

TAGE the MAGE

Created by Devin Grace and Viktor Tarasov
CSC 165-01

2.



3. INSTRUCTIONS Navigate to the project directory containing the tage-the-mage files.

Compile the project.

Open two terminal windows:

- Run `runServer` in one window to start the server.
- Run one of the following in the second window to join as a player:
 - `runClient` – Default Purple Wizard
 - `runClientRed` – Evil Red Wizard
 - `runClientBlue` – Blue Space Wizard

- `runClientGreen` – Green Sun Wizard

Repeat the client step for each additional player (up to 4 players).

4. HOW TO PLAY Your goal is to defend the wizard tower from the goblin invasion for as long as possible. Every goblin you kill will grant you points so try and see how long you can last and rack up as many points as possible. To kill the goblins you walk into them and have to heal up to keep killing goblins.

5. CONTROLS

Keyboard controls:

W - Move Forward

S - Move Backwards

A - Move Left

D - Move Right

E - Zoom Camera

Q - UnZoom Camera

Esc: closes game

L: toggle lights

GamePad Controls:

Left Joystick: moves character forward/Back and turns Left/right

Right Joystick: orbits camera around avatar

Left Bumper: Angles camera Upward

Right Bumper: Angles camera Downward

Left Trigger: Zooms out

Right Trigger: Zooms in

Select button: closes game

6. Lighting: Wizard and tower have lights that change corresponding with health from green yellow red. There is also a spot light you can find that standing in will heal the tower. Lights can be turned off

7. Network protocol: the given approach with a server and clients connect to that server following TCP.

8. Tagger changes: Introduced an 3D orbit class, along with pitch, yaw/globalYaw, and roll to gameobject and camera Class

9. Genre: Survival Action

Theme: Fantasy, Wizards

Dimensionality: 3D person on the Ground

Activities: Defense Combat

10. **External Models:** The models created by us are the wizard and the goblin . The models out sourced are the tower. The wizard goblin and tower are textured by us.

Networked multiplayer: game is playable by up to for players which in turn increases the goblin threat per player Wizard skins are selectable.

Skybox and terrain: The skybox is outsourced and so is the terrain texture. Skybox is a sky with clouds and terrain is grassy valley surrounded by hills using height mapping.

Lights: Wizard and tower have lights that change corresponding with health from green yellow red. There is also a spot light you can find that standing in will heal the tower.

HUD: the hud displays your current score along with the health of the tower and the health of the player

3D Sound: Current sounds in the game are goblins laugh as you when near them, Footsteps when you walk, and a noise when a fireball is cast. Also background music not 3d though

SceneGraph:DNF Fireball is a child of the avatar class. Red goblin indicator plate is child of enemy

Animation: All animation is created by Devin and Viktor, the goblin walking, the wizard walking, when the wizard is idle, goblins attacking, and throwing a fireball.

Physics: is used as you can block the goblins with your body to stop them from reaching the tower.

11: Failure to meet; didnt get to implement the fireball and its animation in time but have it in the folders same with the audio. Didnt get scenegraph working in a way we liked that is impactful to the game

12: Beyond: no

13: Devin Grace made the wizard, did animations, sound, and textures. Viktor Tarasov Made the goblin did physics, AI. Then the rest of the game we worked on equally.

14.Created by Us Goblin model, goblin texture, goblin animation, Wizard model,Wizard texture(s), Wizard animation, Tower Texture.

15. Outsourced Assets: wizard walking sound is Creative commons

The screenshot shows a sound effect titled "Dry Grass Steps" with a waveform visualization. The page includes a search bar, navigation links (Sounds, Tags, Forum, Map), and a "Donate" button. The sound has 1.4K downloads and 1 comment. It is licensed under Creative Commons 0, which allows copying, modifying, distributing, and performing the sound for commercial purposes without needing permission. The page also features a "Your rating:" section with five stars and a "Download sound" button.

