### Assessable Exercise 4: Inter-process Communication

#### Overview:

This exercises forms part of your assessment for this subject.

For this exercise you must complete the tutorial on inter-process communication. This tutorial explores the inter-process communication technique of *named shared memory*.

Named Shared Memory allows us to create a block of memory within one application and map it for use within other applications, using a string to identify the block. NSM is an Operating System specific feature and is not available on all platforms.

Upon completion of this exercises, upload your completed program(s) (including source code, solution and project files, and executable build) to the assessment submission section on Canvas (<https://aie.instructure.com>).

#### Inter-process communication:

Complete the tutorial on this page: <https://aie.instructure.com/courses/39/pages/Interprocess%20Communication>

Upon completion of the tutorial, package your solution and submit it to Canvas.

#### Submission

You will need to submit the following:

* A Release build of your application that can execute as a stand-alone program
* Your complete Visual Studio project
  + Be sure to remove any temporary build folders (i.e., the Debug and Release folders). Only project files, source code files, and any resource files used should be included in your submission.

Package all files in a single compressed archive file (.zip, .7z, or .rar)

#### Submission Checklist

This submission checklist is used to assist your assessor in marking your assessment.

A copy of this checklist can be downloaded from <https://aie.instructure.com/>. You must complete this checklist yourself and submit it with your project.

**General**

|  |  |
| --- | --- |
| **Description** | **Y/N** |
| The project compiles without errors *Programs that don’t compile cannot be assessed* |  |
| The program includes a “readme” or document explaining how to compile, execute and operate the program |  |
| The program performs as described in the general description |  |
| The program contains no logical errors |  |
| The code is sufficiently commented and clean |  |
| An attempt has been made to increase the program’s efficiency |  |
| Code compiles without no warnings |  |
| Program executes without crashing |  |
| Program has no memory leaks |  |
| A release executable has been made and included in the submission |  |
| Project files and source code are included in the submission |  |
| All files are packaged in a single compressed archive |  |

|  |  |
| --- | --- |
| Estimate the number of hours taken to complete this assessment task |  |
| How many times have you submitted this assessment task (including this time)? |  |