|  |  |
| --- | --- |
| 1. Edit file main.cpp within [StarterKit](https://bitbucket.org/MuddyGames/gameplay-programming-i-lab-04-a) | Modify StarterKit so that it includes   * Circle to Point Collision * Box to Box Collision (Define a new data Type Box)   class Box {  public:  Point p;  int w;  int h;  void print() {  }  }; |
| 1. Edit file main.cpp within [StarterKit](https://bitbucket.org/MuddyGames/gameplay-programming-i-lab-04) | Modify StarterKit so that is displays a bounding rectangle that changes color on collision |
| 1. Experiment with collisions | * AABB To Capsule * AABB To Polygon * AABB To Ray * Circle To AABB * Circle To Circle * Circle To Ray * Circle To Capsule * Circle To Polygon * Ray To AABB * Ray To Capsule * Ray To Circle * Ray To Poly |

**Demonstrate completed Header, Cpp, Texture and Game Project files at the end of the LAB and ensure program been checked**

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name** |  | **Student Number** |  |
| **Date** |  | **Checked** |  |
| **Group** | **A / B** |  |  |

|  |  |  |
| --- | --- | --- |
| **0 -35** | **35-75** | **75-100** |
| * A selection of the basic game requirements have been implemented to a basic level * Game implementation will achieve minimum functionality * Game implementation may contain some syntax and/or run-time errors * Game implementation code will be poorly commented and/or formatted * Game implementation will contain basic features; application will not be tested properly * Game implementation code will not follow applicable coding conventions | * Game implementation requirement have been implemented to an acceptable level * Game implementation will achieve expected functionality which includes all listed collisions. * Game implementation will not contain syntax and/or run-time errors * Game implementation code will be reasonably commented and/or formatted * Game will be tested to a reasonable degree * Game implementation code will follow appropriate coding conventions | * Game implementation requirement have been implemented to an advanced level * Game implementation will achieve expected functionality which includes all listed collisions. * Game implementation code will be well commented and/or formatted * Game will be expertly tested * Game implementation of code will follow coding conventions * Game implementation will have novel gameplay and utilise Animated FSM (Note Animated FSM is not required for Part A, only Part B) |