DEBUGGING JUPYTERLAB EXTENSIONS

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When to debug

How to debug (using vscode)

When to debug

- When stuff goes wrong
- When you want to inspect the internals of your extension

jupyter

When to debug

How to debug (using vscode)

How to know stuff has gone wrong

- UI elements don't show up

- Errors appear in Python console

- Errors appear in browser console

When to debug

How to debug (using vscode)

Enter into a terminal

- `$ pip install cookiecutter`

- `$ cookiecutter gh:jupyterlab/debug-config-cookiecutter –f`

- Answer any prompts that come up

- Configure stuff in .vscode dir as necessary
    - For the "mybutton" example project, change "webroot" to:

        `"webRoot":  "${workspaceFolder}/demo/completed-demo",`

- Needs the "Debugger for Chrome" extension for vscode

jupyter

Set breakpoints in vscode

When to debug

How to debug (using vscode)


```
handlers.py  ✕        ⚙ debug.env

demo > completed-demo > mybutton > 🐍 handlers.py > ⚡ TutorialHandler
1  from jupyter_server.base.handlers import JupyterHandler
2  import tornado
3
4  class TutorialHandler(JupyterHandler):
5      @tornado.web.authenticated
6      def get(self):
7          self.write('HELLO WORLD')
```
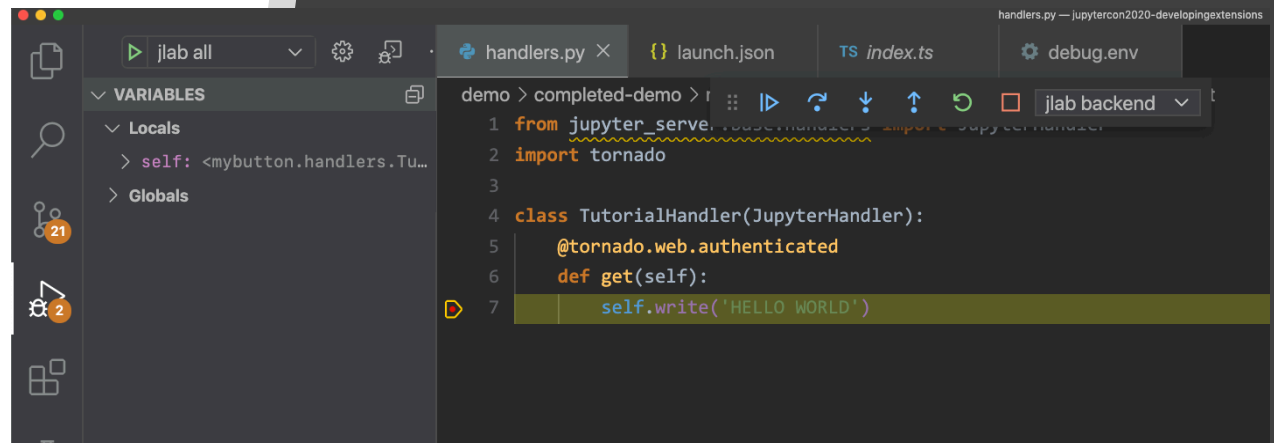
Run debug tasks in "run" sidebar

- Run "jlab all"

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Project config (for your own extensions)

- Add "sourceMap" to tsconfig.json
  - "sourceMap": true,

- Make sure that "files" in package.json includes src
  - Example:

```
30    "files": [
31      "lib/**/*.{d.ts,eot,gif,html,jpg,js,js.map,json,png,svg,woff2,ttf}",
32      "schema/**/*.{json,}",
33      "src/**/*",
34      "style/**/*.{css,eot,gif,html,jpg,json,png,svg,woff2,ttf}"
35    ],
```

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If you run into any problems...

- Please make an issue on the jupyterlab/debug-config-cookiecutter repo:

  https://github.com/jupyterlab/debug-config-cookiecutter/issues

- Example video:

  https://youtu.be/VB-0o6JZVE4