

WARS

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03:00



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Genre

2.5D (3D Assets in 2D Game Scope)

3 Player Versus

Fast paced tactical shooter with bullet hell elements

Slightly tilted top down camera (No split screen)

Game Mechanics

Controlles (Twin stick)

- Move with the left Stick (Up, Down, Left, Right)
- Aim with the right Stick (Up, Down, Left, Right)
- Shoot with the right sholder button (RB)

Reflecting Bullets

- Bullets bounce of Walls to create unique angles for each shot
- Some Walls do not reflect Bullets
- Bullets only bounce up to 5 times
- Bullets despawn when they do not hit anything in 5 Seconds.

Health and Respawning

- Players have 10 HP (4 Bullet Hits)
- When dead Players will respawn within 5 Seconds
- A random Respawn Point will be chosen each time

Damage and Healing

- Damage of the same Color as the hit Player will heal them
- Damage of a different Color than the hit player will deal damage

Scores and Match Duration

- Kill other players to the 10 Points
- Get 1 Point for each Damage dealt
- The Player with the highest Score Wins
- The Match ends when a timer runs out (Default 3 Minutes, Up to 10 Minutes)

Not implemented (yet?)

Bosses/NPCs

- They have the Color White
- Only one Boss per Game
- Multiple respawning NPCs
- Kills and Damage give Points

Weapon Types

- Sniper
- Assault Rifle
- Grenade Launcher

Traps

- Reactivate disabled Traps with your Color
- Triggering Traps will deal Damage in the set Color

Characters

Roboters (Players)

- Red
- Green
- Blue

Not implemented (yet?)

NPCs (White)

- Basic respawning NPCs
- Unique Bosses (one per Match)

