Tank Hero

The year is 2023 and the coronavirus has spiraled out of control and put the world in total chaos, instead of mild symptoms such as coughing people are now turning into flesh eating zombies! You, one of the last people alive yet to be infected by the virus has been sent out on a mission to save what remains of humanity. You and your tank are the only thing that stands between total extinction or survival. To rescue humanity, you must shoot the zombies in your way and pick up survivors. Don’t forget to evade objects so you don’t crash and break the tank. Stay alive by picking up more hearts and fuel for your tank.

Good luck!

Controls:

**ARROW UP: move up**

**ARROW DOWN: move down**

**RIGHT ARROW: move right**

**LEFT ARROW: move left**

**SPACEBAR: shoot**

**ESC: pause**

**Game description:**

The mission of the game is to get the highest score possible before dying.

There are two ways the game will end. The first one is if you run in to obstacles or zombies and lose all your tank’s health. The other way is if you run out of fuel.

**Game states**

***Intro - game menu***

The first thing you will see when the game starts is the main menu. At the top of the menu the game logo is displayed, and at the bottom we have the game controls. In this menu you also have two options:

*Start game*

*Toggle sound*

***Game running - game loop active***

All functions related to the gameboard are active.

* Scrolling background
* Spawning of entities
* Movement/shooting with the tank
* Score-counter
* Collision-check

There are two ways to end the game. The first one is to run out of tank-lives, second one is after your fuel runs out.

***Game paused - pause screen***

* Most of the game functions will be paused. Countdown timer, score-counter, spawning of entities, movement and shooting with the tank.
* Arrow up and down will instead be used to control the options in the menu. Space or Enter will be used to select an option.

The player can pause the game by pressing escape button. A pause screen will be displayed with the following options.

*Continue*

*Sound ON/OFF*

*Restart*

***End of game - game over screen***

As previously stated, the game can end in two ways. The first one is to run out of tank-lives, second one is after your fuel runs out.

When the game ends the game over menu will displayed. In this menu you will see your total score (in game score + number of rescued humans).

Two buttons will also be displayed:

*Play again*

*Highscore*

**Entities**

**Tank:** Can be moved up, down, left & right and fires bullets. Used by the player to shoot zombies and pick up survivors. Loses health when ran into objects. Game ends when the tank is out of health.

**Survivors:** will move slowly from right to left on the playing field. You have two options:

1. “run” them over with the tank to save them.

2. Let them walk all the way to the left and save themselves. If you chose to let them walk by themselves there is a risk that a monster will come from behind and eat them.

**Monsters:** needs to be shot or ran over. If you run them over, they will die but the tank will lose health. If left alone will eat your rescued survivors.

**Big monsters:** needs to be shot with more bullets and killed. If you don’t kill the big monsters the game will end.

**Obstacles:** truck & roadblock. Needs to be avoided, if hit the tank will lose health. Will “degrade” when hit, shown visually.

**Scoring and health**

* **How to get score?**
* **Hot to lose score?**
* **How to lose health**

**Tank**

Health(4)

Damage to monsters – killed when running over

Damage to boss - killed when running over

**Bullet**

Damage(1) - Against survivors, zombies, bosses

Spawn rate(on input- 250ms)

**Zombie**

Zombie health (3)

Score value (100)

Damage to tank (1) - when run over

Damage to survivor (1)

Spawn rate(2000ms-3000ms)

**Boss**

Boss health (5)

Score value (500)

Damage to tank (1) - when hit

Damage to survivor (1)

Spawn rate(20000ms)

**Human**

Health (1)

Score value (10)

Damage to tank (0) - added to sideboard when run over

Damage to survivor (0)

Spawn rate(13500ms)

**Obstacles – Truck/Roadblock**

Damage to tank(1) - on initial hit, only 1 damage point per obstacle

Spawn rate(4500)

**PowerUps – FuelTank/Heart**

**FuelTank**

Points – random (5 – 25)

**Hearts**

Points – (1)

**Idle scoring – 20 per second**

**UI**

The game board is split into two parts. The first part is the “sidebar” where the survivors you rescued are shown. The number of survivors increases when you pick them up on the playing field.

The second part is the “playing field” where your tank and other objects are displayed. The background of the playing field is an image scrolling from right to left. The playing field is divided in to different invisible horizontal lanes. In each of the different lanes monster/obstacles/survivors will appear. The monsters, obstacles and survivors will move towards the player(tank) and needs to be dealt with in different ways.

In the top of the screen your score/fuel/zombies killed/soundON-OFF will be displayed.