

Course Code	TKIT165121	
Course Name	Game Development	
Course Instructors	Ridi Ferdiana	
Course Type	Elective	
Course Classification	Engineering Topics	
Credit / Contact Hour per Week	3 / 150 minutes per Week	
Course Description	This course discusses a software engineering model based on game applications. This course will focus on the process and method of developing game applications. This course will discuss the historical aspects, aspects of software development engineering, technical aspects of development, and pragmatic aspects of the publication and design of gaming applications.	
Prerequisites Courses	-	
Covered Student Outcome	Development of Engineering Solution (b) Engineering Design (c) Modern Tools Utilization (e) Engineering Awareness and Society (j)	
Learning Mapping		
Code	Learning Outcome	Student Outcome
LO1	Students are able to explain basic concepts about the evolution of game application technology, current game technology, types of game applications and various basic concepts in game applications.	Modern Tools Utilization
LO2	Students are able to explain about the basic elements of a game application such as sprites, terrain, background games including architecture of a game application based on a 2D and 3D game case study.	Engineering Awareness and Society
LO3	Students are able to apply logic knowledge of game application development such as development scenario, action and reaction, and also simulation of game component development.	Development of Engineering Solution
LO4	Students are able to demonstrate ability to use several tools to create a simple game	Modern Tools Utilization
LO5	Students are able to illustrate the impact of various game in community	Engineering Design
Topic	<ol style="list-style-type: none"> 1. The basic concept and history of game apps 2. Creativity and Conceptual Development on game applications 3. Game Requirements Design 4. Presentation of Idea Showcase Game 5. Game Output Design 6. The Concept of Game Components 7. Game Interface Development 8. UTS 9. Game Story Creation 10. Game Engine Platform: Kodu Game Engine 11. Game Engine Platform: Construct 2 Game Engine 12. Presentation of progress report 13. Game Engine Platform: Unity 3D Game Engine 14. Final Project Presentation 15. Final Project Presentation 16. UAS 	

Direct Assessment	<table border="1"> <thead> <tr> <th data-bbox="456 247 893 279">Direct Assessment Plan</th> <th data-bbox="893 247 1360 279">Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 279 893 310">Mid Exam</td> <td data-bbox="893 279 1360 310">LO1, LO2, LO3</td> </tr> <tr> <td data-bbox="456 310 893 342">Final Exam</td> <td data-bbox="893 310 1360 342">LO4, LO5</td> </tr> <tr> <td data-bbox="456 342 893 373"> </td> <td data-bbox="893 342 1360 373"> </td> </tr> <tr> <td data-bbox="456 373 893 405"> </td> <td data-bbox="893 373 1360 405"> </td> </tr> <tr> <td data-bbox="456 405 893 432"> </td> <td data-bbox="893 405 1360 432"> </td> </tr> </tbody> </table>	Direct Assessment Plan	Measured Learning Outcome	Mid Exam	LO1, LO2, LO3	Final Exam	LO4, LO5						
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Mid Exam	LO1, LO2, LO3												
Final Exam	LO4, LO5												
Indirect Assessment	Questionnaire and direct communication												
References	<ol style="list-style-type: none"> 1. Steve Rabin. 2009. Introduction to Game Development, Second Edition. Course Technology PTR. 2. Nick Iuppa; Terry Borst. 2009. End-to-End Game Development. Focal Press. 3. Ernest Adams. 2009. Fundamentals of Game Design, Second Edition. News Rider. 4. Antony Ward. 2008. Game Character Development. Course Technology PTR. 5. Briar Lee Mitchell. 2012. Game Design Essentials. Sybex. 6. Ashok Kumar; Jim Etheredge; Aaron Boudreaux. 2012. Algorithmic and Architectural Gaming Design. IGI Global. 7. Mike McShaffry; David Graham. 2012. Game Coding Complete, Fourth Edition. Course Technology PTR. 												