Cloud Computing Concepts - Coursework

Dell Zhang
Birkbeck, University of London
2014/15

[Version: October 19, 2014]

1 Description

The coursework is to write an essay of 2,000-3,000 words (excluding the references) about how cloud computing and big data technologies can change a business of your choice (e.g., in education, finance, and game).

The essay needs to be properly organised and structured. It should include the following major parts.

Introduction.
Describe the business of your choice with relevant details (what it does, how many users it has, what kind of data it generates, how big the data will be, etc.). It could be a real company that you are familiar with, or a fictional one in the business sector that you understand well. If you decide to go for the latter, you are responsible to make your description consistent and realistic.

Current Status.
Survey the current status of cloud computing and big data in the selected business sector. Particularly, it would be useful to explore typical companies’ level of involvement in cloud computing and big data. If they have not tried cloud computing services or big data analytics, what are their obstacles? If they have already started using cloud computing services and big data analytics, what are their limitations? Critically examine the adoption of cloud computing and big data technologies by such companies, and discuss the corresponding technical, organisational, societal, and individual impacts.

Potential Benefits.
Analyse the business of your choice carefully, and identify the potential benefits (in terms of cost saving, profit making, agility, efficiency, and security, etc.) that can be obtained from more or better usage of cloud computing and big data technologies. Which areas of the business could benefit most from such technologies? It might be worth to set the business targets for the next few years, and envisage how cloud computing and big data technologies will help to achieve those targets.

Proposed Solutions.
Make recommendations and/or provide advices to the business of your choice about the approaches to becoming (more) successful in cloud computing and big data. Explain the possibilities offered by your proposals, and the risks involved in implementing them. Consider various technical issues such as system integrity, reliability, usability, and scalability. Give justifications (rationale) for the technical choices made. How will you measure the performance or impact of such new technologies? What are the success factors for your overall plan to work in practice?

Conclusions.
Summarise the main results, assess the key findings, draw conclusions from the study, and predict the future developments.

[Note] The suggested content for each part is only for your reference: you are not limited by it.
2 Guidelines

The coursework is an integral part of this module and contributes 20% to the overall mark. You should work independently to complete all stages/parts of it.

Please submit your complete essay in one PDF file through Moodle (http://moodle.bbk.ac.uk/).

Please refer to the latest booklet/handbook of your programme as well as the College regulations for detailed information about late submissions, mitigating circumstances, plagiarism, and exploitation of outputs, etc.
3 Marking Scheme

Each aspect of your essay would be assessed using the following grades (mark ranges): Complete Fail (0-39%), Marginal Fail (40-49%), Pass (50-59%), Merit (60-69%), and Distinction (70-100%).

The criteria for an essay to achieve a mark at the Pass or Distinction grade are listed as follows.

Introduction.
- [Distinction] The essay describes a suitable business clearly. The context and the major user/technical requirements are specified.

Current Status.
- [Distinction] The essay gives an extensive review of the current status and critically evaluates them. Different approaches are compared. The state of the art is explored.

Potential Benefits.
- [Pass] The essay identifies several potential benefits that could be obtained.
- [Distinction] The essay identifies a number of potential benefits that could be obtained, with sufficient evidences provided.

Proposed Solutions.
- [Pass] The essay presents sensible and feasible ideas to make advancements. A suitable approach is chosen and there is an attempt to justify it. The technologies involved are explained.
- [Distinction] The essay presents novel and practical ideas to make advancements, which demonstrate real insights. It discusses various approaches in an authoritative way and provides a full justification for adopting a particular one. The technologies involved are explained in details. The coverage of important design and implementation issues is comprehensive and balanced.

Conclusions.
- [Pass] The conclusions drawn are reasonable.
- [Distinction] The main results are accurately summarised. The key findings are critically assessed. The conclusions drawn are insightful. Predictions about the future developments are made.

Bibliography.
- [Pass] The author provides some relevant references, which are cited in the text.
- [Distinction] The author provides many relevant references using a consistent referencing style, all of which are cited clearly at appropriate places in the text.

Presentation.
- [Pass] The essay is readable and comprehensible. It is generally coherent in its style and structure. It communicates the author's contribution to readers.
- [Distinction] Complex issues are explained clearly and concisely to a specialist audience. The content of the essay is well organised and structured in a way that shows the links between the concepts presented. The essay demonstrates that the author clearly understands the relevant research material and leads logically to a solution of the problem. The essay is of professional quality, so there are very few, ideally no, typographic/grammatical errors.
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Weight</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Current Status</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Potential Benefits</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Proposed Solutions</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bibliography</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Comments: