

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA – 533 003, Andhra Pradesh, India

II Year - I Semester	Skill Oriented Course- I	L	T	P	C
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MOBILE APP DEVELOPMENT(SO2101)					

Course Objectives:

- To understand the components and structure of mobile application development frameworks for Android and windows OS based mobiles.
- To understand how to work with various mobile application development frameworks.
- To learn the basic and important design concepts and issues of development of mobile applications.
- To understand the capabilities and limitations of mobile devices.

Course Outcomes:

At the end of this course, students will be able to:

- 1. Identify various concepts of mobile programming that make it unique from programming for other platforms
- 2. Critique mobile applications on their design pros and cons
- 3. Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces,
- 4. Program mobile applications for the Android operating system that use basic and advanced phone features and
- 5. Deploy applications to the Android marketplace for distribution.

LIST OF EXPERIMENTS

- 1. Introduction to mobile technologies and devices, Android platform and applications overview
- 2. Setting Android development environments
- 3. Writing Android applications, Understanding anatomy of an Android application
- 4. Develop an application that uses GUI components, Font and Colours
- 5. Develop an application that uses Layout Managers and event listeners.
- 6. Write an application that draws basic graphical primitives on the screen.
- 7. Develop an application that makes use of databases.
- 8. Develop an application that makes use of Notification Manager
- 9. Implement an application that uses Multi-threading
- 10. Develop a native application that uses GPS location information
- 11. Implement an application that writes data to the SD card.
- 12. Implement an application that creates an alert upon receiving a message
- 13. Write a mobile application that makes use of RSS feed
- 14. Develop a mobile application to send an email.
- 15. Develop a Mobile application for simple needs (Mini Project)

References:

- 1. Android Programming unleashed, B.M. Harwani, Pearson, 2013.
- 2. Android Programming (Big Nerd Ranch Guide), by Bill Phillips, Chris Stewart, Brian Hardy, Kristin Marsicano, Pearson, 2016
- 3. Android Programming Pushing the limits by Hellman by Erik Hellman, WILEY, 2013



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Web References:

- 1. The Complete Android N Developer Course –Udemy https://www.udemy.com/course/complete-android-n-developer-course/?altsc=428526
- 2. Android Development Courses on Google developers training https://developers.google.com/training/android/
- 3. Mobile Computing Video course- NPTEL https://nptel.ac.in/courses/106/106/106106147/#
- 4. Android Tutorial Tutorial Point https://www.tutorialspoint.com/android/index.htm