

# Project Assignment 1

## CPSC 3780 Data Communications and Networking

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### 1 Instructions

- Due: xx, before the end of the day.
- Submit this assignment as a team. You must select a team before you are able to submit.
- Maximum marks: 25 pts.

### 2 Prototype 1

Complete exercise 1 from Section 3.3 in the lab manual. A framework for testing your functions is provided. You must use it in order to get points for this project assignment. Download the files and make sure the following project directory structure is present:

```
.
|-- build
|   '-- (will be created by Makefile)
|-- include
|   '-- (place all your project header files here)
|-- Makefile
|-- src
|   '-- (place all your code, .cc files here)
'-- test
    |-- header_driver_t.cc
    |-- header_driver_t.h
    '-- test_headers.cc
```

The source files in folder `test` are only for testing your code. Your final project sources will be stored in `src` and the header files in `include`.

The test cases are given using the google test framework in file `test_headers.cc`. You need to redefine the driver functions from `header_driver_t.cc` to call the necessary functions and create the necessary classes that perform the services described in the exercise.

Note that your submission will be marked using the instructor version of `test_headers.cc` so make sure that the success of your tests depends only on modifications to `header_driver_t.*` files.

### 3 Marking scheme

- 11 pts: the 11 test cases provided pass.
- 10 pts: 10 additional test cases will be defined and used for marking.
- 4 pts: for general design and code organization.
  - Code is appropriately commented.
  - Project code is in folders `src` and `include`. Do not implement project functions in your test code.
  - The design is modular, without excessively complicated functions.