

IMS 445: Lazer Tag

Team Members

- Aaron Baker
- Tyler Hadidon
- Stephen Yakkell

How to play

- **The keybindings are as follows:**
 - Esc → Open disconnect menu
 - W → Move forward
 - S → Move backward
 - A → Strafe left
 - D → Strafe right
 - Space → Jump
 - Shift → Move faster as spectator
 - Tab → Open in-game score and info screen
 - Mouse movement → Aim phasor
 - Mouse 1 → Fire lazer beam

- **Creating a server**

The create server menu offers you to change some settings before creating a game. They are:

1. Your name as it appears in game.
2. Whether you want to be a spectator or a player (useful for “dedicated” servers)
3. The map you would like to play.

Once you have made your selection, click the Create button in the lower right to create a new server.

- **Joining a server**

The join server menu offers you three settings you can change before joining a game. They are:

1. The server hostname or IP and port
2. Your name as it appears in game.
3. Whether you want to be a spectator or a player

Once you have supplied a server hostname/IP and your name, click the “Join” button in the lower right to join the server.

- **Playing the game**

- **General Gameplay**

The general gameplay is centered around the idea of laser tag. In this game, you “tag” other players by firing laser beams at them using your phasor. In addition, there are different gametypes that have different core objectives. These will be discussed next.

You have a limited amount of charge available. Each time you are hit with a laser, your charge is reduced by 33, unless your attacker has the Earth power up. Your charge is also reduced by 5 each time you fire your phasor. Once your charge reaches zero, you must recharge before you are able to be tagged again or fire your phasor.

- **Gametypes**

- i. Team Deathmatch (TDM)

Team Deathmatch is a team vs. team gametype. Simply tag as many opponent team members as possible, but try not to get tagged yourself. Each tag you make gives your team 1 point, however, each time you are tagged will increase the enemy score by 1.

- ii. Search and Destroy (S&D)

Search and Destroy is a team vs. team gametype. You need to find and destroy targets surrounding the opponent’s base. First team to destroy the other team’s targets wins.

- iii. Capture the Flag (CTF)

Capture the Flag is a team vs. team gametype. You need to grab the energy ball, spawned in the center of the map, and return it back to your base. However, when you have the energy ball, your charge is reduced each second. Once your charge reaches zero you drop the flag. Each capture counts as a point for your team. First team to 5 captures wins.

- **Power ups**

The game maps are littered with different power ups you can obtain to enhance your performance. These include:

1. **Fire** - This power up doubles your firepower, allowing you to shoot two lasers for the cost of one.
2. **Ice** - This power up makes you invisible for a short period of time.
3. **Air** - This power up increases your movement speed for a short period of time.
4. **Earth** - This power up will reduce an opponent's charge quicker for each tag.
5. **Lightning** - This power up will recharge you twice as fast the next time you are in your base.

- **Player colors**

The color of a player model is first determined by the team they are on. Red colored models represent a Red Team player. Green colored models represent a Green Team player. Players who have charge will have a bright Red or Green color. Players with a darker Red or Green do not have enough charge to fire their Phasor, but may still be tagged if they have some charge left.

- **Viewing scores and game info**

During gameplay, you can view your score, your team score and other player's scores by pressing the TAB key. This displays the score, number of tags, number of times tagged, and a tags/tagged ratio. It also displays the current map name, gametype, and current server host player and IP address.

Special Requirements

This game does not have any special requirements. Only a standard keyboard with standard mouse is required.

Known Bugs and Issues

- When a game of CTF is won the game freezes
- Not all levels show in the create menu
- Sometimes the player names do not disappear when you turn
- As a client, you do not unload the level when the server disconnects
- Sometimes settings are not reloaded properly when you restart the game.

