

2nd Submission – Tiny Tanks

Controls:

Key/Button	Effect
W, S	Moving forward/backward
A, D	Rotate whole tank
Q, E	Rotate only upper part
SPACE	Jump
Left mouse button	Shoot
Mouse wheel	Zoom
Hold right mouse button and move mouse	Tilt Camera
ESC	Quit
F2	Toggle FPS
F3	Toggle Wireframe
F4	Toggle Texture Magnification Filter
F5	Toggle Texture Minification Filter

Development Status:

Finished.

Short overview of features:

- VBOs/VAOs/FBOs/Transformfeedbackbuffer used
- Animated Object: Independently rotatable tanks
- Camera: Relatively freely movable, see controls
- Collision detection: Box2D self-extended by third dimension for jumping
- Lighting: Single sun light
- Texturing: imported or hardcoded uv-coords in interleaved VBOs

- Transparency: When zooming in on the player's tank it becomes transparent so that you can see through it.
- Explosions on bullet-impact with particle systems
- AI enemy
- Cel-Shading-like contours
- Projective shadows

Effects:

- ❖ Particle System (with Transformfeedbackbuffer)
- ❖ Cel-Shading-like contours (two-pass FBO)
- ❖ Shadowmapping (two-pass with FBOs as explained in CGUE slides)