

VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)
DEPARTMENT OF CSE
COURSE INFORMATION FORM - THEORY

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| Department | Computer Science And Engineering |
| Course Code & Title | 18ITT61 & MOBILE APPLICATION DEVELOPMENT |
| Type & Designation | Theory - Required |
| Semester | 6 |
| Course Prerequisites | - |
| Course Co requisites | - |
| Contact hours | Lecture -3 Tutorial-0 Practical -0 Total- 3 |
| Credits | 3 |
| Course handling Faculty | Mrs.R. Vidhya, AP/CSE |
| Preamble | <i>Mobile Application Development is designed to impart the knowledge on application development framework and tools for creating android applications. It also equips the students to design, implement and deploy applications in mobile devices.</i> |
| Course Outcomes | <p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> 1. Develop mobile application for the given user requirement using android development framework and tools. 2. Create android applications using views, layouts, intents and SMS Manager API to send SMS and E-mails. 3. Create menu, notifications and multimedia features for the applications using android Notification Manager and Multimedia APIs. 4. Create databases for the applications to store and retrieve data using SQLite and Firebase. 5. Create mobile applications using standard web technologies such as HTML5, CSS3 and JavaScript for android and iOS platforms. |
| Topics | <p>UNIT I GETTING STARTED WITH ANDROID</p> <p>Android – Evolution of Android - Android architecture – Features- Core building blocks – Anatomy of android application – Android activity life cycle. Android Widgets: Button – TextView – EditText – RadioGroup -ToggleButton – CheckBox – Spinner –DatePicker - Progress Bar – DialogBox.</p> <p>UNIT II INTENTS, LAYOUTS AND TELEPHONY</p> <p>Intent – Types of Intent - Launching Activities using Intents. Layout: Relative Layout -Table Layout – Linear Layout – ListView – GridView – CardView. Android Telephony: Phone call –send Mail- Send SMS.</p> <p>UNIT III MENUS, NOTIFICATION AND MULTIMEDIA</p> <p>Menus –Option Menu – Adding and Updating menu items – Handling menu items. Android Notification –Android Toast. Multimedia in Android: Android camera – Android Audio player – Android Video player.</p> <p>UNIT 4 DATABASE AND CONTENT PROVIDERS</p> <p>Storage in Android - Android SQLite Database - Firebase Login –</p> |

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| | <p>Firestore authentication. Parsing in android – Android JSON parser – Creating API with PHP and MySQL - Connecting Android with MySQL using API - Android Google Map – Finding Current location.</p> <p>UNIT 5 HYBRID APP DEVELOPMENT</p> <p>Apache Cordova– Architecture of Apache Cordova – Building simple App using Apache Cordova- Publish the app on app store: Monetizing, promoting and distributing applications. React Native: Overview and its features.</p> |
| Text Books | <ol style="list-style-type: none"> 1. Reto Meier, “Professional Android 4 Application Development”, Wiley India Pvt. Ltd, New Delhi - 2014. |
| | <ol style="list-style-type: none"> 2. John M. Wargo, “Apache Cordova API Cookbook”, Pearson Education – 2015. |
| Reference Books | <ol style="list-style-type: none"> 1. ZiguardMedneiks, Laird Dornin G, Blake Meike and Masumi Nakamura, “Programming Android”, O’Reily,2013. 2. Anubhav Pradhan and Anil V Deshpande, “Composing Mobile Apps” , First Edition, Wiley India Pvt. Ltd, 2014. 3. Charlie Collins, Michael Galpin and Matthias Kappler, “Android in Practice”, Manning Publications, 2012. |
| Website resources | <ol style="list-style-type: none"> 1. https://developer.android.com/develop/ui/views/appwidgets 2. https://darmanto.akakom.ac.id/android/07.1.Intent.vogella.pdf 3. www.tutlane.com/tutorial/android/android-menus-options-context-popup 4. www.slideshare.net/PRITITELMORE/content-provider-inandroid-58116099 5. www.trio.dev/blog/hybrid-app-development |
| NPTEL Videos | <ol style="list-style-type: none"> 1. https://nptel.ac.in/courses/106/106/106106147/, “Mobile Computing – Starting Android Programming”, Professor Pushpendra Singh, IIT- Madras. 2. https://nptel.ac.in/courses/106/106/106106222/, “Introduction to Modern Application Development”, Prof. Madhavan Mukund, Prof. AbhijatVichare and Prof. Aamod Sane, IIT- Madras. |
| Contents Beyond Syllabus | - |

Faculty

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