Level Design

Futuristic (Space) Station

Tight Corridors

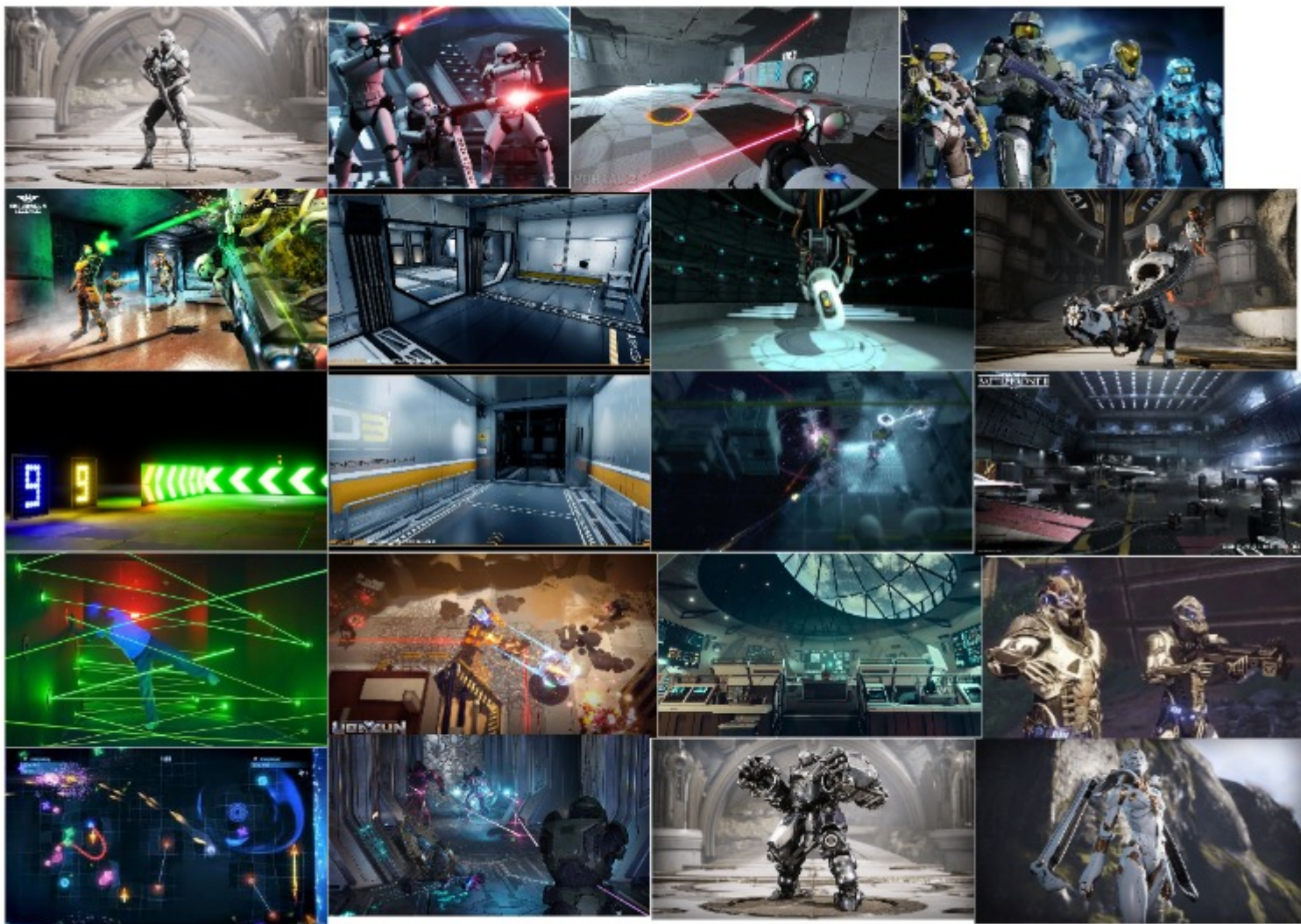
Lots of Corners

Not implemented (yet?)

Traps and other things

Big room with Boss

Moodboard



Game Flow

1. Start Lobby
2. Add Player Controllers
3. Choose Playtime (Standard 3 min)
4. FIGHT
 - kill
 - die
 - respawn
5. Celebrate the Winner(s)
6. Play Again

Not implemented (yet?)

- 2.5. Choose starting Weapons

Hardware / Software Requirements

3 Controllers (one per Player)

Windows 11

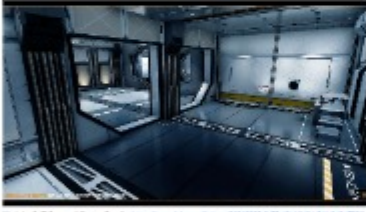
Local multiplayer (no Internet)

Asset Packs

Players



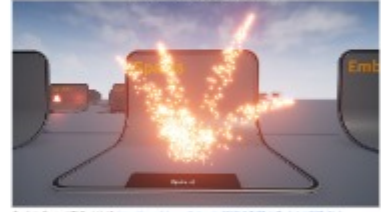
Environment



Not used (yet?)



Not used (yet?)



Bosses
Not used (yet?)



Background
Music



Soundeffectx



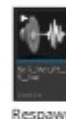
Bounce



Despawr



Death



Respawn



Damage



Heal



Shoot

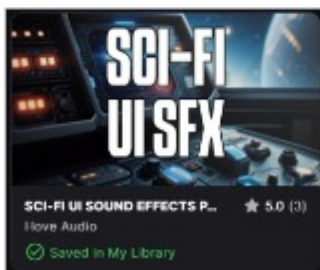


Draw



Win

UI Sounds
Not used (yet?)



Estimated Timetable

10.12. - 21.1.

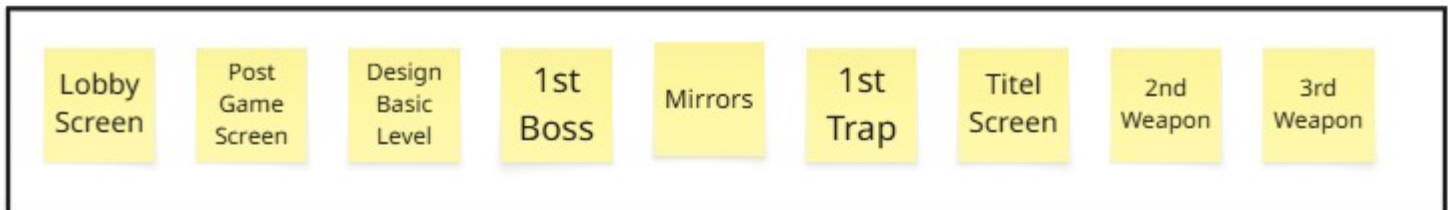
Initial
Concept
(this doc)

