

Module code	CI285
Module title	Introduction to Functional Programming
Coursework hand out date	1 <sup>st</sup> March 2015
Coursework hand in date	As on StudentCentral assessment submission page.

*Coursework feedback will be provided within four term-time weeks unless otherwise notified.*

General description of the coursework:

This task is divided into two parts, the first called the *core task* and the second the *extension task*.

For the core task you are required to write a web service in Haskell such that:

1. it consumes some JSON data of temperatures from an external source,
2. stores some data locally that is persistent across service instances,
3. performs some processing, and
4. produces HTML output.

An initial data dump is available at <http://www.phoric.eu/temperature.json>.

The extension task of this exercise is to create a RESTful service to store temperatures from multiple locations. Being RESTful it would support creation of new locations, if the user is suitably authenticated. A user should not be able to mutate another users data.

Module outcomes assessed by this piece of work:

Learning outcomes 2, 3 and 4.

Names of markers: Aidan Delaney and Jim Burton

Indicative marking criteria:

Percent of total	criteria
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25%	Querying and parsing input data.
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25%	Processing data in a concurrent or parallel manner (Actors is the preferred model).
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25%	Persistent data storage and querying.
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25%	Extension task.
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Note that the above criteria are indicative. This means that if you do something interesting, then I can give you marks for that.

Submission procedure:

Your code should be in a public git repository that I can pull from. A plain-text document called `README.md` (i.e. markdown formatted) should be in the root of your archive and detail exactly how to build your code. If you have used any 3<sup>rd</sup> party code, you should document this in the README file and ensure that you're using the code under a licence that allows it. An astute student may automate the build using cabal. If your documentation for building your code is not correct and concise, then it will be harder for me to build your product. If I can't build your product, it's even harder for me to award marks.

To submit your project you should do two things:

- Ensure the latest version of your source code has been pushed to some repository that I can pull from, and
- submit the repository URL and any supporting documentation as a PDF (I only accept PDF for technical reasons) on StudentCentral.

1. A copy of your coursework submission may be made as part of the University of Brighton and School of Computing, Mathematical and Information Sciences procedures which aim to monitor and improve quality of teaching. If a copy is made, it will be kept only for this purpose and will be destroyed once this purpose has been fulfilled. You should refer to your student handbook for details.
2. All work submitted must be your own (or your teams for an assignment which has been specified as a group submission) and all sources which do not fall into that category must be correctly attributed. The markers may submit the whole set of submissions to the JISC Plagiarism Detection Service.