**Assignment 2**

**(Group Assignment)**

**GAME 2002 Multimedia Systems Development Using SFML**

You have two choices for this assignment. The first choice is enhance the airplane game the second choice is a new 2D game. In the followings, you can find corresponding requirements and possible marks.

1. Enhancing the airplane game (**maximum 33 marks**)

Basically for this choice, you need to add

1. Two more levels: (**maximum 15 marks**)

You may use week 10, 11, or 12 template to begin with. They are all posted in Blackboard in the respective “Learning materials WEEKs”. Template 11 and 12 have only one level. Once the airplane reaches the end of this level the game is finished. You need to add two more levels to the game. In each level the intensity of the game is increased based on the number of enemy airplanes and their speeds. **12 marks** for completing two levels **3 more mark** if your game supports sound effects. Sound effects are used in week 12 template.

1. Supporting mouse and joystick for controlling the player airplane (**maximum 5 marks**)

Player airplane should be controlled by mouse and joystick as well. You should provide an interface in the setting state for the user to change the option for controlling the player airplane. In addition to the player airplane, GUI components should also be responsive to mouse and joystick.

1. A new weapon for the player airplane (**maximum 10 marks**)

Introduce a new weapon for the player airplane (other than current weapons) which can be earned by the user by destroying an enemy airplane like a missile. For example you can make an especial type of missile such as very fast straight trajectory missile. Provide an option for firing the added weapon and corresponding settings in the setting options.

Upon completing of all section, you may receive **3 bonus marks** based on the overall quality of the game.

1. A new 2D game (**maximum 40 marks**)

You may develop a new game from scratch. The game should at least have

1. A setting state for configuring keyboard, mouse and joystick. All GUI components should be responsive to mouse and joystick.
2. At least 2 levels should be defined for the game.

The mark is assigned based on the quality, level of completeness, and used correct designed patterns for the game. There are **10 bonus marks** for this choice.

**Submission:**

1. Compress the entire project to “Assignment2.zip”.
2. Submit the file under “Assignment 2” in the assignment section.
3. The submission is done only once per group.