

Mobile Apps Development

Course Title: Mobile Apps Development					
Course Code: CIT620 12	Student Workload: 8.50 Hours / Weeks	Credits: 4 Credits (6.0 ECTS)	Semester: 4 rd Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester (<i>Lecture:</i> 14 weeks; <i>Midterm assessment</i> : 1 week; <i>Final assessment</i> : 1 week)
1	Types of Courses: Specific Skills	Contact Hours: <i>Lecturing:</i> 1.67 Hours/ Week; <i>Practical Work:</i> 2.83 Hours/ Week	Independent Study: <i>Self-study:</i> 4.00 Hours/ Week; <i>Structured Assignment:</i> 4.00 Hours/ Week	Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): Basic programming				
3	Learning Outcomes: <ol style="list-style-type: none"> 1. M1: Able to understand concepts and challenges in device application development mobile device 2. M2: Able to apply procedures in managing the application development environment mobile device 3. M3: Able to produce interactive user interface in one application page mobile device 4. M4: Able to produce user interfaces that can switch pages and can communicate with other application components 5. M5: Able to manage data collection 6. M6: Able to manage parallel processes or work 7. M7: Able to produce mobile applications that can store and retrieve data from database 8. M8: Capable of generating mobile applications that consume rest API 9. M9: Able to display notifications on mobile applications 10. M10: Able to display user position and map on mobile application 				
4	Subject aims/Content: At the end of the course, students are expected: <ol style="list-style-type: none"> 1. L1: Able to understand the characteristics of mobile applications 2. L2: able to understand differences in user interactions in using device applications mobile and desktop apps 3. L3: Able to understand various limitations in device application development mobile device 4. L4: Able to understand various technologies (hardware and software) that can be used in mobile application development 5. L5: Able to know the concept of runtime in mobile applications 6. L6: Able to understand the mobile application development environment 7. L7: Able to apply procedures in configuring the application development environment mobile device 8. L8: Able to understand Mobile Application life cycle 9. L9: Able to demonstrate the Mobile Application lifecycle 10. L10: Able to understand the concept of mobile application interface 11. L11: Able to design mobile application interface layout 12. L12: Able to understand Event-driven programming in mobile applications 13. L13: Able to apply Event-driven programming for user interface interactions 14. L14: Able to understand the concept of mobile application page navigation 15. L15: Able to understand communication between components of mobile applications 16. L16: Able to implement navigation and communication between device application 				

	<p>components move</p> <p>17. L17: Able to understand how to manage data in the form of collection</p> <p>18. L18: Able to display data collection in the application</p> <p>19. L19: Able to understand the concept of Thread and Async Task</p> <p>20. L20: Able to manage processes running in parallel on mobile applications</p> <p>21. L21: Able to understand Data storage locally on mobile devices</p> <p>22. L22: Capable of implementing local data storage on mobile devices</p> <p>23. L23: Able to understand Data storage using cloud services</p> <p>24. L24: Able to implement data storage using cloud services</p> <p>25. L25: Able to understand how to consume rest API on mobile applications</p> <p>26. L26: Able to implement the use of rest API on mobile applications</p> <p>27. L27: Able to understand the concept of notifications on mobile applications</p> <p>28. L38: Able to apply notifications on mobile applications</p> <p>29. L29: Able to know the kinds of sensors on mobile devices</p> <p>30. L30: Able to know the use of sensors in mobile applications</p> <p>31. L31: Able to apply sensors to find out the location on mobile applications that use location or map features</p>
5	<p>Teaching Methods: Lecturing, Group Discussion, Case-Based Learning, Project-Based Learning</p>
6	<p>Assessment Methods: Essay, Multiple-Choice, Project Assessment, Anecdotal Record/Logbook, Product Assessment</p>
7	<p>This Course is Used in The Following Study Programme/s as Well: -</p>
8	<p>Responsibility for Course : Aryo Pinandito</p>
9	<p>Other Information: Bibliography:</p> <ol style="list-style-type: none"> 1. Horton, Android Programming with Kotlin for Beginners,PACKT,2019 2. Hagos, Learn Android Studio 3 with Kotlin : Efficient Android App Development,Payload Media Apress,2017