3h

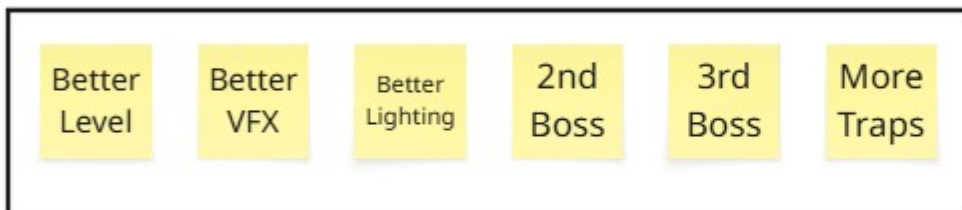
Must Haves Bis 24.12.



Should Haves Bis 07.01.









Could haves Bis 21.01.



BUG FIXING (10.12. - 21.1.)

Actuale Timetable

(better formatted Version in Excel File in Repo)

14.1.2026	17.1.2026	18.1.2026	19.1.2026	20.1.2026
<p>1h: Project Setup 2h: Fixed Camera 4h: Local Multiplayer</p>  <p>https://www.youtube.com/watch?v=gDgqgqGQg</p>	<p>Ab 8Uhr</p> <p>2h: Bullet Collision, Bouncing and Despawn time / logic</p>  <p>1,5h: Character Aim Animation (aufgegeben)</p> <p>0,5h: Bullets Color per Player</p> <p>0,5h: Color Damage Types (Heal or Dmg)</p> <p>0,5h: Better Aiming</p> <p>0,5h: PAUSE</p> <p>1h: Player Scores</p> <p>0,5h: Default Weapon (no pickup)</p> <p>2h: Respawnig players</p> <p>--- RGB_Wars_Backup_1</p> <p>6,5h: Level bauen</p> 	<p>Ab 8:30 Uhr</p> <p>2,5h: Game Timer</p> <p>1h: Better Event Handling</p> <p>1h: Lobby UI</p> <p>1h: Bullet Vfx</p> <p>0,5h: Sound Effects suchen</p> <p>-- RGB_Wars_Backup_2</p> <p>3,5h: Add Sound Effects and BGM</p> <p>0,5h: Game Pausing fix (Sound and Camera)</p> <p>Ab 18:30Uhr</p> <p>1h: PAUSE</p> <p>1h: Winner Screen</p> <p>1h: Restart Game</p> <p>1h: Controller UI Controls</p>	<p>0,5h: Plan ToDos</p> <p>Ab 14:30 Uhr</p> <p>2h: Match Start Countdown - On all joined - display Countdown - On countdown done - start match (previous all joined logic) - Display on PlayAgain</p> <p>0,5h: Tried to fix - UI already in Viewport Warnigns</p> <p>0,5h: Fixing Bug - Player controlls disabled in 2nd Match</p> <p>0,5h: Add Exit Button to Win Screen</p> <p>2,5h: Change Color on Focus + Soundeffect</p> <p>1h: PAUSE</p> <p>Ab 21:30</p> <p>0,5h: Handle Equal Scores</p> <p>1,5h: Match Duration Slider</p> 	<p>0,5h: Plan ToDos</p> <p>Ab 14:30 Uhr</p> <p>1h: UI Sounds</p> <p>0,5h: Win/Draw Sounds</p> <p>2,5h: Pause/Settings UI</p> <p>0,5: Handle Player Ragdol hit</p> <p>1h: Tried to Fix Animations (Failed)</p> <p>Ab 20:00 Uhr</p> <p>1h: Create Git Repo and Export Game to a new Blank Project (for Hand In)</p> <p>https://github.com/ThomasP/MST_2026</p> <p>1h: Build Executable for Windows</p> <p>https://www.youtube.com/watch?v=6B2073d8d0</p> <p>0,5h: PAUSE</p> <p>0,5h: Fix Exit Game Button</p> <p>1h: Update Documentation (this Miro Board) + Hand In</p>
15.1.2026				
<p>1h: Player Asset</p> <p>https://www.youtube.com/watch?v=43224035_43224035_43224035</p> <p>4h: Character Rotation</p> <p>https://www.youtube.com/watch?v=43224035_43224035_43224035</p> <p>5h: Shooting</p>  <p>1h: Rebuild Multiplayer</p>				
16.1.2026				
<p>1,5h: Multiplayer Shooting</p> <p>3h: HP UI</p> <p>1h: RGB Weapon / Bullet</p>  <p>0,5h: Update Doku</p>				

