

Rules of the Game

Change History

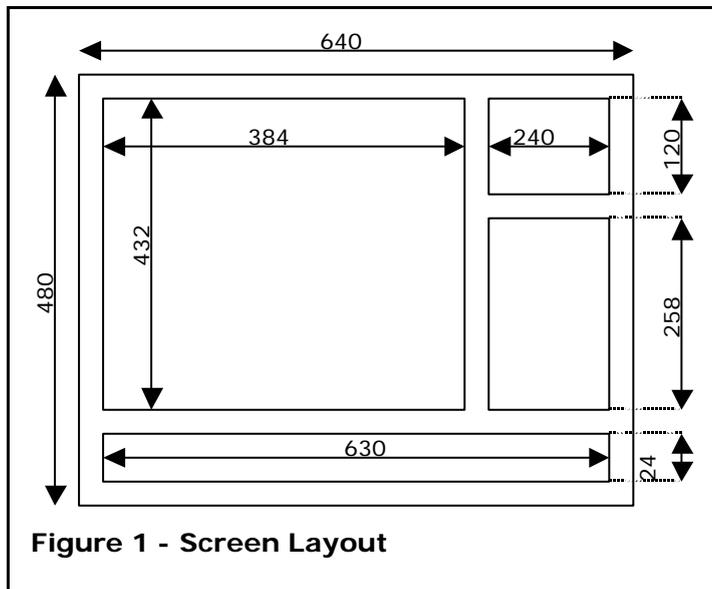
When	Who	Why
Jan 16, 2000	Gitm	Initial version

Introduction

This document attempts to define the rules of the TankWar game for each of the four different game modes. Please refer to the Overview document for a brief description of each of the play modes. At this revision the document should be considered a work in progress – hopefully as more members join the development team and suggestions from real-world players come in the game rules can be refined.

General Display

TankWar is designed to run at a resolution of 640x480 in 16 bit color. This mode should be supported by most graphics cards people are likely to have installed. We should aim to support a 256 color mode in future releases to increase the number of machines the game can run in. The general display format is shown in Figure 1.



As shown in the diagram, the screen is broken into four main sections. The largest section is the main playing field – this is where the map is displayed during gameplay. The game will attempt to keep the players tank in the center of this region at all times.

The smaller region to the top left of the screen displays the radar (for locating other players) and the current armour and energy levels.

The region to the mid-left of the screen displays the names and scores of the other players in the game. Player names will be grouped

by teams if a team based game mode is being played.

The wide section at the very bottom of the screen is used to display game messages and messages sent by other players.

Players

There can be up to sixteen players (either bots or remote players) in any single game. You have the option of starting a closed game where new players cannot join

once the game has started, or an open game where new players can join at any time during the game.

Terrain

The tanks travel over a map where each cell of the map is of a particular terrain type. Some terrain types affect the movement of a tank by either slowing it down or prohibiting movement altogether. Each terrain cell is associated with a bit-mask which determines the effect that cell has on movement. Multiple movement modifiers can be associated with each cell, for example – a single cell may contain the image of a road, some grass and a wall. The road portion allows full speed movement, the grass slows movement by a quarter and the wall is an object that the tank collides with.

Movement and Weapons

Tank movement is fairly straightforward. The tank can be rotated left or right (there are 16 separate angles the tank can move through) and moved forward or backwards along the current angle.

Two types of weapons are available – the cannon, which can fire a bullet up to four tiles in the direction the tank is currently facing and a mine which can be dropped directly behind the tank and is triggered when an enemy tank moves on to the tile the mine is at.

Bullets cause one unit of damage to any tank they hit. Mines cause a random value between five and eight units of damage.

In Deathmatch play mines are invisible to all players except the player that dropped them. In team play any mines dropped by a member of the team are visible to all members of the team. You can be damaged by friendly mines, so avoid them.

Resources

There are two resources associated with a tank that are limited. A new tank starts with 20 units of armour and 100 units of fuel. Armour is depleted whenever the tank is hit by a bullet or triggers a mine. When the armour level reaches zero (or less) the tank is destroyed.

Fuel is consumed at a rate of one unit for every five tiles travelled. If the tank runs out of fuel it is destroyed.

Both resources can be replenished at special locations detailed in the next section.

Special Locations

There are two types of special locations – a base and a refuelling depot. Each player is assigned a base when the game begins (level designers should provide sixteen bases on their maps to allow the maximum number of players). A tank can return to its own base (or an unassigned base) at any time to repair their tank – this will restore armour and fuel levels to maximum. A base will not repair an enemy tank.

Fuel depots will refuel any tank that activates them. Fuel depots will not repair damage, they will simply provide the tank with a full quantity of fuel.

Deathmatch Games

In Deathmatch games the goal is to kill as many of the enemy as possible. When a tank is destroyed the player has the option of remaining in the game and will be re-spawned at their base.

Scoring in Deathmatch games is very simple, every time you (or your team) destroy another player your score increases by one. Every time you are destroyed your score decreases by 1. The team or player with the highest score is the current leader.

Deathmatch games have no final goal – the game continues until everyone quits.

Capture the Flag Games

In this style of game each player has a flag which is initially at their base. The goal is to find the other players bases, pick up their flags (simply by running over them) and return them to your base. If your tank is destroyed on the journey the flag will remain in the location your tank was last at and can be picked up by any other player.

In individual games a player is removed from the game when their flag is captured (as in taken to someone else's base). It is possible to steal already captured flags from other players. The player who captures all the flags wins.

In team play all members of the team will remain in the game as long as any one flag is available.

Team Play Games

In team play you can have anywhere from two to sixteen teams (sixteen teams is actually single play mode – think about it). Teams do not have to be of equal sizes, although that would be the fairest way to play.

Scores in team play mode are attributed to the team, not to individual players. In a networked game you may allow new players to join at any time during the game.

Summary

This document has given a brief rundown on the rules and gameplay for TankWar. As this project is still under heavy development comments and suggestions are more than welcome. As the development cycle progresses this document will be updated with screen shots from the actual game to further illustrate the points discussed.

For More Information

For more information on the TankWar project you might like to visit some of the following websites.

<http://tankwar.sourceforge.net>

The TankWar home page, hosted by SourceForge. This will always be the most up to date resource for TankWar.

https://sourceforge.net/project/?group_id=1476

The TankWar project page at SourceForge. If you would like to join the development team, or get the latest snapshot of the source code this is the place to go. There are also a number of public forums on this page where you can post suggestions and questions.

<http://mail1.sourceforge.net/mailman/listinfo/tankwar-discuss>

The TankWar mailing list page. This list is for general discussion of the game, suggestions and comments.