

DUBLIN INSTITUTE OF TECHNOLOGY

DT282 – BSc Computer Science (International)

Stage 1

SAMPLE EXAMINATION

Software for the Global Market [SDEV 1003]

Ciaran O'Leary

2 hours

Answer three questions. All questions carry equal marks.

1. (a) Explain clearly the first three principles of Universal Design and how they relate to the social model, rather than the medical model, of disability.

(8 marks)

(b) Using examples, demonstrate clearly the differences between the three WCAG levels.

(10 marks)

(c) Provide a paper prototype for a social media application whose design was informed by the principles of Universal Design.

Clearly justify your design choices.

(15 marks)

2. (a) Clearly distinguish between internationalisation and localisation, and identify three ways in which internationalisation and localisation should inform your interface design.

(8 marks)

(b) Identify and describe the six cultural dimensions of Hofstede's model, and outline four ways in which these can inform your interface design.

(10 marks)

(c) Design an evaluation strategy for the website for the 2016 Olympic Games.

Clearly justify your decisions.

(15 marks)

3. (a) Using the appropriate headings, describe the *breadcrumbs* interface design pattern.

(8 marks)

(b) Clearly demonstrate what is meant by the *behaviour activation threshold* had show how this can impact on interface design.

(10 marks)

(c) You and your design team are tasked with designing a system which encourages people to share their answers to sample examination questions online. Provide a paper prototype for your system and justify your design decisions.

(15 marks)

4. (a) What are the key differences between a persona and a user, as roles in the design process?

(8 marks)

(b) Describe in detail the process which should be followed to develop a persona set for a design project.

(10 marks)

(c) Using an example application, demonstrate how a persona set should be used throughout a design project.

(15 marks)