

# Micro:bit Project Sheet 33

## Success Criteria

- Be able to move a sprite left/right/up/down
- Avoid the “bomb”
- Gain a point every time you move
- Bomb randomly strikes

## Background Code

```
run in background
set Score to 0
set wall to create sprite at x: pick random 0 to 4 y: pick random 0 to 4
forever
  wall set y to pick random 0 to 4
  wall set x to pick random 0 to 4
  pause (ms) pick random 0 to 1000
```

## Main Code PXT

```
set MySprite to create sprite at x: 2 y: 2
forever
  on button A pressed
    MySprite move by -1
    change Score by 1
  on button B pressed
    MySprite move by 1
    change Score by 1
  on button A+B pressed
    MySprite turn right by (°) 90
    change Score by 1
  if MySprite touching wall ?
    then
      forever
        A show string "Game Over - Score = "
        show number Score
```

## Testing

- A to move left
- B to move right
- A+B to rotate (giving up and down)

## Notes

This is meant to simulate a simple pre-8 bit style game a space ship (you) starts in the centre of the known galaxy (the screen) and can move left/right/up/down

You are being targeted by an alien force who keeps deploying mines. If you hit a mine you die. You gain a point for every move you make without hitting the mine.