

ENSE 374 Lab 6

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1 Background

1.1 Defensive Programming

Defensive programming is a form of defensive design intended to ensure the continuing function of a piece of software under unforeseen circumstances. Defensive programming practices are often used where high availability, safety or security is needed.

Defensive programming is an approach to improve software and source code, in terms of:

General quality reducing the number of software bugs and problems. Making the source code comprehensible the source code should be readable and understandable so it is approved in a code audit. Making the software behave in a predictable manner despite unexpected inputs or user actions. Overly defensive programming, however, may safeguard against errors that will never be encountered, thus wasting runtime and maintenance costs. There is also the risk that the code traps or prevents too many exceptions, potentially resulting in unnoticed, incorrect results.

2 Objective

Your objective is to protect a piece of code and improve its fault tolerance.

3 Procedure

Open the project in Eclipse and run the test code (if you can). You are testing some code that asks for user input. Try and break the code by putting in bad user data. The last test will make the code read in a file to fill some data. Again you must protect this code from possible faults that the test code should expose.

4 What to submit?

Your protected application.