

# **20MCA243 – Mobile Application Development Lab**

*Lab Report Submitted By*

**Athira K P**

**AJC22MCA-2030**

*In Partial Fulfilment for the Award of the Degree Of*

**MASTER OF COMPUTER APPLICATIONS  
(MCA TWO YEAR)  
[Accredited by NBA]**

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**



**AMAL JYOTHI COLLEGE OF ENGINEERING  
KANJIRAPPALLY**

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE,  
Accredited by NAAC. Koovappally, Kanjirappally, Kottayam, Kerala – 686518]

**2022-2024**

**DEPARTMENT OF COMPUTER APPLICATIONS**

**AMAL JYOTHI COLLEGE OF ENGINEERING**

**KANJIRAPPALLY**



**CERTIFICATE**

This is to certify that the lab report, “**20MCA243 – Mobile Application Development Lab**” is the bonafide work of **ATHIRA K P (AJC22MCA-2030)** in partial fulfilment of the requirements for the award of the Degree of Master of Computer Applications under APJ Abdul Kalam Technological University during the year **2022-24**.

Ms. Shelly Shiju George

**Lab In- Charge**

Rev. Fr. Dr. Rubin Thottupurathu Jose

**Head of the Department**

**Internal Examiner**

**External Examiner**

Course Code	Course Name	Syllabus Year	L-T-P-C
20MCA243	Mobile Application Development Lab	2020	0-1-3-2

### VISION

To promote an academic and research environment conducive for innovation centric technical education.

### MISSION

- MS1 - Provide foundations and advanced technical education in both theoretical and applied Computer Applications in-line with Industry demands.
- MS2 - Create highly skilled computer professionals capable of designing and innovating real life solutions.
- MS3 - Sustain an academic environment conducive to research and teaching focused to generate up-skilled professionals with ethical values.
- MS4 - Promote entrepreneurial initiatives and innovations capable of bridging and contributing with sustainable, socially relevant technology solutions.

### COURSE OUTCOME

CO	Outcome	Target
CO1	Design and develop user interfaces for mobile apps using basic building blocks, UI components and application structure using Emulator	60.1
CO2	Write simple programs and develop small applications using the concepts of UI design, layouts and preferences	60.1
CO3	Develop applications with multiple activities using intents, array adapter, exceptions and options menu.	60.1
CO4	Implement activities with dialogs, spinner, fragments and navigation drawer by applying themes	60.1
CO5	Develop mobile applications using SQLite.	60.1

### COURSE END SURVEY

CO	Survey Question	Answer Format
CO1	To what extent you are able to design and develop UI using Emulator	Excellent/Very Good/Good Satisfactory/Needs improvement
CO2	To what extent you understood concepts of layouts	Excellent/Very Good/Good Satisfactory/Needs improvement
CO3	To what extent you understood intents, exceptions and menus	Excellent/Very Good/Good Satisfactory/Needs improvement
CO4	To what extent you are able to implement activities applying themes	Excellent/Very Good/Good Satisfactory/Needs improvement
CO5	To what extent you understood to create applications with SQLite	Excellent/Very Good/Good Satisfactory/Needs improvement

## CONTENT

SL. NO.	LIST OF LAB EXPERIMENTS/EXERCISES	DATE	CO	PAGE NO
1	Design a Login Form with username and password using LinearLayout and toast valid Credentials	21-09-2023	CO1	1
2	Implementing basic arithmetic operations of a simple calculator	11-10-2023	CO1,CO2	5
3	Write a program that demonstrates Activity Lifecycle.	12-10-2023	CO1	15
4	Implement validations on various UI controls .	25-10-2023	CO1,CO2	19
5	Create a Facebook page using RelativeLayout; set properties using .xml file	26-10-2023	CO2	24
6	Develop an application that toggles image using FrameLayout	01-11-2023	CO2	31
7	Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences.	01-11-2023	CO2	34
8	Develop an application that uses ArrayAdapter with ListView.	09-11-2023	CO3	38
9	Implement Options Menu to navigate to activities	09-11-2023	CO3	41
10	Develop application that works with explicit intents	16-11-2023	CO3	46
11	Develop an application that implements Spinner component and perform event handling	16-11-2023	CO4	51
12	Develop an application using fragments	22-11-2023	CO4	55
13	Implement Adapters and perform exception handling	23-11-2023	CO4	60
14	Create database using SQLite and perform INSERT and SELECT	04-12-2023	CO5	63
15	Perform UPDATE and DELETE on SQLite database	07-12-2023	CO5	70

