

Topdown Shooter Documentation

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Changes to the design

There were no significant changes. I wanted to add different monsters, but decided to add different spells first.

Requirements met

Media requirements

Sound

- Have BGM for the title, gameplay and game over screens
- Have effect sounds for spells, damage and pick ups
- All in MP3s, because they're compatible with every browser except Opera Mini and I didn't want to have duplicate files with other formats

Images

- All PNGs

Fonts

- Used two webfonts

Canvas

- Used Phaser framework
- Animations are used in the Magic Dart spell, the mana pickups, and enemies
- Particle system is used by the Mind Blast spell

Interaction requirements

- Controls use mouse and keyboard
- Mapped to WASD and arrow keys
- Used Phaser's keyboard methods
- Shift + arrow lets you run

Usability requirements

- Pauses if you change windows or press P
- Teaching: menu screen has instructions
- Feedback: score is displayed, and there are health and mana meters as well as audio feedback when the player is hit or runs out of mana
- Difficulty: spawn rate starts out lower and increases with score
- Title/instructions screen + Game screen + Game over screen

Extras

- Kept track of high scores
- Made the spell system fairly modular so that adding new spells should be really easy
- Used tweening effects to make the enemies fade out, and to animate the mana bar
- Mana bar displays how much mana was used in a short amount of time
- Added alternative controls for players using a trackpad instead of a mouse
- Worked hard on that title screen!

Resources

Tutorials and examples:

<http://phaser.io/examples/v2/camera/deadzone>

<http://phaser.io/examples/v2/games/tanks>

<https://github.com/BdR76/phaseranimals/blob/master/groupTest.js>

Images

[Wizard](#) by [Xarius](#), available under [CC-BY-3.0](#)

[Magic dart](#) by [chabull](#), available under [CC-BY-3.0](#). Modified by adding colors and pasting into a spritesheet.

[Mana pickup](#) by [Tatermand](#), available under [CC0](#). Modified by adding different brightness levels and rotations.

[Slime](#) by [Stephen Challener \(Redshrike\)](#), available under [CC-BY-3.0](#), hosted by OpenGameArt.org

[Grass background](#) by [surfacecurve](#), available under [CC0](#)

[Heart](#) by [shinzohotoroki](#), available under [CC0](#)

[Mana bar](#) by [ScrittI](#), available under [CC-BY-3.0](#)

[Book background](#) by [yd](#), available under [CC0](#)

Fonts

[Gondola SD](#) by Steve Deffeyes

[Gothic Ultra OT](#) by Blue Vinyl Fonts

Background music

The Realm of Battle (Conquer), The Realm of Battle (Regret) and Spanish Theme (Classic Fantasy Music Pack) © 2014 [Murray Atkinson](#)

Sound effects

[Magic dart sound](#) by [spookymodem](#), available under [CC-BY-3.0](#)

[Mind blast sound](#) by [Little Robot Sound Factory](#), available under [CC-BY-3.0](#)

[Mana pickup sound](#) by [Écrivain](#), available under [CC0](#)

[Monster death](#) by [qubodup](#), available under [CC0](#)

[Magic failure](#) by Tuomo Untinen, available under [CC-BY-3.0](#)

[Damage sound](#) by [artisticdude](#), available under [CC0](#)

Grade

As self-serving as it might sound, I honestly give myself an A on this. I worked really hard on this project and paid special attention to details like the mana bar animation, giving the player feedback on how much mana their spells spend, and I tried to design the code so that it could be easily extensible to add more spells. Some of the code (pickups and enemies) is still a little messy from when I was learning Phaser, and if I had the time I would rework the enemy class so that it's like the spells and allows for new types of enemies to be easily created.