin/python3 /Users/ash/Desktop/msg_scheduler
^G Get Help ^O WriteOut ^R Read File ^Y Prev Pg ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where is ^V Next Pg ^U UnCut Text ^T To Spell
```

This cronjob entry breaks down as follows:

59 : Minute field. Specifies the minute when the cronjob will run (0 in this case).

9: Hour field. Specifies the hour when the cronjob will run (10 in this case).

***** : Day of the month field. Asterisk (*) means any day of the month is acceptable.

***** : Month field. Asterisk (*) means any month is acceptable.

4 : Day of the week field. Specifies Thursday (days are represented from 0 to 6, where Sunday is 0 and Saturday is 6).

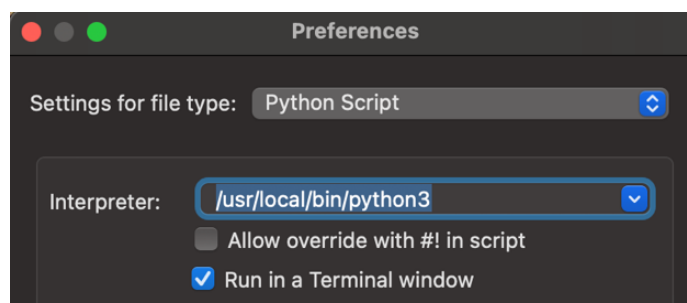
****Disclaimer: You must change the paths of your python executable and scripts accordingly based on your setup**

/usr/local/bin/python3: Full path to your Python executable.

/Users/ash/Desktop/msg_scheduler: Full path to your Python script.

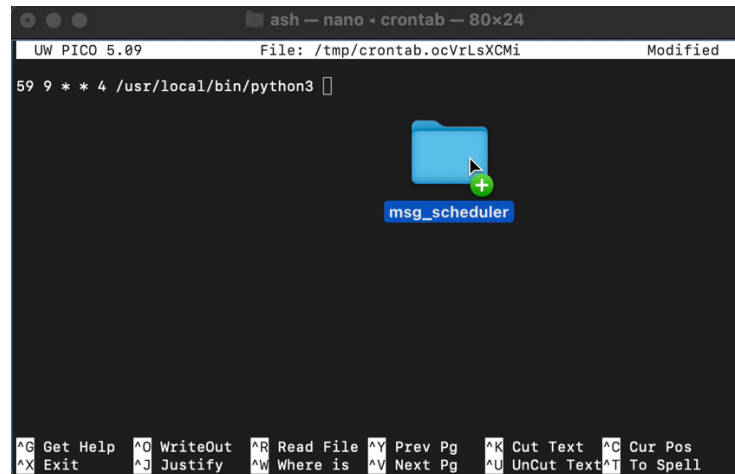
To get full path to your python executable (Mac User):

Open Python Launcher >> Open Settings | The path is located at interpreter.

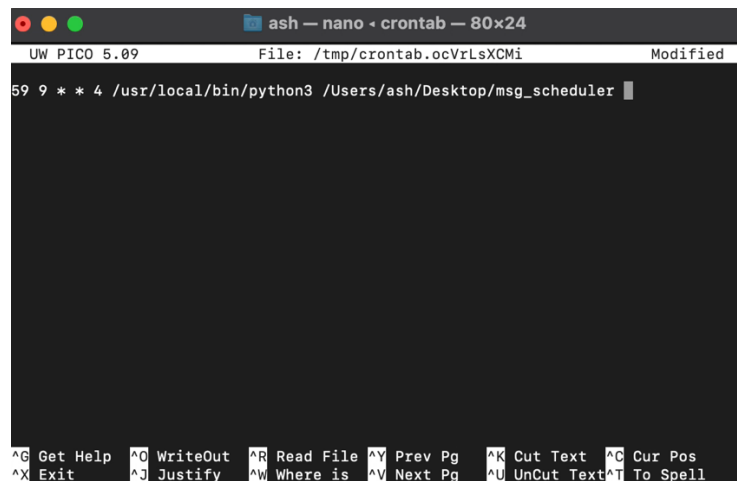


To get full path to your python script (Mac User):

Drag and drop the file downloaded into crontab after typing path of python executable.



Before



After

6. Then we proceed to press 'control' + 'x' button simultaneously to exit.
7. Press 'y' to save changes, then press 'enter' to commit changes to the crontab.
8. To verify cronjob is saved, type: `crontab -l` to view list of cronjobs.

```
ash@Ashleys-MacBook-Pro-5 ~ % crontab -l
59 9 * * 4 /usr/local/bin/python3 /Users/ash/Desktop/msg_scheduler
ash@Ashleys-MacBook-Pro-5 ~ %
```

9. Setup completed, and the script will run according to the scheduled time.