**Faculty of Technology – Coursework Specification 2016/17**

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| **Module name:** | | **Games Programming** | | | | | | |
| **Module code:** | | **IMAT3606** | | | | | | |
| **Title of the Assignment:** | | **Engine Programming** | | | | | | |
| **This coursework item is:** | | | | **Summative** | | |  | |
| **This summative coursework will be marked anonymously** | | | | | |  | | **No** |
| **The learning outcomes that are assessed by this coursework are:**   1. To demonstrate a variety of design patterns and architectures to build the basic functionality of a game engine 2. To practise professional skills such as source code management | | | | | | | | |
| This coursework is: | | | Individual | | | |  | |
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| **This coursework constitutes** 40 % **of the overall module mark.** | | | | | | | | |
| **Date Set:** | **21/11/2017** | | | | | | | |
| **Date & Time Due:** | **19/01/2018 (11:59pm)** | | | | | | | |
| **Your marked coursework and feedback will be available to you on: 16/02/2018**  If for any reason this is not forthcoming by the due date your module leader will let you know why and when it can be expected. The Head of Studies ([headofstudies-tec@dmu.ac.uk](mailto:headofstudies-tec@dmu.ac.uk) ) should be informed of any issues relating to the return of marked coursework and feedback.  Note that you should normally receive feedback on your coursework by **no later than 20 University working days after the formal hand-in date,** provided that you have met the submission deadline. | | | | |  | | | |
| **When completed you are required to submit your coursework via:**   1. Github and Blackboard link | | | | | | | | |
| **Late submission of coursework** **policy:** Late submissions will be processed in accordance with current University regulations which state:  *“the time period during which a student may submit a piece of work late without authorisation and have the work capped at 40% [50% at PG level] if passed is* ***14 calendar days****. Work submitted unauthorised more than 14 calendar days after the original submission date will receive a mark of 0%. These regulations apply to a student’s first attempt at coursework. Work submitted late without authorisation which constitutes reassessment of a previously failed piece of coursework will always receive a mark of 0%.”* | | | | | | | | |
| **Academic Offences and Bad Academic Practices:**  **These include plagiarism, cheating, collusion, copying work and reuse of your own work, poor referencing or the passing off of somebody else's ideas as your own. If you are in any doubt about what constitutes an academic offence or bad academic practice you must check with your tutor. Further information and details of how DSU can support you, if needed, is available at:**  <http://www.dmu.ac.uk/dmu-students/the-student-gateway/academic-support-office/academic-offences.aspx> and  <http://www.dmu.ac.uk/dmu-students/the-student-gateway/academic-support-office/bad-academic-practice.aspx> | | | | | | | | |
| **Tasks to be undertaken:**  In this assignment each student will develop an interactive 3D environment that showcases the basics of their underlying engine. The assessment criteria include:   * **Engine Code** (Including design patterns such as components and interfaces) **(20%)** * **Data-driven architecture** (Use of JSON, XML or text files to manage the game data, including game-flow with various ‘scenes’) **(20%)** * **User Input** (Including different camera implementations and movement of a player character using the mouse and keyboard) **(20%)** * **Asset Pipeline** (The creation and export/import processing of ‘scenes’ within a level editor package such as Maya) **(20%)** * **Software Testing and Game Debugging Tools** (Demonstrating use of tools such as Unit Testing and the creation of a Game Debugging Menu) **(10%)** * **Professional Practices and Documentation** (Use of source control management and a short brief that outlines how the above tasks have been handled) **(10%)**   More details of what is required have been made available using a rubric marking scheme available on blackboard. | | | | | | | | |
| **Deliverables to be submitted for assessment:** Code and assets that can be compiled without error to showcase a basic game engine. A short document (approx. 1-2 pages) outlining how the tasks have been met. | | | | | | | | |
| **How the work will be marked:** According to rubric by first and second marker | | | | | | | | |
| **Module leader/tutor name:** | | **Stephen Ackland** | | | | | | |
| **Contact details:** | | **smackland@dmu.ac.uk** | | | | | | |