Credits

- **Resources Used**

- Unity, Standard Assets, First Person Controller & Scripts
- Dalek Model: <http://tf3dm.com/3d-model/dalek-11510.html>
- Fire: <http://www.123dapp.com/3dcr-Creature/Fireball/1443108>
- Dragon: <http://www.123dapp.com/3dcr-Creature/Hot-Dragon/1552994>
- Snowflake: <http://www.123dapp.com/3dcr-Creature/Snowflake/1348847>
- Water: <http://www.turbosquid.com/FullPreview/Index.cfm/ID/629015>
- Tetrahedron: <http://www.turbosquid.com/FullPreview/Index.cfm/ID/317966>
- Cloud:
http://upload.wikimedia.org/wikipedia/commons/7/7c/Mammatus-storm-clouds_San-Antonio.jpg
- Lightning:
<http://images2.layoutsparks.com/1/173323/lightning-strike-thunder-bolt.jpg>
- Glass Shader: <http://u3d.as/content/bruno-rime/hard-surface-shaders-free/1RB>
- Penguin: <http://tf3dm.com/3d-model/penguin-45846.html>
- Snowmobile: <http://tf3dm.com/3d-model/electric-sled-10130.html>
- Camp Fire:
<http://www.turbosquid.com/3d-models/free-max-mode-camp/607575>
- Forest Level Tree: <http://www.turbosquid.com/FullPreview/Index.cfm/ID/285837>
- Earth Powerup rock:
<http://www.turbosquid.com/FullPreview/Index.cfm/ID/451171>
- Snow Image: <https://www.filterforge.com/filters/992.jpg>
- Flowers: <http://tf3dm.com/3d-model/flowers-68637.html>
- Leaves: <http://www.3dmodelfree.com/models/33537-0.htm>
- Ruby:
http://www.spiralgraphics.biz/packs/crystal_rough/previews/Raw%20Ruby.jpg
- Sapphire: http://wonderworlds.org/images/quartz_textures/blue-yellow-quartz.jpg
- Dirt:
<http://4.bp.blogspot.com/-s6IIUvxtwDA/UHU86KYnIdI/AAAAAAAAADfk/sTXFuUdSYhA/s1600/Seamless%2Bgroud%2Btexture%2Bv1.0.jpg>
- Gravel:
<http://www.rpgattitude.com/joomla/images/photoshop/texture/normal/gravel/gravel-texture-5.jpg>
- Plasma Ball:
<http://2.bp.blogspot.com/-BQFdpcnknuw/UKn8p4VfrZI/AAAAAAAAA68/QKKIzUzpHjI/s1600/plasma+ball.jpg>

- **Shoutouts**

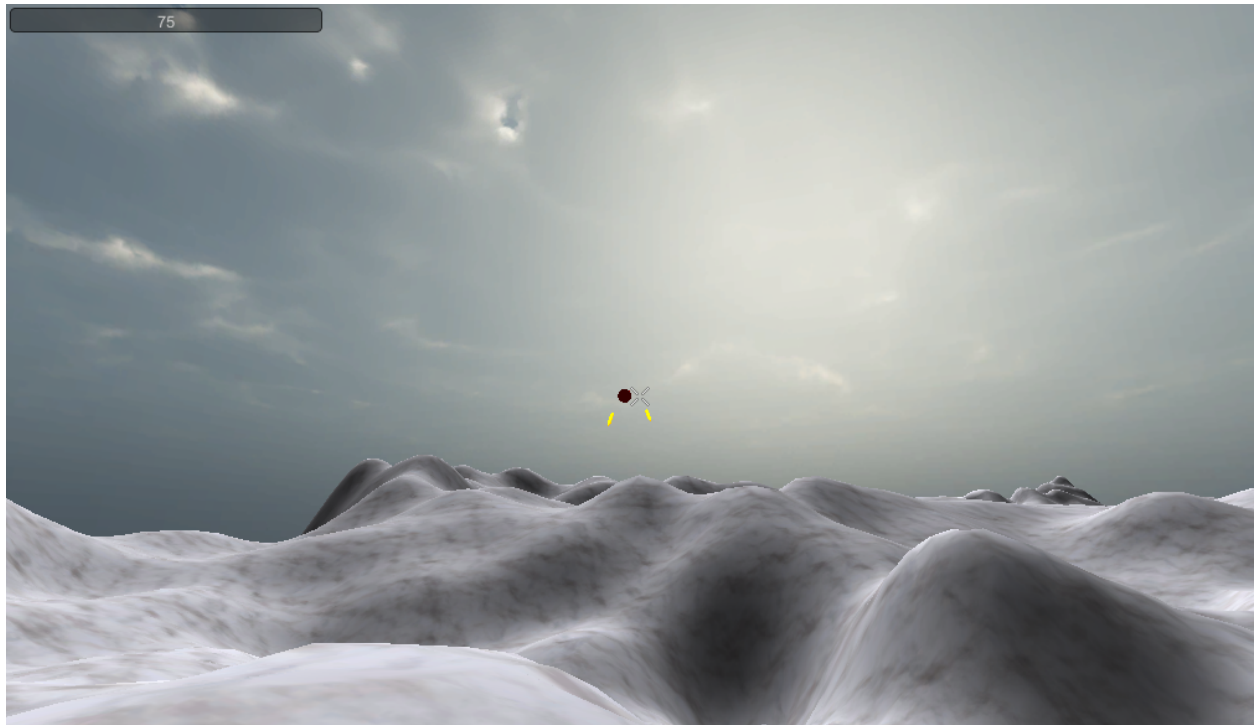
- My mom, just cus.

Builds

The repo is located at <https://github.com/hadidotj/IMS445-Term-Project>. The web build is at <https://github.com/hadidotj/IMS445-Term-Project/tree/master/Builds/LazerTagWeb.zip> and the windows build is at <https://github.com/hadidotj/IMS445-Term-Project/tree/master/Builds/LazerTagFinal.zip>.

Screenshots





Out of character

Capture the Flag

Read Team

	Score	Tags	Tagged	Ratio
Red Player	1	6	0	0
	6	6	0	0

Green Team

	Score	Tags	Tagged	Ratio
Green Player	0	0	6	0
	0	0	6	0

Green Player



Player206

127.0.0.1:28965

