TP Videojuegos
Assignment 5

In this assignment, you will modify the Asteroids game to have new kind of badges. Make sure that your design allows adding more badges easily, you might be asked to add more badges in the future.

Super Bullets Badge

When this badge is obtained, bullets do not disappear when they collide with asteroids, but rather they keep moving and thus might destroy more asteroids, etc.

Multi-Bullets Gun Badge

When this badge is obtained, the fighter is awarded a new gun that shoots `6` bullets at a time (i.e., with every press on the corresponding key) as follows: if `d` is the direction vector of the fighter, then it shoots one bullet in the directions `d`, one bullet in the direction of `d` rotated by `60` degrees, one in the direction of `d` rotated by `120` degrees, etc. Like the normal gun, this gun allows 5 shots every 3 seconds (but recall that each shot generates 6 bullets).

Rules for obtaining badges

We have 3 kind of badges: the normal badge (B_0), the bullets badge (B_1) and the super gun badge (B_2). The rules for obtaining a badge are the same as before, but the first time in a round the fighter is awarded B_0, the second time in the same round is awarded B_1, the third time in the same round is awarded B_2, etc. After B_2 Awe start again from B_0. All badges are obtained for 10 seconds as before. Use a different icon for each badge.