F20BD/F21BD Big Data Management

Coursework 2 Assignment

There are two parts to the assignment. The first is for everyone, the second is just for F21BD students. Both parts are to be completed individually and are subject to the usual terms:

- A standard late submission penalty of 10% per day applies.
- Submissions more than 5 days late will receive zero marks.
- You can only request an extension if you have mitigating circumstances. If this is the case, please submit a mitigating circumstances form before the deadline has passed. For further details, see: https://www.hw.ac.uk/students/studies/examinations/mitigating-circumstances.htm.
- Note that all submissions will be checked for plagiarism.

Part 1 - All students

Conduct a literature review of Linked Data and Semantic Technologies; you may find the Vision folder *Learning Materials* > *Semantic Technologies* > *Reading Material* a good starting point.

Your review should provide an introduction to the concept of the Semantic Web, and cover topics such as:

- What is the objective of the Semantic Web?
- What are the key technologies for the Semantic Web? How do they relate?
- What is the difference between Linked Data and the Semantic Web?
- Where are Semantic Technologies being employed, and what benefits do they provide for those use cases?

References should be provided where appropriate; please use IEEE referencing (http://www.bath.ac.uk/library/help/infoguides/ieee.pdf).

Submission

Reports should be approximately 4 pages in length (not including figures, diagrams, or references). Reports must not exceed 1500 words, and should use Arial 11pt font and single line spacing. You are encouraged to make use of figures and diagrams where they aid the understanding of your report.
Submission is through Vision with a **deadline of 22nd March 2018** (before midnight).

Note: F21BD students should submit a single report that covers both Part 1 and Part 2 (see below).

Plagiarism and Collusion

Coursework reports must be written in your own words, free from plagiarism and collusion. If some text in the coursework has been taken from other sources, these sources must be properly referenced. Failure to reference work that has been obtained from other sources or to copy the words of another student constitutes plagiarism. Sharing a coursework report or parts of it with another student constitutes collusion, and is as serious as plagiarism. https://www.hw.ac.uk/students/studies/examinations/plagiarism.htm
Both collusion and plagiarism cases will be reported to the School Discipline Committee.

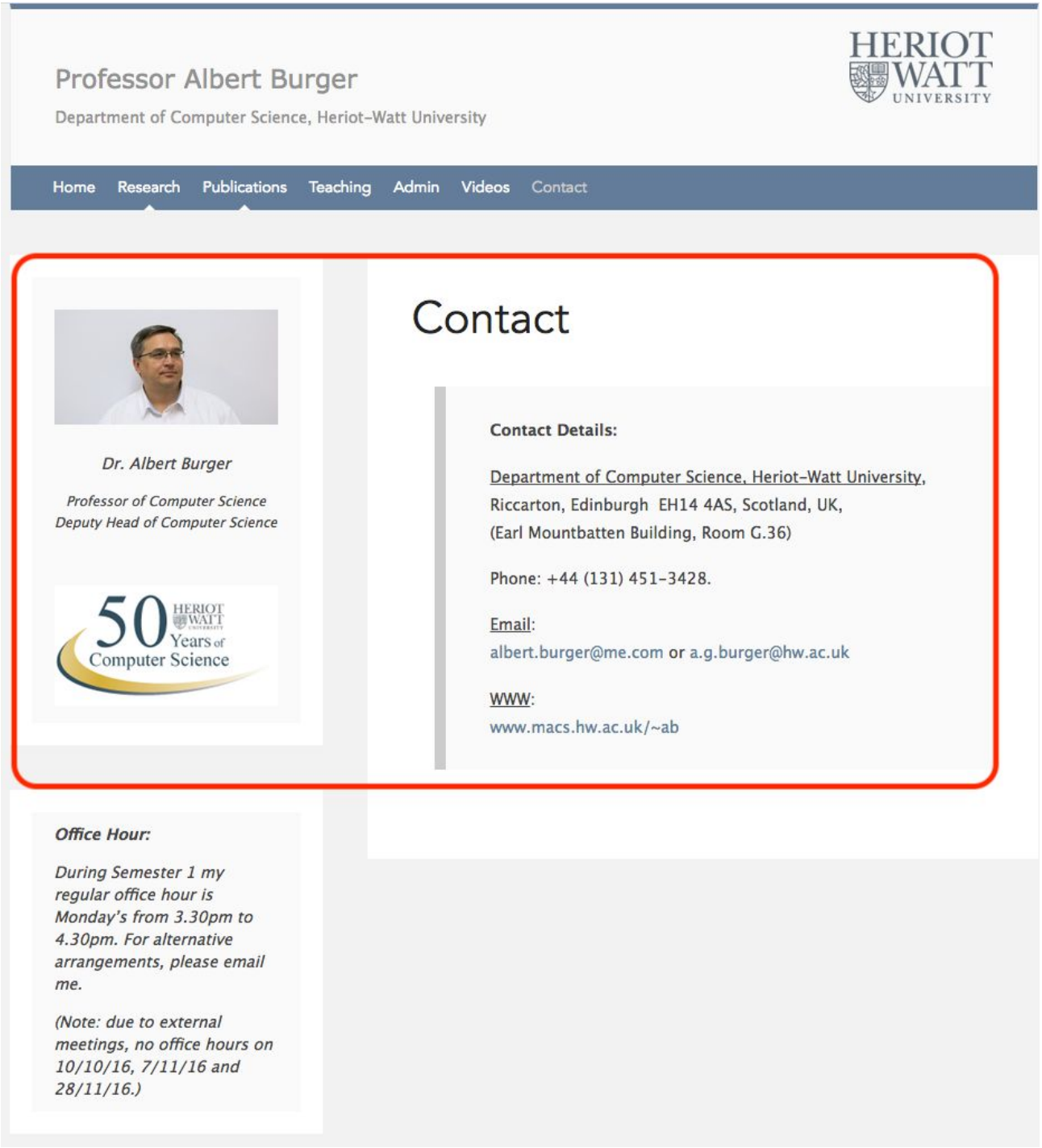
Marking Scheme

Content of Report: Have all four aspects (objective, technologies, LD vs SW, and examples of usage) been covered? Have appropriate references been identified? Have relevant additional topics been discussed and appropriately referenced? (30 marks)
Quality of Report: Overall structure and formatting? Appropriate referencing? Spell-checked? (10 marks)
Quality of Analysis: Simple concatenation of excerpts from external material vs evidence of deeper understanding. (10 marks)

Part 2 - F21BD ONLY

This assignment is to be completed individually, and is subject to the terms given above.

Please provide a schema.org markup for the *contact page* of Prof Albert Burger:
https://www.macs.hw.ac.uk/~ab/contact.html
Clarification: you only need to describe the information inside the red box in the following image:



Information outside of the red box should be ignored. Please use JSON-LD.

Please test your work with the Google Structured Data Testing tool.

Extra information:

- From Google: https://developers.google.com/search/docs/guides/intro-structured-data
- From Schema.org: http://schema.org/docs/gs.html
- From Vision: Learning Materials > Semantic Technologies > Lectures > 5_schema.org.pptx

Submission

Please submit, through Vision, a PDF document containing:

- Your report for Part 1;
- The JSON-LD you have produced; and,
- A screenshot showing the result of running your JSON-LD on the Google Structured Data Testing Tool.

Marking scheme

Markup receives 8 marks. 1 mark for correctly marking up each of:

- Name
- Role 1 (Professor)
- Role 2 (Head of Department)
- Physical address
- Email address 1 (me.com)
- Email address 2 (hw.ac.uk)
- Web Address
- Phone

1 mark for screenshot