Use Case UC1: Play the Game

Scope: Arkanoid–style computer game application
Level: User goal
Primary Actor: Player
Stakeholders and Interests:
- Player: Wants simple interesting dynamic game that helps to release stress.
- Company: Wants this app as the bestseller product.
Preconditions: Game is installed on player's computer.
Success Guarantee: Game is finished. Player's score is saved into a best results file. Player feels rested and ready for further productive work.

Main Success Scenario (Basic Flow):
1. Player starts the game.
2. App shows the main screen with the options like "start a new game" and "see the best results".
3. Player chooses the "start a new game" option.
4. Application shows a game screen with a set of targets and a space ship.
5. Player manipulates the space ship by pressing the left, right, down and space bar keys, or with mouse.
6. Player presses the space bar key.
7. Star ship launches a bullet.
8. Bullet hits a target.
9. 1 point is being added to the target's hits counter.
10. Target and bullet disappear (target was hit by bullets as many times as it needed to destroy it).
11. 5 points are being added to the score.
12. Bonus box occasionally appears instead of destroyed target and slowly fall down.
13. Player controls the space ship's movement by pressing the left, right and down keys or using a mouse.
14. Space ship touches a bonus box.
15. Bonus box activates one of the different bonus effects, which affects the behavior either of the ship, targets or bullets.
16. If player destroys the last target then a new set of targets appears.
Player repeats steps 5 – 16 until he / she feels rested.
17. Player presses the "Q" button.
18. App stops the game.
19. App shows a window prompting the user to input his name.
20. Player inputs his / her name.
21. App saves the name and the score to the file.
22. Player vigorously proceeds with his / her work.

Extensions (Alternative Flows):
3a. Player chooses the "see the best results" option.
        1. App shows a table with the list of best results.
        2. Player clicks back button.
        3. App shows the main screen as per p. 2 of the Basic Flow.
8a. Bullet does not touch any target.
        1. Bullet goes out of the top of the screen.
        2. One point is being subtracted from player's score if it is more than 0.
10a. The target was not hit as many times as it needed to destroy it.
        1. Bullet disappears.
        2. Target proceeds its movement.
        3. No points are being added to the score.

15a. Bonus box activates "monster target" bonus effect.
    1. "Hits needed to destroy the target" parameter is being increased by 1 for each existing target if its value no more than 3.
15b. Bonus box activates "missile" bonus effect.
    1. Next 10 shots the space ship will launch missiles instead of regular bullets. Missile makes double damage to the target.
15c. Bonus box activates "multi bullet" bonus effect.
    1. Next shot will launch 6 additional bullets simultaneously with the regular bullet: by 3 bullets on the left and right sides.
15d. Bonus box activates "double speed" bonus effect.
    1. Space ship starts moving with double speed.
15e. Bonus box activates "half speed" bonus effect.
    1. Space ship starts moving with half speed.
2-15a. Player presses "P" button (pause mode).
    1. App stops all animations.
20a. Player does not input his / her name.
    1. App fills the default value (anonymous player) to the name field.
    2. App saves the default name and the score to the file.