Module Specification

Mobile Applications

Version: 2023-24, v4.0, 14 Jun 2023

Contents

Part 1: Information

Module title: Mobile Applications

Module code: UFCF7H-15-3

Level: Level 6

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Field: Computer Science and Creative Technologies

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: This module will allow students to study current and historical mobile device technologies, along with the current mobile application marketplace and its impact on app development. Convergence of the web and mobile technologies will be explored and the differences between desktop and mobile

applications will help students design for context whilst considering mobile information, architecture and design.

Outline syllabus: The syllabus includes:

Mobile platforms and the development process:
Features of mobile platforms and devices, advantages and limitations. The mobile software development process. Application development methodology for mobile apps. Commercial licensing frameworks.

Design:
Mobile application design; application model and infrastructure; hardware and software architecture; managing resources; development workflow. Interaction design.

Interface technologies:
Modern mobile device features can be applied to a variety of applications. Being able to adapt to devices as they evolve are vital skills of a mobile developer. Opportunities provided through GPS, orientation sensors, device detection and networking allow for a wide range of phone applications.

Security:
Security issues and secure design for mobile applications.

The Future:
Innovations in the mobile market. Students will be able to explore the emerging trends surrounding mobile applications.

Part 3: Teaching and learning methods

Teaching and learning methods: Students will learn through a combination of lectures, tutorials and practical activities in a digital media studio.

Students will be expected to learn independently and carry out reading and directed study beyond that available within taught classes.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Analyse and critically evaluate mobile platform technologies for the development of mobile applications

MO2 Interpret user expectations and apply these in the context of mobile applications

MO3 Design, develop, test and document a working application for a mobile device

MO4 Consider current and emerging trends in mobile device technology and have regard to commercial licensing frameworks for mobile development

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufcf7h-15-3.html

Part 4: Assessment

Assessment strategy: The assignment for this module will be designed to consolidate the students' knowledge and practical skills in relation to the learning outcomes and to provide independent learning and problem solving.

The individual assignment will be a software development task using tools and applications associated with the mobile development pipeline, including

documentation of design, implementation, and testing .

User testing will provide an opportunity to for students to interpret user expectations and apply this in the context of their own application. Student knowledge of the technical and commercial aspects of mobile application development will be demonstrated through a showcase of the functionality of the application created.

Assessment criteria will be established against learning outcomes and objectives provided in the assignment specification.

Resit strategy is the same as first sit.

Assessment tasks:

Practical Skills Assessment (First Sit)
Description: User testing
The exact types of exercises are specified in the assignment brief. The exercises will consist of user testing, observations and potentially other user research methods to support a written post-mortem of a mobile application. Duration of exercises and word count of summaries is specified in the assignment brief.
Weighting: 25 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO3

Practical Skills Assessment (First Sit)
Description: Individual development of a mobile application
Weighting: 75 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4

Practical Skills Assessment (Resit)

Description: User testing

The exact types of exercises are specified in the assignment brief. The exercises will consist of user testing, observations and potentially other user research methods to support a written post-mortem of a mobile application. Duration of exercises and word count of summaries is specified in the assignment brief.

Weighting: 25 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO2, MO3

Practical Skills Assessment (Resit)

Description: Individual development of a mobile application

Weighting: 75 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Information Technology {Top-Up} [INTUNI] BSc (Hons) 2023-24

Information Technology {Top-Up} [Gloscoll] BSc (Hons) 2023-24

Computer Science [Jan][FT][Villa][3yrs] BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] BSc (Hons) 2021-22

Software Engineering {Dual} [Aug][FT][Taylors][3yrs] BSc (Hons) 2021-22

Software Engineering {Dual} [Mar][FT][Taylors][3yrs] BSc (Hons) 2021-22

Information Technology {Top-Up} [Frenchay] BSc (Hons) 2023-24

Information Technology {Top-Up} [INTUNI] BSc (Hons) 2023-24

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2023-24

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2023-24

Information Technology {Top-Up} [Phenikaa] BSc (Hons) 2023-24

Information Technology {Top-Up} [Frenchay] BSc (Hons) 2022-23

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2022-23

Information Technology {Top-Up} [INTUNI] BSc (Hons) 2022-23

Computer Science [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Computer Science [Sep][FT][Villa][3yrs] BSc (Hons) 2021-22

Computer Science [Sep][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [Jan][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computing [Sep][FT][Frenchay][3yrs] - Not Running BSc (Hons) 2021-22

Digital Media [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Software Engineering [Jan][FT][Northshore][3yrs] - Not Running BSc (Hons) 2021-22

Information Technology {Dual}[Mar][FT][Taylors][3yrs] BSc (Hons) 2021-22

Computer Security and Forensics {Foundation} [Feb][FT][GCET][4yrs] BSc (Hons) 2020-21

Computer Security and Forensics {Foundation} [Oct][FT][GCET][4yrs] BSc (Hons) 2020-21

Computing [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Computing {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science {Foundation}[Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Digital Media {Foundation}[Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Computer Science {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Digital Media [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Software Engineering {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2020-21

Software Engineering {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2020-21

Computing {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20

Digital Media {Foundation}[Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20

Computer Science {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20