

**PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA
(AUTONOMOUS)
INFORMATION TECHNOLOGY**

MOBILE APPLICATION DEVELOPMENT

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|---|----------|---------------------------------|-------|----------------------|------------------|
| Course Code | 20SA8652 | Year | III | Semester | II |
| Course Category | SC | Branch | IT | Course Type | SKILL |
| Credits | 2 | L-T-P | 1-0-2 | Prerequisites | Java Programming |
| Continuous Internal Evaluation : | - | Semester End Evaluation: | 50 | Total Marks: | 50 |

| Course Outcomes | | |
|---|---|-----------|
| Upon successful completion of the course, the student will be able to | | |
| CO1 | Basics of android mobile application design models and styles. | L2 |
| CO2 | Apply activities, dialog boxes, fragments, intents, views and layouts to android apps. | L3 |
| CO3 | Apply views and layouts to android apps. | L3 |
| CO4 | Design and develop mobile apps for given real time scenario using modern tool android studio. | L3 |

| Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight) | | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
| CO1 | 3 | | | | 3 | | | | | | | | 2 | 2 |
| CO2 | 3 | 3 | | | 3 | 3 | | | | 3 | | | 2 | 2 |
| CO3 | 3 | 3 | | | 3 | 3 | | | | 3 | | | 2 | 2 |
| CO4 | 3 | 3 | 3 | 3 | 3 | 3 | | | | 3 | | | 2 | 2 |

| Syllabus | | |
|-------------------|---|-------------------------|
| Unit No. | Contents | Mapped CO |
| I | GETTING STARTED WITH ANDROID PROGRAMMING: What Is Android?, Versions of android, Features of android, Architecture of android. ACTIVITIES, INTENTS: Understanding activities, Life cycle of an activity. | CO1, CO2 |
| II | INTENTS: Linking activities using intents, Calling built in apps using intents, Displaying Notifications. | CO1, CO2 |
| III | GETTING TO KNOW ANDROID UI: Understanding the components of screen - Views and view groups, Liner layout, Absolute layout, Table layout, Relative layout, Frame layout, Scroll view. | CO1, CO3, CO4 |
| IV | DISPLAY ORIENTATION, PICTURES and MENUS: Anchoring views, Resizing and repositioning views, Managing changes to screen orientation, Utilizing the action bar, Creating UI programmatically, Using image views to display pictures and Menus. | CO1, CO3, CO4 |
| V | DESIGNING UI WITH VIEWS: Using basic views - Text view, Button, Image Button, Edit text, check Box, Toggle button, Radio button, and Radio group views, Progress bar view and Auto complete text view. | CO1, CO3, CO4 |
| Lab Course | | |
| Expt. No. | Contents | Mapped CO |
| 1 | Installation of Android studio, its required tools and Android Virtual Device (AVD). | CO1 |
| 2 | Develop an android program to displaying your name in AVD. | CO1 |
| 3 | Develop an android program to illustrate how to create a basic Activity and applying themes, styles to it. | CO1 |
| 4 | Develop an android program to displaying various types of Dialog objects. | CO2 |
| 5 | Develop an android program to illustrate linking activities with Intents. | CO2 |
| 6 | Develop an android program to illustrate passing data using intent object. | CO2 |
| 7 | Develop an android program to illustrate different layouts. | CO3 |
| 8 | Build an Android application. | CO4 |

| Learning Resources |
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| Text Book |
| 1. Wei-Meng Lee, “Beginning Android Application Development”, 1st Edition, John Wiley & Sons, Inc., 2012. |
| References |
| 1. Raimon Refols Montane, Laurence Dawson, “Learning and Android Application Development”, 1st Edition, PACKT Publishing, 2016. |
| 2. Adam Gerber and Clifton Craig, “Learn Android Studio”, 1st Edition, Apress, 2015 |
| e-Resources and other Digital Material |
| 1. https://www.coursera.org/specializations/android-app-development#courses 2. https://infyspringboard.onwingspan.com/web/en/app/toc/lex_auth_0130944503427072002808_shared/overview |