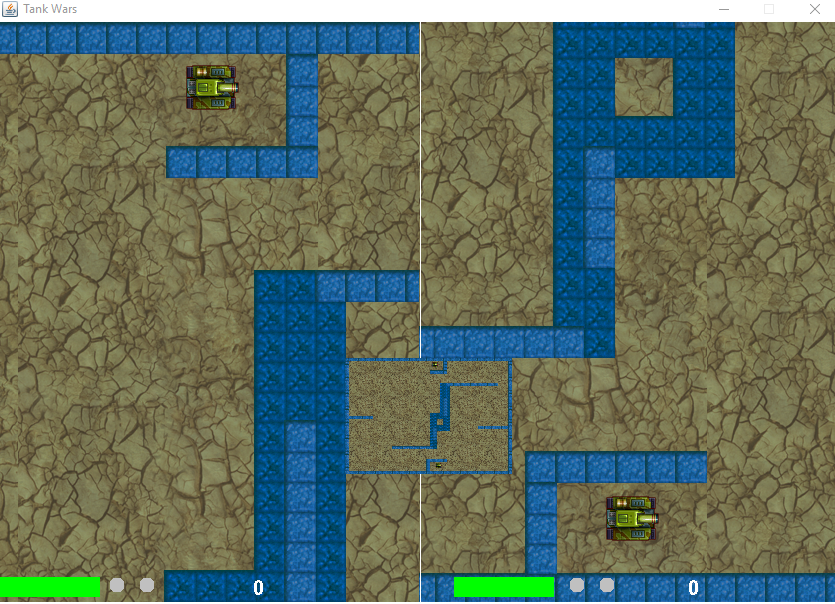
Game Project Documentation

**This is output of game program**:



**Code’s Introduction and Overview**

In the github repository, I provided six java files which were called tanksGame.java, TankBullet.java,

MapBackground.java, Walls.java, DrawWalls.java, and Tank.java. These six java files were saved in the

TanksGame folder. There were many png files and wav files which were saved in the TanksGame/Pictures folder. There were other two java files, which were called KeyboardControl.java and KeyboardEvents.java, were saved in the TanksGame/GameKeyControl folder. The implementation of this game project was to upload png files, upload wav files, place images on the game map, play music and allow players to control two tanks from keyboard when the game is begun.

The purpose of MapBackground.java is to place a background image on the game map.

The purpose of DrawWalls.java is to place walls images on the game map.

The purpose of Walls.java is to provide information about each wall’s position and provide information how many walls are placed on game map.

The purpose of TankBullet.java is to draw bullets for tank’s weapon.

The purpose of Tank.java is to place two tanks on game map and allow players controls tanks’ movement from keyboard.

The purpose of KeyboardEvents.java is to set each key typed event.

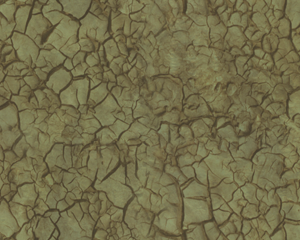
The purpose of KeyboardControl.java is to get the key pressed and key released events.

The purpose of tanksGame.java is to execute the program for the game.

**Game Map**

The game screen is divided into two sections: the left hand side, which renders the area of the map immediately around Player One, and the right hand side, which renders the area of the map immediately around Player Two.

The map is composed of a background tile (*background\_tile.png*), onto which various obstructions are placed.



The two obstructions that are placed on the map are a wall (*wall.png*),



and an indestructible wall (*wall\_indestructible.png*).



The indestructible wall obstruction is placed surround the map, creating a boundary past which tanks will not travel. Indestructible walls also appear on the map, preventing movement by tanks. Regular wall obstructions is destroyed using the tank weapons.

A minimap is rendered in the lower portion of the screen that shows the entire map,zoomed out, with markers for walls and the player locations.

**Player Controls**:

Tank Game is a two player game. Both players play from the same computer. Player one represents left tank. Player Two represents right tank.

Player One controls are:

\* A: Rotate left

\* D: Rotate right

\* W: Move forward

\* S: Move in reverse

\* Space: Fire weapon

Player Two controls are:

\* Left Arrow: Rotate left

\* Right Arrow: Rotate right

\* Up Arrow: Move forward

\* Down Arrow: Move in reverse

\* Return: Fire weapon

**Tanks**

The two tanks are smoothly rendered as they move across the map. The music (turret.wav) will be played when the game is begun. The both players use keyboard to control two tanks. The bullets are two tanks’ weapons. The both tanks launch bullets to fire each other. A sound (BulletSound.wav) is played when a bullet hits a target (wall or tank). Please see above picture. Each green rectangle represents each tank’s hp. The small gray ball represents tank’s number of lives. Each tank has two gray balls which represent tank’s numbers of lives. It means that each tank has two opportunities of lives. Each zero number represents each tank’s score. If left tank’s bullet hits right tank for each time, left tank’s score will be increased ten points and right tank’s hp will be decreased until it dies. A sound (ExplosionSound.wav) is played when right tank is explosive. Then the game will be restarted automatically and right tank will have only one remaining life. If right tank doesn’t have remaining life, the left tank will win this game. Then the game is finished and the music is stopped. The game screen also displays the left tank’s scores.