

UNIT 03: C++ FUNCTIONS

Lesson 4

- Console Input Validation
- Namespaces and Header Files



Activity Requirements

- All of the activities will involve writing programs. You will collaborate in groups of 2 to 3 students, but each of you will write your own programs on your own laptop.
- You will be submitting your source code at the end of the lesson for marks.
- You must be present, in class, to be eligible to participate in the activities, and thus be eligible for these marks.



Activity 9

- Guided Activity:
 - We will we will validate user input in a *'for'* loop.
 - Open the starter file *CPRG03-09AB.cpp*
 - Follow along with the instructor, modifying the code.



CPRG03-09.cpp



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Activity 10A

- Coding Activity:
 - We will write a more useful function to help to get and validate numeric input.
- 1. Open the starter file *CPRG03-10A.cpp*
- 2. Following the documentation provided in the comments, finish coding the ***GetValidDouble*** function.
- 3. Run the program a number of times to test your function.



CPRG03-10A.cpp



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Activity 10B

- Coding Activity:
 - We will write another function to help to get and validate numeric input.
 - 1. Open the starter file *CPRG03-10B.cpp*
 - 2. Following the documentation provided in the comments, finish coding the ***GetValidInteger*** function.
 - 3. Run the program a number of times to test your function.



CPRG03-10B.cpp



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Activity 11

- Guided Activity:
 - We will modify a reusable library of input validation functions, and include that library in a program.
 - Open the starter file *CPRG03-011.cpp* and *MyInputValidation.h*
 - Follow along with the instructor, modifying the code.



CPRG03-11.cpp



MyInputValidation.h



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Submission

- Open the *Unit 3- Lesson 4 Activities* Dropbox
- Attach your source code files *individually* (**DO NOT ZIP**) and submit
 - *CPRG01-09A.cpp, CPRG01-09B.cpp*
 - *CPRG01-10A.cpp, CPRG01-10B.cpp*
 - *CPRG01-11.cpp, MyInputValidation.h*



References

Bronson, G. (2012). Chapter 6 Modularity Using Functions. In *A First Book of C++* (4th ed.). Boston, MA: Course Technology.