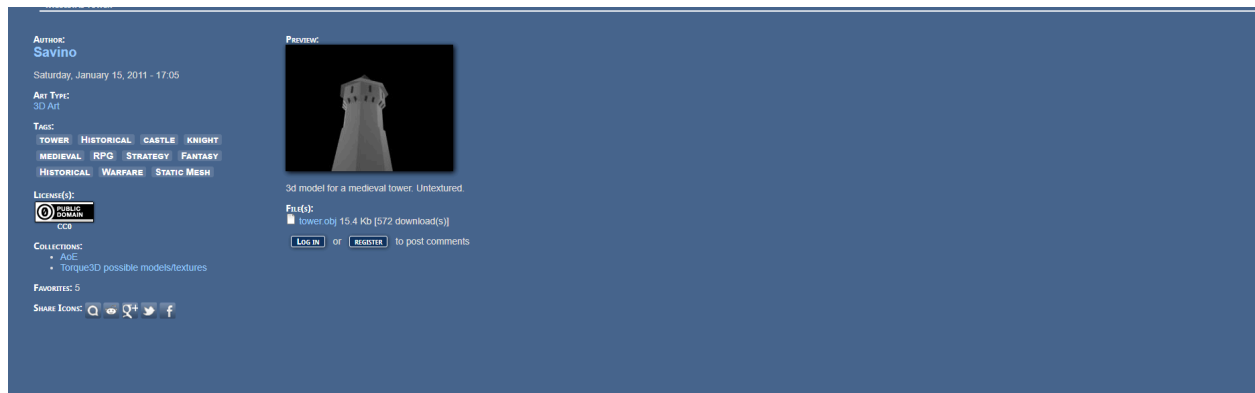
Goblin sound is made by NanaKisan

The screenshot shows a sound effect titled "Evil Laugh 10.wav" by NanaKisan. The page includes a search bar, navigation links (Sounds, Tags, Forum, Map), and a "Donate" button. The sound has 1.8K downloads and 2 comments. It is licensed under Attribution 4.0, which allows sharing (copying, distributing, and transmitting) and remixing (adapting and modifying) as long as the author is credited. The page also features a "Your rating:" section with five stars and a "Download sound" button. Below the sound, there is a section for the author, NanaKisan, with a "Follow" button and a link to "More with the goblins!".

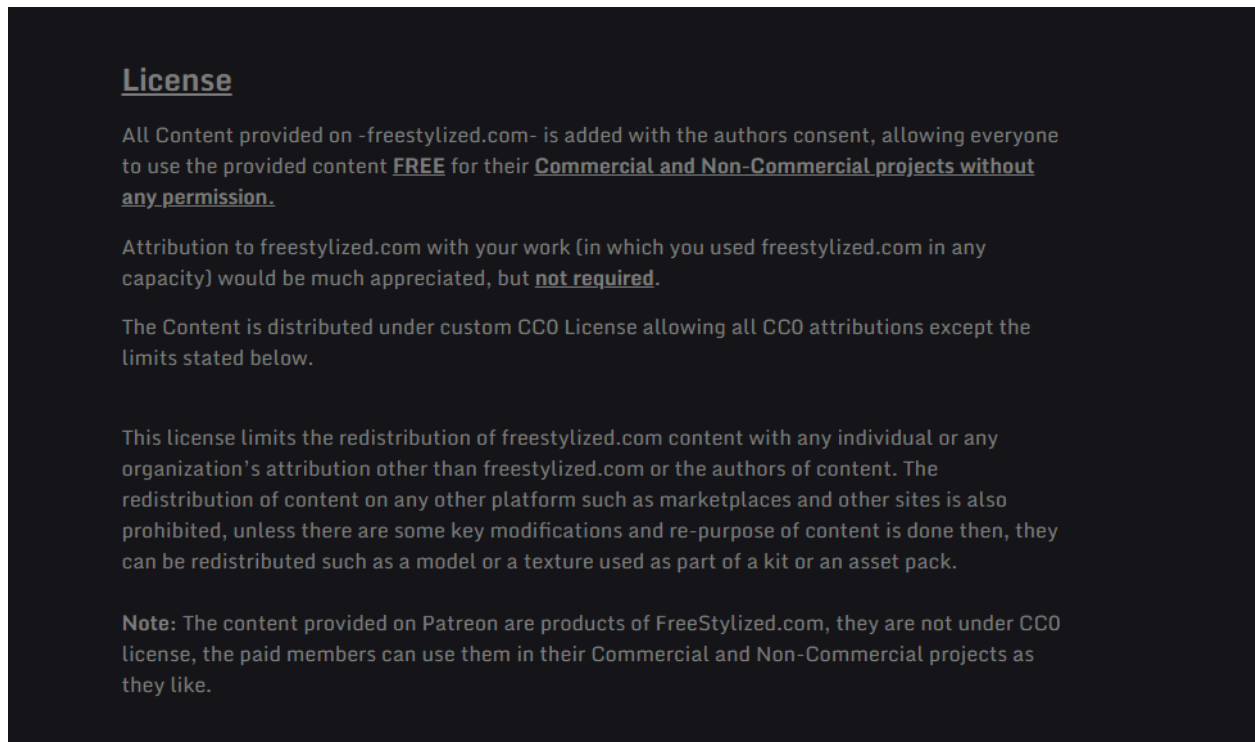
fireball sound is made by LiamG_SFX

The screenshot shows a sound effect titled "Fireball Cast 3" by LiamG_SFX. The page includes a search bar, navigation links (Sounds, Tags, Forum, Map), and a "Donate" button. The sound has 1.8K downloads and 2 comments. It is licensed under Attribution 4.0, which allows sharing (copying, distributing, and transmitting) and remixing (adapting and modifying) as long as the author is credited. The page also features a "Your rating:" section with five stars and a "Download sound" button. Below the sound, there is a section for the author, LiamG_SFX, with a "Follow" button and a link to "More with the goblins!".

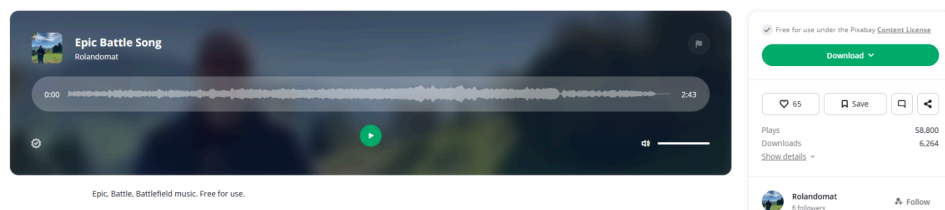
The Tower obj is open domain



The Skybox and The Terrain Texture



Background Music created by



16: ECS FALLOUT , ECS SNEEZYMUD

