Mobile Application

Module name	Mobile Application	
Module level	Undergraduate	
Code	IF221201	
Courses (if applicable)	Mobile Application	
Semester	5/6	
Lecturer	Yisti Vita Via, S.ST, M.Kom (PIC)	
Language	Bahasa Indonesia and English	
Relation to curriculum	Elective; 5th/6th semester	
Type of teaching, contact hours	Lectures, < 60 students,	
Teaching Methods	simulation, case study, project-based learning, problem-based learning	
Workload	1. Lectures: 3 sks x 50 = 150 minutes (2 hours 30 minutes) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 180 minutes (3 hours) per week	
Credit points	3 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	Software Engineering	
Courses description	Within this course, students will gain proficiency in the development of mobile applications, encompassing integrated development environments, infrastructure, design, as well as the development and testing of mobile applications connected to databases, with the objective of addressing real-world challenges.	
Learning outcomes and their corresponding PLOs	After completing this module, a student is expected to:	
	CO1 Students possess the ability to expound upon the definitions and terminology associated with mobile application development. Furthermore, they demonstrate competence in engaging in discussions concerning exemplars of correct and effective mobile application development, referencing published journal sources, authoritative literature, and market-available mobile applications. (C2, A2)	PLO9,PLO10
	CO2 Students are proficient in crafting the User Interface (UI) and User Experience (UX) of mobile applications, adhering to established principles as per published journal references, authoritative literature, and current articles featuring expert opinions. (C3, P3)	PLO9,PLO10
	CO3 Students demonstrate proficiency in applying and advancing through each stage of mobile application development, encompassing both theoretical concepts and practical implementation. This includes the utilization of programming languages, frameworks, database design, as	PLO9,PLO10

	well as the implementation of sound principles in UI and UX design. (C6, P4)	
Content	Introduction to mobile application programming; Designing User Interface (UI) and User Experience (UX) for mobile applications; Android Activity; UI Fragments; Menu and Dialog design; Listview, Gridview, and Recyclerview Utilization; SQLite database management; Integration of Google APIs within applications; Procedures for the publication of applications on the Google Play Store; individual project assignments	
Media employed	LCD, whiteboard, websites, books (as references), online meeting, etc.	
Assessments and Evaluation	One written Midterm assessment (60 minutes) and one final oral exam (30 minutes), two short computer-based quizzes, takehome written assignments	
Study and examination requirements and forms of examination	The final grade in the module is composed of: • Two short computer-based quizzes: 15% x 2 = 30% • Take-home written assignments : 15% • Written Midterm assessment: 25% • Final oral exam: 30% Students must have a final grade of 55.6% or higher to pass.	
Reading List	● Grant Allen, Android for Absolute Beginners: Getting Started with Mobile Apps Development Using the Android Java SDK, 2021. ● John Horton, Android Programming for Beginners: Build In-depth, Full-featured Android Apps Starting from Zero Programming Experience, 3rd Edition, 2021.	