

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Software for Mobile Devices	Course Code:	CS-440
Program:	BS (Computer Science)	Semester:	Fall 2018
Duration:	60 Minutes	Total Marks:	30
Paper Date:	01-Oct-18	Weight	12.5 %
Section:	A & B	Page(s):	2
Exam:	Midterm-I	Reg. No.	

Instruction/Notes: Students are allowed a double-sided single page cheat sheet.
While writing code, make best effort to write correct and relevant code only. Minor syntactic errors are acceptable and will be ignored during marking but overall concept and approach must be correct. You may use a class diagram for illustration (where necessary).

Question 1

(20 points)

Dictionary

Word

document

Lookup

Meanings

1. a written or printed paper furnishing information or evidence
2. any written item, as a book, article, or letter
3. a computer data file

Consider a UI for a simple Dictionary application, as illustrated above in the picture:

- A dictionary contains a **list** of **meanings** for a given word, if the word exists in dictionary
- A user may type the word and press lookup button, in order to show the meanings
- There is no limit on number of meanings that may be displayed. UI needs to take care of scroll, in case number of items exceed available screen space
- You may assume that a **Dictionary** class exists with a **lookup** function that can **return** a **list/ArrayList** of meanings for a given word.

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Software for Mobile Devices	Course Code:	CS-440
Program:	BS (Computer Science)	Semester:	Fall 2018
Duration:	60 Minutes	Total Marks:	30
Paper Date:	01-Oct-18	Weight	12.5 %
Section:	A & B	Page(s):	2
Exam:	Midterm-I	Reg. No.	

Provide required implementation/ functionality and create the following:

1. Create a **layout**, using any of the declarative or programmatic approaches (hint: xml or java file) (10)
2. Handle **necessary** event(s), fetch/bind UI components and provide the functionality. (hint: java file)(10)

Question 2

(10 points)

Answer the following questions briefly (not more than 5 lines each):

1. Differentiate the compilation procedure for an Android as well as an ordinary Java program? (4)
2. What is the role of manifest file? What components can be added in the manifest file and what are their uses? (3)
3. What is Gradle? Please list down some benefits it provides in the development cycle? (3)