

COMMONWEALTH OF AUSTRALIA

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Family Name	
Given Names	
Student Number	
Teaching Period	Semester 2, 2016

FINAL EXAMINATION	DURATION
HIT238 – The Mobile Paradigm	Reading Time: 10 minutes
	Writing Time: 180 minutes

INSTRUCTIONS TO CANDIDATES

Hand-written notes should be submitted along with the answer book at the end of the exam.

TOTAL MARKS: 60 MARKS

EXAM CONDITIONS

You may begin writing from the commencement of the examination session. The reading time indicated above is provided as a guide only.

This is a RESTRICTED OPEN BOOK examination

No calculators are permitted

One A4 sheet of handwritten double-sided notes permitted

Hard copy, unannotated English translation dictionary only

ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED
No additional printed material is permitted	1 x 16 Page Book 1 x Scrap Paper

**THIS EXAMINATION IS PRINTED
DOUBLE-SIDED.**

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Question 1

(4 + 4 = 8 Marks)

List some considerations to take into account when developing a mobile app in comparison to a desktop app:

- a) What are some major differences?
- b) What tips would you give to someone building a mobile app?

Question 2

(5 + 4 + 4 = 13 Marks)

- a) What is a web framework and how does it compare to an API?
- b) Write a brief summary of the functionality of one (1) web framework.
- c) Provide some example code of the web framework you have described.

Question 3

(3 + 3 = 6 Marks)

- a) How does JSON work with local storage in a web app ?
- b) What is Modernizr and how does it work with web apps ?

Question 4

(5 Marks)

Describe the approach that MVC brings to mobile development.

Question 5**(5 + 5 = 10 Marks)**

- a) Describe the Android mobile app life cycle using states (with Diagram).
- b) Describe the IOS mobile app life cycle using states (with Diagram).

Question 6**(4 + 2 + 2 = 8 Marks)**

- a) Why is it considered best practice to separate resources from code?
- b) How is this separation implemented in Android Studio?
- c) How is this separation implemented in XCode ?

Question 7**(5 + 5 = 10 Marks)**

Choose one from the following two implementations for a mobile app:

- Web Framework App
- Native App (IOS or Android)

Write five (5) positive comments as to why your choice is better than the other one, and five (5) negative comments as to why your choice is not as good as the other one.

Explain your comments in two or three sentences - don't just use dot points.

END OF EXAMINATION