

### **Interrupts (hardware software)**

**Group:** Make a group of 2 people. You can also do the assignment individually but there will be no compensation of scope or excuse of doing it alone.

**You can make cross section groups.**

**Submission date:** Monday 4<sup>th</sup> December 2017

### **Brick Breaker**

Design the traditional brick breaker game with at least the following functionalities:

A bar that moves left and right only by pressing keys on keyboard. Use left and right keys for bar navigation.

A ball that hits the bar and then moves in upward (straight up, left or right) direction and breaks the bricks. (You can replace ball with some other ascii character(s))

Design the game for at least one player and one level.

The time for finishing the game is 2 minutes. If the game ends in 2 minutes the player gets extra points. If it does not end in 2 minutes, the player won't get any extra points but can keep playing the game.

You can hard-code the position of bricks.

Breaking a brick makes the player earns some points. (you can decide how many)

Show on display the total points gained by the player.

The ball movement depends on where it hits the bar.

If the ball does not hit the bar, it falls down (to the end of screen) and the player loses one life. Show on display remaining and total lives.

The player has a total of three lives.

If the player loses all lives the game ends.

The display should be colorful.

The game should end normally after all bricks are broken by the player. (you should play the game at least once till the end before submitting.)

A sample display is attach as image.