Open ToDos and Bugs

UI for specific or all players (not just player 0)

Title Screen (with Logo)

Seperate Game Level as Lobby (Settings as ingame Buttons)

Everything marked as "Not implemented (yet?)"

BUG - Bullet Time to live (Bullets sometimes just despawn)



BUG - Fix Animations for Player Character

BUG - Simplify Shooting Logic (Bullet start Point/Direction not from Gun Muzzle)

WARNING - UI already in Viewport Warnigns

```
LogViewport: Display: Viewport MouseCaptureMode Changed, NoCapture -> CaptureDuringMouseDown
LogScript: Warning: Script Msg: The widget 'UI_RGB_Match_C_0' was already added to the screen.
LogScript: Warning: Script Msg called by: GM_RGB_Shooter_C /Game/RGB_Wars/UEDP1E_0_Lvl_RGB_Test.Lvl_RGB_Test:PersistentLevel.GM_RGB_Shooter_C_0
LogViewport: Display: Viewport MouseCaptureMode Changed, CaptureDuringMouseDown -> NoCapture
LogViewport: Display: Viewport MouseCaptureMode Changed, NoCapture -> CaptureDuringMouseDown
LogScript: Warning: Script Msg: The widget 'UI_RGB_Match_C_0' was already added to the screen.
LogScript: Warning: Script Msg called by: GM_RGB_Shooter_C /Game/RGB_Wars/UEDP1E_0_Lvl_RGB_Test.Lvl_RGB_Test:PersistentLevel.GM_RGB_Shooter_C_0
LogSlate: Updating window title bar state: overlay mode, drag disabled, window buttons hidden, title bar hidden
```


Balancing Notes

The image displays three screenshots of the Unreal Engine 4 interface, showing the BP_RifleBullet class and its EventGraph, illustrating balancing notes for a projectile.

Top Screenshot: The BP_RifleBullet class is selected. The EventGraph shows a sequence of events: "On Projectile Hit" (Triggered by "Hit"), "Select" (Triggered by "Hit"), "Set Location" (Triggered by "Select"), and "Set Velocity" (Triggered by "Select"). The "Details" panel shows the "Projectile" section with the following values:

Property	Value
Projectile Name	1000
Initial Velocity	200
Max Velocity	2000.0
Damage	10.0
Damage Radius	100.0
Explosion Radius	100.0

Middle Screenshot: The BP_RifleBullet class is selected. The EventGraph shows a sequence of events: "On Projectile Hit" (Triggered by "Hit"), "Set Location" (Triggered by "Hit"), "Set Velocity" (Triggered by "Hit"), and "Set Rotation" (Triggered by "Hit"). The "Details" panel shows the "Variable" section with the following values:

Property	Value
Variable Name	ProjectileMovement
Initial Value	0.0
Category	Component
Subclass when inherited	True
Is a Component	True
Parent Class	None
Initial Speed	1000.0
Max Speed	1000.0
Rotation Follows Velocity	True
Rotation Remains Vertical	False

Bottom Screenshot: The BP_RifleBullet class is selected. The EventGraph shows a sequence of events: "On Projectile Hit" (Triggered by "Hit"), "Set Location" (Triggered by "Hit"), "Set Velocity" (Triggered by "Hit"), and "Set Rotation" (Triggered by "Hit"). The "Details" panel shows the "Variable" section with the following values:

Property	Value
Variable Name	ProjectileMovement
Initial Value	0.0
Category	Component
Subclass when inherited	True
Is a Component	True
Parent Class	None
Initial Speed	1000.0
Max Speed	1000.0
Rotation Follows Velocity	True
Rotation Remains Vertical	False

The bottom screenshot also shows a message at the bottom: "This node is disabled and will not be called. Drag it here to add functionality."