## Requirements.

- 1. The application developed should be an interactive Arkanoid-style shooter game.
- 2. The game developed should have a space ship that can shoot bullets.
- 3. The application developed should have a set of target bricks disposed on the different levels from the top of screen and down.
- 4. Targets should move back and forth horizontally from one edge of the screen to another.
- 5. Target bricks should have different speed and initial movement direction that should be generated randomly every time just before showing a new set of target bricks (further targets).
- 6. Bullets should go up through a screen and target to break the target bricks.
- 7. Bullet should go out of a screen if no target is hit.
- 8. Player's score should be decreased by 1 if a bullet went out of the screen having not hit any target.
- 9. Targets should provide a hits counter, being incremented with each hit.
- 10. Targets should provide a "number of hits needed for destruction" property.
- 11. Once a bullet hits a target brick, then the target's hits counter should be increased by 1.
- 12. Once a target was hit as many times as it needed to destroy it (property of p.6 == property of p.7):
  - a. it should disappear.
  - b. player's score should be increased by 5.
- 13. Bonus box should appear instead of destroyed target if its chance were generated randomly.
- 14. If the space ship touches a bonus box, its bonus effects should be applied.
- 15. Each bonus box should provide one of the following bonus effects:
  - a. "Monster target" bonus effect: the "hits needed to destroy the target" parameter is being increased by 1 for each existing target if its value no more than 3.
  - b. "Missile" bonus effect: next 10 shots the space ship should launch missiles instead of regular bullets. Missile should make double damage to the target.
  - c. "Multi bullet" bonus effect: next shot should launch 6 additional bullets or missiles (whatever is active at the moment) simultaneously with the regular bullet or missile: by 3 bullets/missiles on the left and right sides.
  - d. "Double speed" bonus effect: the space ship starts moving with double speed.
  - e. "Half speed" bonus effect: the space ship starts moving with half speed.
- 16. The game should be played using keyboard control or using mouse as desired by the player.
- 17. Space ship should move to the right if the "right arrow" button were pressed or mouse were moved to the right side from the space ship.
- 18. Space ship should move to the left if the "left arrow" button were pressed or mouse were moved to the left side from the space ship.
- 19. Space ship should stop moving if the "down arrow" button were pressed or on mouse right-click.
- 20. Space ship should launch a bullet / missile (if "missile" bonus effect is active) if the "space" button were pressed or on mouse left-click.
- 21. The game should be stopped if the "Q" button were pressed.
- 22. The application should save the best scores and related players' names.
- 23. The application should show the best scores and related players' names.