

## CGP3012M Physics Simulation, Assessment Item 1

<b>Learning Outcome</b>	Criterion	Pass	2:2	2:1	1st
[LO3] demonstrate practical skills in applying real-time physics algorithms by the use of middle-ware products.	Code demonstration (CR1 80%)	The student demonstrates a working, runnable software with minimal elements of a Fantasy Medieval Rugby. It has minimal PhysX functionalities (e.g. compound shapes).	The student demonstrates a working, runnable software with basic elements of Fantasy Medieval Rugby.  The software shows the use and understanding of basic PhysX functionalities (e.g. compound shapes, materials) within the context of Rugby and Medieval Fantasy.  There is some basic consideration of the physical properties of the game objects.	The student demonstrates a working, running software with advanced physical game elements of Fantasy Medieval Rugby.  The software shows the effective use and understanding of basic and advanced PhysX elements (e.g. compound shapes, materials, joints, motors, triggers, filters, collision groups) within the context of Rugby and Medieval Fantasy.  The physical properties of the game objects have been taken into consideration.	The student demonstrates an excellent, running software of a Fantasy Medieval Rugby game with professional look and feel that includes many of the physical elements of Rugby and Fantasy Medieval.  It features the outstanding use and understanding of basic, advanced and extra PhysX functionalities learnt from the module tutorials and beyond.  There is a careful consideration of all the physical properties of the game objects and simulation parameters within the context of the assignment brief.
[LO2] Analyse and evaluate computational performance and accuracy of real-time simulation algorithms	Game Evaluation (CR2 20%)	A basic evaluation of the computational performance of the software was demonstrated.	The demonstration includes an evaluation of the computational performance of one test case.	The demonstration presents a good evaluation and analysis of the simulation's performance of several test cases with valid game conditions and variables.	The demonstration provides a robust evaluation and analysis of the limitations of the computational performance of the simulation.  An exhaustive selection of test cases with excellent valid and invalid conditions and variables were implemented, evaluated and analysed.
Weighting	The weighting for each criteria is indicated above.				