



Learning and Assessment Plan

This learning and assessment plan outlines how this unit or cluster of units will be delivered and assessed. The schedule of learning topics, assessments and the due date for assessments is included.

Qualification national code and title:	ICT50220 Diploma Information Technology (Advanced Programming)
Delivery Period:	Semester 2, 2024
Cluster Name (if applicable)	Advanced Mobile Development

National ID	Name of unit
ICTPRG549	Apply Intermediate Object Orientated Language Skills
ICTPRG603	Develop Advanced Mobile Multitouch Applications
You can access the full unit/s of competency here: https://training.gov.au/Training/Details/ICTPRG549 https://training.gov.au/Training/Details/ICTPRG603	
Delivery Location/s (Campus/Room/Online):	Wednesday 09:00 –13:00 (L306), 30 Aberdeen St, Northbridge

Student Learning Resources, text, equipment (Required/Optional)				
Student to supply: Personal Laptop/computer (Optional; recommended) Software (Flutter, Visual Studio Code) (Optional; recommended)				
College to supply: Computer (On Campus) Samsung/Nokia Mobile Tablet/Phone Devices for testing (On Campus) Software (Flutter, Visual studio Code)				
Lecturer Name:	Phone:	Email:	Contact times	Campus / Room
Aaron Clifford	-	Aaron.clifford@nmtafe.wa.edu.au	Class, By Appointment	Level 3 Office, 30 Aberdeen St

Assessment Summary

Assessment	Title and brief description	Due Date
Assessment 1	Portfolio – This assessment task covers some of the core knowledge and understanding necessary to develop application with flutter. Laying the foundation to take this onto the project assessment.	Week 8
Assessment 2 (A)	Documentation – This assessment covers the necessary documentation required to complete the advanced mobile cluster; this will focus on the mobile app for your client.	Week 12
Assessment 2 (B)	Project – Check in with supervisor. Schedule a time with supervisor to present / demo to date work.	Week 14



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Assessment	Title and brief description	Due Date
Assessment 2 (B)	Project – The final submission for your project, the finished application with testing documentation.	Week 18
Assessment 3	Knowledge Assessment (KBA) – This assessment covers the necessary knowledge evidence for both units.	Week 18

You will receive more detailed instructions on each assessment from your lecturer.

The regular learning requirements to develop the skills and knowledge for this unit are outlined below. Please refer to your timetable for session times.

Please note: This plan is to be used as a guide and may be adapted to meet the needs of students. You will be notified of changes as they occur.

Your training will include **structured in and out of class activities*** to be completed for this unit.

*Out of class activities may include(☑):

- | | |
|---|--|
| <input type="checkbox"/> lectures or tutorials, online tasks and forums | <input type="checkbox"/> workshop activities |
| <input type="checkbox"/> assessments (when integrated with learning) | <input type="checkbox"/> projects, assignments |
| <input type="checkbox"/> workplace experience | <input type="checkbox"/> prescribed follow-up activities |
| <input type="checkbox"/> prescribed reading and research | <input type="checkbox"/> other (please specify) |

Sessions (Hours)		Element number	Topic	Learning Resources*	Structured out of class activities*	
Session	Hrs				Activity	Hrs
1	4	-	Introductions - Cluster Overview	Blackboard Session 1	-	-
2	4	-	The Dart Language – A look at Dart and comparison to C# and other languages.	Session 2	Exercise 1-3	2
3	4	-	Flutter UI – The framework, basic project and building UI layouts, basic input	Session 3	Exercise 4	2
4	4	-	Advanced UI – More complex UI and stateless/stateful widgets, Dynamic layouts, custom widgets, forms	Session 4	Todo App (Part 1-3)	2
5	4		Provider State management – this session looks at managing state through streams or cubits.	Session 5	Todo App - Data	2
6	4		Database – Working offline to store and manage data through database calls.	Session 6	Todo App - SQLite	2
7	4		API – Moving data online using an API to retrieve data	Session 7	Todo App - API	2
8	4		Binary and File IO – writing to file IO and serialisation of objects into binary. Assessment 1 Due (Portfolio)	Session 8	Todo App - Hive	2
9	4		Documentation (Part 1) – A refresher on modelling applications and planning for development	Session 9	-	-



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10	4		Documentation (Part 2) - Database Design, normalization and project plans	Session 10	-	-
11	4		Assessment – Work on assessment 2	-	-	-
12	4		Assessment – Work on assessment 2 Assessment 2 (A) Due (Planning)	-	-	-
13	4		IOC - Using abstract/interface classes to invert control and flow of the program.	Session 11	-	-
14	4		Themes and Theme Data – customising the visual colours and styles of your application and allowing customisation later.	Session 12	-	-
15	4		Routes and Page Management - This will help with basic and complex page / views within an app.	Session 13	-	-
16	4		Bloc (Advanced State Management) - This session looks at implementing more advanced state management using states and the bloc pattern.	Session 14	-	-
17	4		Assessment – Work on project	-	-	-
18	4		Assessment – Work on project Assessment 2 (B) Due (Project) Assessment 3 Due (KBA)	-	-	-
19	4		Re-Submission Week	-	-	-
20	-		Non-Contact (Resulting)	-	-	-
Total Hours	76				Total hours out of class activities	14
Total amount of training for this unit:					90	



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Recognition of Prior Learning (RPL) / Credit

You may be eligible for Recognition of Prior Learning (RPL) / Credit towards your studies. If you have relevant existing skills, knowledge, or formal qualifications. Please discuss available options with your lecturer.

Reasonable Adjustment

We recognise that every student has different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning so they may be able to adjust your plan.

Results and Appeals

Students may lodge an appeal against an academic result. Appeals must be lodged within four weeks from notification of the assessment result. Please see details under Academic Appeals on the NMT website.

Absences

If you are unable to attend any class or assessment session you must inform your lecturer as soon as possible.

If you miss an assessment due to illness, please provide your lecturer with a medical certificate in order to negotiate an alternate time for the assessment.

Plagiarism

Plagiarism is using another person's ideas and words without clearly acknowledging the source of the information. It is not acceptable to submit an assessment that is based on another person's work and claim it as your own. If you submit an assessment that is significantly or recognizably the same or similar in content as submitted by another student (current or past) you may have to submit another assessment.

Assessment Resit/Resubmission

You shall be permitted to have at least two attempts to demonstrate competency against a unit of competency or cluster of units of competency.

To qualify for re-assessment:

- you must have made a reasonable attempt to complete the assessment satisfactorily
AND
- you must have submitted the original assessment by the due date
OR
- you must have attended and participated in the original assessment event

In the case of a re-assessment opportunity, your lecturer will give you a due date for your second attempt. Should you not achieve a Satisfactory result on the second attempt, you will need to re-enrol (R) in the unit.

In certain situations, a re-assessment is not possible; please refer to your assessment instructions.