The JupyterLab project allows developers to build extensions to further the functionality of the system, both client side and server side. This document provides a short tutorial on how to build an extension from scratch and may be useful: https://jupyterlab.readthedocs.io/en/stable/extension/extension_tutorial.html

The JupyterLab environment has a status bar (see

https://jupyterlab.readthedocs.io/en/stable/extension/extension_points.html#status-bar) which can be used to display contextual information. Your task is to modify the status bar by adding a new widget that shows how much time a cell execution has taken after it has run. This requires (a) rendering a new widget in the status bar and (b) hooking into the cell execution signals to determine how long it took a cell to run. It also requires you to set up a JupyterLab development environment.

