Course Directive
IN721: Mobile Application Development
Summer School, 2021-2022

Course Information

Credits:	15 Credits
Prerequisite:	IN607: Introductory Application Development Concepts
Timetable:	Monday 11 AM via Microsoft Teams

Lecturer

Name:	Grayson Orr (Lecturer & Second/Third-Year Coordinator)
Location:	D311
Email:	grayson.orr@op.ac.nz

Course Dates

Summer School:	06 December 2021 - 11 February 2022 (10 weeks)

Aims

To learn the specifics of mobile application design & development. Learners will be able to develop & publish **Android** mobile applications using **Kotlin**, **Android Studio** & **Google Play Store**.

Learning Outcomes

At the successful completion of this course, learners will be able to:

1. Implement & publish complete, non-trivial, industry-standard mobile applications following sound architectural & code-quality standards.
2. Identify relevant use cases for a mobile computing scenario & incorporate them into an effective user experience design.
3. Follow industry standard software engineering practice in the design of mobile applications.

Assessments

Assessment	Weight	Due Date	Learning Outcomes
Project	80%	11-02-2022	1, 2, 3
Presentation	20%	11-02-2022	2, 3

Provisional Schedule

Week	Date	Session	
1	06-12-2021	Kotlin 1	Kotlin 2
2	13-12-2021	Android Overview	Fragment
3	20-12-2021	Espresso	ViewModel
4	27-12-2021	LiveData	DataBinding
5	03-01-2022	Retrofit	RecyclerView
6	10-01-2022	Room Database	Firebase Auth
7	17-01-2022	DataStore	Adaptive Launcher Icon
8	24-01-2022	KDoc & Dokka	Google Play Store
9	31-01-2022	Project Work	
10	07-02-2022	Project & Presentation Work	

Resources

Software

This paper will be taught using **Android Studio**. An installer for **Android Studio** are available. See https://developer.android.com/studio. Refer any problems with downloads or installers to Rob Broadley in D205a.

Readings

There is no textbook for the course.

Course Requirements & Expectations

Learning Hours

This course requires **150 hours** of learning. This time includes **10 hours** of meeting time, & **140 hours** of self-directed reading, preparation & completion of assessments.

Criteria for Passing

To pass this paper, you must achieve a cumulative pass mark of **50%** over all assessments. There are no reassessments or resits.

Attendance

- Learners are expected to attend all classes, including lectures & labs.
- If you cannot attend for a few days for any reason, contact the course.

Communication

Microsoft Outlook/Teams are the official communication channels for this course. It is your responsibility to regularly check **Microsoft Outlook/Teams** & GitHub for important course material, including changes to class scheduling or assessment details. Not checking will not be accepted as an excuse.

Snow Days/Polytechnic Closure

In the event **Otago Polytechnic** is closed or has a delayed opening because of snow or bad weather, you should not attempt to attend class if it is unsafe to do so. It is possible that the course lecturer will not be able to attend either, so classes will not physically be meeting. However, this does not become a holiday. Rather, the course material will be made available on GitHub for classes affected by the closure. You are responsible for any course material presented in this manner. Information about closure will be posted on the **Otago Polytechnic Facebook** page https://www.facebook.com/OtagoPoly.

Group Work & Originality

Learners in the **Bachelor of Information Technology** programme are expected to hand in original work. Learners are encouraged to discuss assessments with their fellow learners, however, all assessments are to be completed as individual works unless group work is explicitly required (i.e. if it doesn't say it is group work then it is not group work – even if a group consultation was involved). Failure to submit your original work will be treated as plagiarism.

Referencing

Appropriate referencing is required for all work. Referencing standards will be specified by the course lecturer.

Plagiarism

Plagiarism is submitting someone elses work as your own. Plagiarism offences are taken seriously & an assessment that has been plagiarised may be awarded a zero mark. A definition of plagiarism is in the Student Handbook, available online or at the school office.

Submission Requirements

All assessments are to be submitted by the time, date, & method given when the assessment is issued. Failure to meet all requirements will result in a penalty of up to **10%** per day (including weekends).

Extensions

Extensions are only available for unusual circumstances. These must be applied for, & approved, before the submission date.

Impairment

In case of sickness contact the course lecturer or **Head of Information Technology (Michael Holtz)** as soon as possible, preferably before the assessment is due. The policy regarding the granting of a mark that considers impaired performance requires a medical certificate & a medical practitioner's signature on a form. You may refer to the guide on impaired performance on the student handbook.

Appeals

If you are concerned about any aspect of your assessment, approach the course lecturer in the first instance. We support an open-door policy & aim to resolve issues promptly. Further support is available from the **Head of Information Technology (Michael Holtz)** & **Second/Third-Year Coordinator (Grayson Orr)**. **Otago Polytechnic** has a formal process for academic appeals if necessary.

Other Documents

Regulatory documents relating to this course can be found on the **Otago Polytechnic** website.