1.3 How to create a new project

- The link below is for a tutorial on how to create a new project, and configurations for it. (I haven't used the tutorial, but it looks good.)
  - px-lib: 7.5 How to get started with STM32CubeIDE
    - https://piconomix.com/px-fwlib/_h_o_w_t_o__s_t_m32_c_u_b_e_i_d_e.html

2 Troubleshooting build-problems

2.1 Build problems from adding a C-file, e.g., "No rule to make target"

This section describes how to fix build problems caused by incorrectly adding a program-file (e.g., a C-file) to a STM32CubeIDE project. The build problems may include the error message, "`No rule to make target`". (The error message "`No rule to make target 'clean'`" has a different cause, and it's described in a later section.)

How to add a program-file to a project was described in an earlier section. The section's introduction describes STM32CubeIDE's use of *projects* and *configurations*. The introduction also describes how the book's example programs are organized by *chapter-folders*, and how each configuration's build-scripts are generated automatically. The following instructions assume familiarity with the concepts described in that introduction.

For a chapter-folder, when a C-file is added to its `Src` folder, the chapter-folder's configurations must be set-up properly. If the C-file is simply added to the `Src` folder, and the configurations are not set-up, it can cause build problems. The next configuration that is built will incorporate that new file in its generated build-scripts. This can corrupt the build-scripts, and the problem can be difficult to fix.

Below is an example of the problem, and how I fixed it. The description is based on my recollection, which may be inaccurate. A screen-shot shows the project used (`Chapter_8`).
- I copied an existing C-file in the project's source-code directory, to make a back-up of the file, e.g.,
  - `Chapter_8\Src\mainSemPriorityInversion.c` was copied, and
  - the copy was named `Chapter_8\Src\mainSemPriorityInversion-backup.c`
- The copy's source-file is part of a configuration named "`semaphorePriorityInversion`".
- I ran build for that configuration, but as I recall, I got build errors related to `mainSemPriorityInversion-backup.c`.
- I deleted `mainSemPriorityInversion-backup.c`, but still got build errors, e.g., "`No rule to make target`". The build errors were from a build-script that expected a file `mainSemPriorityInversion-backup.o`, which didn't exist.
- I fixed that problem by deleting the folder `Chapter_8\semaphorePriorityInversion`. It has the build scripts and build artifacts for the configuration. On the next build, the folder and its contents will be automatically generated, correctly.