



Alagappa University

(A State University Established in 1985)
Karaikudi- 630 003, Tamilnadu, India.
www.alagappauniversity.ac.in



Department of Computer Applications

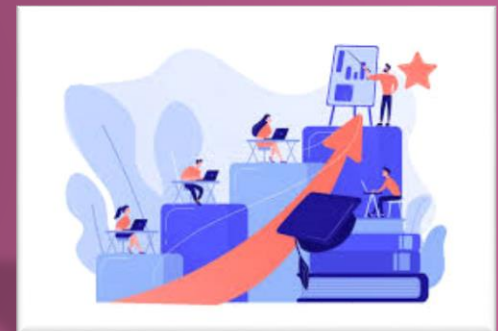
VALUE ADDED COURSES

Course Code: CAVAD8 Course Name: Android Programming
2023-2024

Eligibility: Any Degree Course Duration: 20 hours

COURSE OBJECTIVE:

- To facilitate students to understand android SDK.
- To help students to gain basic understanding of Android application development.
- To understand how to work with various mobile application development frameworks.
- To inculcate working knowledge of Android Studio development tool.
- To learn the basic and important design concepts and issues of development of mobile Applications.



COURSE OUTCOME:

- To identify various concepts of mobile programming that make it unique from programming for other platforms.
- To Create, test and debug Android application by setting up Android development.
- To Demonstrate methods in storing, sharing and retrieving data in Android applications.
- To Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces.
- To Create interactive applications in android using databases with multiple activities including audio, video and notifications and deploy them in marketplace.



COURSE CO-ORDINATOR:

Dr.P.Eswaran
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Department of Computer Applications
Alagappa University
Karaikudi-630 003



ALAGAPPA UNIVERSITY, KARAIKUDI
DEPARTMENT OF COMPUTER APPLICATIONS
VALUE ADDED COURSES

Course Code: CAVAD8	Android Programming	20 Hours
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Unit I	MOBILE PLATFORM AND APPLICATIONS Mobile Device Operating Systems — Special Constraints & Requirements — Commercial Mobile Operating Systems — Software Development Kit: iOS, Android, BlackBerry, Windows Phone — MCommerce — Structure — Pros & Cons — Mobile Payment System — Security Issues	
Unit II	INTRODUCTION TO ANDROID Introduction to Android: The Android Platform, Android SDK, Eclipse Installation, Android Installation, Building you First Android application, Understanding Anatomy of Android Application, Android Manifest file.	
Unit III	ANDROID APPLICATION DESIGN ESSENTIALS Anatomy of Android applications, Android terminologies, Application Context, Activities, Services, Intents, Receiving and Broadcasting Intents, Android Manifest File and its common settings, Using Intent Filter, Permissions.	
Unit IV	ANDROID USER INTERFACE DESIGN & MULTIMEDIA User Interface Screen elements, Designing User Interfaces with Layouts, Drawing and Working with Animation. Playing Audio and Video, Recording Audio and Video, Using the Camera to Take and Process Pictures	
Unit V	ANDROID APIs Using Android Data and Storage APIs, Managing data using Sqlite, Sharing Data between Applications with Content Providers, Using Android Networking APIs, Using Android Web APIs, Using Android Telephony APIs, Deploying Android Application to the World.	
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REFERENCES

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2. Google Developer Training, "Android Developer Fundamentals Course – Concept Reference”, Google Developer Training Team, 2017.
3. Prasanth Kumar Pattnaik,Rajib Mall,”Fundamentals of Mobile Computing”,PHI Learning Pvt.Ltd,New Delhi-2012
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SPD Publishers, 2015. ISBN-13: 978-9352131341
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8. Bill Phillips, Chris Stewart and Kristin Marsicano, “Android Programming: The Big Nerd Ranch Guide”, 4th Edition, Big Nerd Ranch Guides, 2019. ISBN-13: 978-0134706054