

# PsychoPy experiments to Pavlovia online

Although for the most part, converting a PsychoPy script to online takes a few clicks, there are occasionally issues which can occur when syncing with Pavlovia's code repository system (Gitlab). Although this will improve and become smoother as Pavlovia evolves, we have prepared this crib sheet to help with most common issues/tasks.

## Firstly, prepare your account

- 1. If you have not already, create a new account at <a href="https://pavlovia.org/">https://pavlovia.org/</a> with your <a href="https://pavlovia.org/">Kent email address</a>.
- 2. Please create a unique password which you can share with HSS Tech staff in case of any technical issues.

## Pushing your experiment to Pavlovia

- 1. Load up your experiment in PsychoPy
- 2. Go to the "Pavlovia.org" link in the menu
- 3. Then "User" -> "Log in to Pavlovia" and enter credentials.
- 4. Click onto the "Sync with web project" button
- 5. It will first come up saying that the experiment does not belong to a project. Click "Create a project"
- 6. Enter a project title and description when prompted:
- 7. Wait for script to upload all the files (the icons will become greyed out whilst this happens)
- 8. Test script on Pavlovia (it should appear under your projects list) all the way through and check for errors.



You can give access to other Kent users to your experiment, which can be useful for downloading data or changing the running status of the project and also pushing to the same project location. To do this, follow these steps:

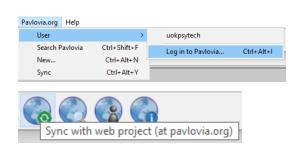
- 1. Ensure the other user has set up a Pavlovia account and take their registered username.
- 2. As owner of the project go to the Pavlovia script page
- 3. Go to "View code" (and log in to Gitlab if prompted)
- 4. Click "Settings" -> "Members"
- 5. Add the registered username as a Guest/Developer and "Add to project".
- 6. When that user logs in, they should see the project appear under their account and access the data etc.

### Accessing a shared experiment

NOTE: This segment requires basic knowledge/usage of Command Prompt (Windows) / Terminal (Mac)

Once a project owner has shared access with you as a "developer", you should now be able to pull down a copy of the experiment to work on and push back changes. To do this, the following steps must be ran:

- 1. Ensure PsychoPy is installed first and obtain the repository address via the **"View code"** area of the project. i.e. gitlab.pavlovia.org/lg497/t2102-3036-nbacktask.git or similar.
- 2. Open up a command prompt window (search for "CMD" on Windows, or "Terminal" for Mac)
- 3. Go to a suitable location to physically store your copy of the experiment
- 4. Enter: git clone https://USERNAME@REPOSITORYADDRESS (Replacing USERNAME with your username and REPOSITORYADDRESS accordingly)
- 5. This should pull down all the files (including data files) from Pavlovia
- 6. You should now be able to use the "Sync with web project" button in PsychoPy to push back any changes. However, see troubleshooting below for potential issues you may face an workarounds.



## Linking up PsychoPy with RPS and Qualtrics

A common requirement will be to prevent participants adding their own participant number at the start of a Pavlovia script. To do this, often it is pre-populated from a system such as RPS or Qualtrics – using for instance the RPS ID of a participant to identify data.

This information is carried through, and often you may want to end a Pavlovia study with another Qualtrics survey or take the user back to RPS to receive their credits automatically. For the latter, tracking the RPS ID is crucial across all parts to ensure the right user is credited at the end.

As this can be a complex series of steps, we have produced a tutorial video that covers the worse case scenario of a RPS -> Qualtrics -> Pavlovia -> Qualtrics -> RPS route:

https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=42a86de7-1cc9-4e0d-a9b0-ac8d00c62235

#### Additional tutorials and advice

As well as the above, you can find other tutorials covering a range of subjects (which will grow over time):

- Drag and Drop within online experiments
  - https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=81424ace-c1f5-4d60-8145-abc001112a89
- Compressing images/audio for online studies
  - https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=8feb0fdd-202d-43c0-a4eeabb800feb51e
- Using audio in PsychoPy online studies
  - https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=c1d21e43-1ac1-4094-863aabc700feba01
- Using rating scales in online experiments
  - o <a href="https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=4fc23b5a-aa75-460f-9126-abd4011adf3f">https://kent.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=4fc23b5a-aa75-460f-9126-abd4011adf3f</a>
- Crib sheet for complex PsychoPy experiment conversions online
  - o <a href="https://discourse.psychopy.org/t/psychopy-python-to-javascript-crib-sheet/14601">https://discourse.psychopy.org/t/psychopy-python-to-javascript-crib-sheet/14601</a>

## **Troubleshooting**

#### "Failed to load resource" errors on Pavlovia

- 1. Sometimes this happens if you refer to stimuli via a code block.
- 2. The simple fix often is to copy your stimuli folders/files and Excel sheets into the "html" -> "resources" folder generated when you first push to Pavlovia.
- 3. Then click "Sync with web project" in PsychoPy This should detect that you have new files to push.

### "fatal: remote origin already exists" errors on Pavlovia

- 1. First of all try and ensure that you're not pushing to a repository that already exists with the same name.
- 2. Clear out any ".git" folders beforehand.
- 3. If you are on a managed build PC, ensure that you are not pushing from your network share. PsychoPy doesn't seem to like pushing to git from a network path and wants a physical drive (I.e. C:\experiments)

Message

This file doesn't belong to any existing project.

Create a project

#### "Project cannot be found, Recreate?" / "Unknown project" in PsychoPy when syncing.

This can happen from time to time and should disappear as Pavlovia matures. If after pushing an experiment, you later come back and get an error like the above, try the following steps:

- 1) Open the experiment
- 2) Go to the "Pavlovia.org" link in the menu
  - a. Then "User" -> "Log in to Pavlovia" and enter your credentials
- 3) Close and re-open the experiment
- 4) Now try the "Sync with Web project" button again
- 5) Repeat these steps at least twice if it doesn't work the first time.

If the above does not work, try deleting the "html" folder and repeat the above steps.

#### If this also does not work, then try these advance steps:

- 1) Open up a Command window (CMD Windows / Terminal Mac) and browse to the script folder
- 2) Enter the following commands one after the other:

```
a. git pull
b. git add -A
c. git commit -m "Message in quotes to say what has changed"
d. git push
```

#### "Cannot read property '0' of undefined" or "Unknown function" error on Pavlovia

PsychoPy can convert most scripts without any trouble, but occasionally (and especially if using code blocks), it will not always translate 100%. If you do get errors, like those listed above, then try the following steps:

- 1. Ensure all code blocks have their JavaScript translations correctly created.
- 2. With "Could not initialize" errors, you may need to set the variable in "Begin experiment".
- 3. Check for use of Python functions or code that needs manual translation to JavaScript. Here is a handy crib sheet to help: <a href="https://discourse.psychopy.org/t/psychopy-python-to-javascript-crib-sheet/14601">https://discourse.psychopy.org/t/psychopy-python-to-javascript-crib-sheet/14601</a>
- 4. Search for the error message on <a href="https://discourse.psychopy.org/">https://discourse.psychopy.org/</a> for other solutions.
- 5. Otherwise, please contact <a href="https://example.com/hsstech@kent.ac.uk">hsstech@kent.ac.uk</a> with a copy of your script and details of the error message.

## Anything not answered here?

Although Pavlovia is a great system, it is still in its infancy. If you have any problems not answered here - please do not hesitate to contact us at <a href="https://hstate.ncb/hstate-ncb//hstate-ncb/hstate-ncb//hstate-nc