

CS23710 Assessed Assignment 2012-2013

Monitoring the Runners and Riders.

Further Information

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1 Data Files

As mentioned in the assignment document, we have provided sets of data files which you are required to process.

They are available from the Assignment area of the module's website on AberLearn Blackboard and in addition, they are also available from the directory:

`/dcs/dap/CS23710_data/`

This directory contains several directories which then contain the datafiles.

1.1 The Main Mission

The directory **event_1** corresponds to data for the “main mission”.

This group of files define the event.

- `name.txt`
- `nodes.txt`
- `tracks.txt`
- `courses.txt`

This file defines the entrants.

- `entrants.txt`

These two files provide times at which entrants reach checkpoints.

- `cp_times_1.txt`
- `cp_times_2.txt`

1.2 The Extended Mission

The directory **event_2** corresponds to the “extended mission”.

This group of files define the event.

- name.txt
- nodes.txt
- tracks.txt
- courses.txt

The files to define the entrants and their times are not yet available.

1.3 Extra Data Files

If time permits, as well as providing the remaining data for event_2, we may also supply a couple of extra sets of data files.

2 Diagram of the Courses for the Event

A diagram has been produced showing the tracks and junctions/checkpoints that make up the courses for the event. This has been added to the AberLearn Blackboard site and two printed copies are available in B57.

3 Processing the Data Files

I suggest you start by looking at the data files that have been supplied and make sure that you understand what they contain.

Having done that, try to write some simple functions that open the files and read in the information. You will need to use functions like `fopen()` and `fscanf()` to open files and read data from them.

Of course, you will need to generate prompts for the user of your program so that they can specify the names of the files that are to be processed. The filenames should not be hard-coded into the final version of your program.