

Homework, Week 1, part A

October 17, 2013

The software development process has four steps. This week's homework will walk you through all four steps. The steps are: (1) analysis, (2) design, (3) implementation, and (4) testing. The process repeats all four steps, one after another, many times before the software is complete.

Analysis The purpose of analysis is to develop the **functional requirements** of the software – what the software is supposed to do. Suppose you were to develop an addition test. Write down everything you can think of that the software should do. This might include things like (a) make up problems, (b) check answers, and (c) count the correct answers.

Design The purpose of design is to think about how the software will actually be written. Taking your functional requirements from the previous answer, develop a design for your addition test. This might include such things as (a) start the test, (b) stop the test, (c) tell when an answer is correct, and (d) correct wrong answers.

Make sure that you think hard about your answers and that you write them down. You will use these answers for the rest of the week when we implement the addition test.