

## **18-642 Project 3 Checklist**

Name:

Date:

- ✓ 1) All the code is in a single .cpp file (this is for academic project management)
- ✓ 2) All indentation, variable naming, and organizational style is consistent
- ✓ 3) Code is commented, including author comment at beginning of file  
At a minimum, comment each function: purpose, inputs, outputs, saved internal state
- ✓ 4) Spaces used instead of tabs for indentation
- ✓ 5) Every variable has a meaningful name that requires no or minimal explanation
- ✓ 6) Variables and procedures have minimum scope  
Defining at smaller scope (such as within a “{}” block) is optional
- ✓ 7) Most variables are automatic; local static only used when required
- ✓ 8) All variables use strongest and simplest appropriate type, with no floats  
Add extra typedefs at your discretion
- ✓ 9) All base types are from types.h  
Variable size is at your discretion within reason
- ✓ 10) Typedefs are used to define structs and enums
- ✓ 11) Geometric pairs (e.g. (X,Y)) are coupled using typedefs
- ✓ 12) #define is not used
- ✓ 13) “Magic numbers” are not used  
Const used for single numeric values and enum for sets of related values
- ✓ 14) Switch statements are used to decide among enum values rather than if/else if
- ✓ 15) Every switch statement has a default clause that activates ROS\_ERROR
- ✓ 16) All conditionally executed sets of statements are enclosed by “{}”
- ✓ 17) No copy-pasted code is present  
Blocks of code that have the same functionality are factored out into modules
- ✓ 18) Code has SF of 10 or less  
Most complex routine: #globals: \_\_\_\_ SCC\*: \_\_\_\_ SLOC/20\*: \_\_\_\_ ⇒ SF\*: \_\_\_\_
- ✓ 19) No bit-wise operations are used for math (e.g., use “%” instead of “&”)
- ✓ 20) Math is not performed on enum values

**OTHER NOTES:**