Assessment Submission Coversheet:  
Maths for Games

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| **Student Name:** | **Justin Katic** |
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| **Course Stream:** | ICT50215 - Diploma of Digital and Interactive Games |
| **Assessment Name:** | Maths for Games |
| **Units Covered:** | ICTPRG515–Review developed software  ICTICT514–Identify and manage the implementation of current industry specific technologies |
| **Teacher/s:** | Jay Yabsley |
| **Due Date:** | 24/04/20 |
| **Date of Submission:** | *24/04/20* |
| **Assessment Work Location** | AIE canvas |

**Declaration**

By submitting this work under my name, I declare that my submission is my own work with respect to plagiarism and does not violate any copyright laws. I have retained a copy of this assessment material that I can produce if requested.

Tick to acknowledge you have read and agree with this declaration.

Name: Please enter you name. Date: Please enter the date

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**Work Submitted:***Tick to acknowledge you have submitted each required piece of assessment work.*

1. **Completed Distributable Maths Classes.**  
   Submitted math class files
2. **Unit Test Results.**

Submitted test result file with all test passing

1. **Graphical Test Application.**

In a few short sentences or dot points, please describe what you submitted for this part of the assessment.

1. **Peer Review Document.**

In a few short sentences or dot points, please describe what you submitted for this part of the assessment.

1. **Version Controlled Project and Report.**

In a few short sentences or dot points, please describe what you submitted for this part of the assessment.

1. **Number Conversion Exercises.**

In a few short sentences or dot points, please describe what you submitted for this part of the assessment.

1. **Application Handover.**

In a few short sentences or dot points, please describe what you submitted for this part of the assessment.

*For more information on these parts, please click on the* ***Subject and Assessment Guide*** *link in the course* ***Game Programming Year 1*** *under the subject* ***Maths for Games*** *on* [*https://aie.instructure.com*](https://aie.instructure.com) *and read the* ***2020 Subject & Assessment Guide – Maths for Games***

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**Submission Checklist:**

|  |  |
| --- | --- |
| **General** **Description** | **Y/N** |
| All submitted projects compile without errors  Programs that don’t compile cannot be assessed |  |
| The program includes a “readme” or document explaining how to compile, execute and operate the program |  |
| The program performs as described in the general description |  |
| The program contains no logical errors |  |
| The code is sufficiently commented and clean |  |
| An attempt has been made to increase the program’s efficiency |  |
| Code compiles without no warnings |  |
| Program executes without crashing |  |
| Program has no memory leaks, and closes all files after use |  |
| A release executable has been made and included in the submission |  |
| Project files and source code are included in the submission |  |
| All files are packaged in a single compressed archive |  |

To ensure you have submitted the right components, please fill out these checklists.

**Required Features**  
**Complete the following table by providing the class name or file name, along with the line number, to show where you have implemented each feature.**

|  |  |  |
| --- | --- | --- |
| **Feature** | **Class/File** | **Line Number** |
| The tank’s position and orientation are calculated using your Vector and Matrix classes (any third-party math library included in the framework is not used) |  |  |
| A matrix hierarchy is correctly implemented (moving the tank base affects the position/orientation of the turret; the bullet is not affected by changes in either the turret or tank base) |  |  |
| The program accepts user input in the manner specified in the requirements above |  |  |
| You have included commit logs or other similar evidence showing the use of version control software for the duration of the project |  |  |
| Your Vector and Matrix classes are included in your project |  |  |
| Your project opens a graphic display window and draws a tank |  |  |
| The turret rotates correctly |  |  |
| The bullet spawns at the correct position and travels in the direction the turret is pointing |  |  |