

**BCS Higher Education Qualification**

**Diploma**

**April 2022**

**EXAMINERS' REPORT**

**Web Application Development**

**General comments**

*A significant proportion of candidates did not try on B4 and B5. Most of them lost marks for failing to respond in the context of the open questions. However, it was refreshing to see a good answer out of five submissions is provided for question B6.*

Qu.	Comment
A1	
a)	Most candidates described the double diamond model and drew an appropriate diagram. Those that discussed the reason for the shape and the division into two phases obtained better marks.
b)	Few candidates adequately discussed the role of the customer. Many of the methods discussed were those appropriate solely to developers. A few candidates demonstrated a good understanding of the operation of the model.
A2	
a)	It was unclear whether many candidates really understand the advantages of agile development. In many cases they appeared to be describing something very similar to the waterfall model where the functionality is defined in the early stages and is then fixed. The values that underpin the agile model are specifically designed to avoid this and allow the application to develop with the users' requirements.
b)	Many candidates either misinterpreted or did not understand the meaning and function of a "user story". This led to irrelevant discussion of other software engineering activities that seemed not to gather any useful information from the actual users.
c)	Most candidates understood what INVEST stands for in this context, but many were unable to discuss how the stated criteria can be used to evaluate a user story.
A3	
a)	Candidates described a range of criteria, many of which were well established in Web 2.0 and so not specific to the semantic web. Inadequate attention was given to the use of Artificial Intelligence and that the underlying language is moving from HTML to RDF (in various forms).
b)	There was some confusion over what was meant by a "chatbot" which misled some candidates. This led to some completely irrelevant answers. Most understood that what was intended was digital assistants, but most of the discussion centred around relatively low level software engineering methods and interface issues rather than the

	use of AI and the collection and interpretation of information from a collection of different (possibly inconsistent) sources.
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Qu.	Comment
B4	
a)	A considerable number of candidates attempted this question, however the average grade is relatively low and candidates did not explain what a content delivery network is and how it works.
b)	The question asked for 4 examples of how the content delivery networks can be used to improve web service performance.  This was poorly answered and limited detail or examples were given for the marks . Candidates should consider the number of examples and the request to DESCRIBE
B5	
a)	This question was not attempted
b)	This question was not attempted
B6	
a)	This question showed a minimal understanding of cyber security and the concept of threats. Candidates should have explain the term and potentially given examples in context.