

# Games Design One Sheet: CTF -SpaceRock

## Game Summary:

SpaceRock is an Unreal Tournament Map that is set in a space scenario. The main combat area and capture the flag spawns are built inside of a meteoroid. Players will be able to face off in a 6 vs 6 format on the level playing until the game has ran out of time or a set number of flags have been captured within the time limit ending the round / game.

## Features and Mechanics:

- Map designed for a Capture the Flag gamemode in mind.
- Map can be used for different gamemodes, such as TDM (Team Death Match.)
- Players will be able to play in a 6 vs 6 or less format (recommended of 4 vs 4 minimum for best experience.)

## Target Platform:

PC

## Technical Requirements:

- Unreal Tournament Editor / Unreal Engine 4 for development
- Unreal Tournament – For Gameplay
- Windows 7 64-bit or Mac OS X 10.9. 2 or later running the latest version of Metal
- Dual-core Intel or AMD processor, 2.5 GHz or faster
- Direct X 11 compatible GPU
- 4 GB RAM

## Gameplay and Design:

**Win Condition:** Capture the flag of the enemy team within the time limit or collect it the number of times set before the game started.

**Lose Condition:** Don't collect enough of the enemy teams' flag within the time limit or lose to not having collected their flag enough.

## Gameplay Overview:

- Players team colours will be set when the game is starting or will allocate a select number of players (6 per party) to a single team (max of two teams per match.)
- Once the match has started players will automatically be assigned a team (Red or Blue.)
- Teams will have to collect weapons and armour throughout the course of the match while also surviving combat against components to collect the enemy teams' flag.
- Once collected they might bring the flag back to their teams flag in order to score a point.
- The game will have a set time limit as well as score amount per round, which once reached will end the round and start the second round. Once that round has also reached the score required or time limit the game will be finished

## Secondary Gameplay Considerations:

- Map can be used for different Unreal Tournament Gamemodes
  - **Team Death Match**

Players can face off in a 6 vs 6 game where the aim of the level is to kill as many people as possible in the time limit given, until a score limit is reached (usually 75 or 100.) Once this score has been reached the game will end automatically. This gamemode can also end in a tie if the time limit runs out with both teams finishing on the same number of confirmed kills. (Suicides do not account to player kills if falling off the edge of the map.)

### **Controls:**

#### Main Menu Controls

- Left Mouse Button – Select Gamemode / settings for the game
- Select team
- Quit Game

#### Main In Game Controls

- WASD and Space Bar – Character Movement
- Left Mouse Button – Fire Primary
- Right Mouse Button – Fire Secondary / Aim Down Sight
- Pickups – Collected upon overlap with the object itself

### **Art Style:**

Unreal Tournament Art Style, with assets being used within the Tournament editor to fit the Unreal Tournament experience.

### **Sound:**

Sounds included come pre packaged as part of Unreal Tournament Editor and will be used in conjunction with the level to give it a better experience as well as one that will fit with the Unreal Tournament style.

### **Development Plan:**

- Create a basic outline for how the level should look.
- Create alternative ideas for level outline if required.
- Work on creating a final outline in engine in the style of a blockout.
- Finalise a blockout to start meshing the level.
- Replace the BSP blockout with meshes from within the unreal tournament editor to create a style of level that fits previous Unreal Tournament levels.
- Light the final meshed level as well as add in final details such as post process volumes and decals.

### **Scope Plan:**

#### **In Scope:**

- Create designs for the level in photoshop before going into engine.
- Create a blockout in engine.
- Fully mesh over the blockout to create a fully polished level with assets from within the Unreal Tournament Editor.
- Light the final with lights within the editor to give it a professional feel and style.
- Add in final details such as objects on walls (trim) as well as decals to give more detail to the level.

#### **Out of Scope**

- Create custom assets to fit into the level to make it even more original without having to use only Unreal Tournament Editor assets.
- Create new sounds for the level to make it original and new.
- Create separate areas where the player can teleport too within the map / outside of the main area (such as sniper spots.)

### Development Plan:

Task	Task Requirements	Software Required for each task	Explanation of each Task	Date of expected task finish
Use research to start planning / drawing out a level design.	Plan out how I want my own level to look based off research and ideas.	Photoshop	Plan and create a level idea in photoshop so that I can get a rough idea for how I would like my level to look once I start creating a blockout in engine.  This design can be changed multiple times but must have a set design by the due date set so that creation in editor can be completed on time.	06/05/2021
Design the level in engine in BSP and make sure that everything fits to the planning.	Design the level in a BSP outline in engine based off the drawings created.	Unreal Engine 4 Unreal Tournament Editor	Take the design created during the planning stage and start to create a copy of that in 3D using BSP within the Unreal Tournament.  Have the overall blockout completed by the due date so that meshing of the level can take place, but also so that play testing can be completed before meshing begins to get some feedback on how the level feels and plays as a blockout.  This would be one of the best times for me to get feedback on how to improve the level to make it more fun for others.	16/06/2021
Fully mesh over the level to make a professional standard level that stands out and has a unique style, that hooks the player	Replace BSP with created assets found within Unreal Tournament to create a level that is designed to a professional standard.	Unreal Engine 4 Unreal Tournament Editor	After the blockout has been finalised, with any suggested changes having been made from playtesting. I can go ahead and start replacing the overall BSP blockout with meshed assets to start creating a finalised level which will look like the blockout but will most likely have some slight changes overall into how the level looks.	27/08/2021
Light the level within the unreal tournament editor using assets and lights to direct the players.	Light the scene, so that it is lit to a professional standard, where that level doesn't look too washed out, or too underlit by having too dark areas.	Unreal Engine 4 Unreal Tournament Editor	Make sure that the level has been lit appropriately  Check that lighting has been placed in areas that need it the most, but also so that it is in directions that will guide the player to certain areas, such as flags so they don't need to	27/08/2021

	Make the lighting the focus for the players guidance.		worry as much about not knowing where to go.  Along with this make sure that the level has been lit enough so that the scene doesn't look dark or even over saturated by having too much light placed around it.	
Add in decals and particles to the scene to create more atmosphere.	Finalise the level by adding in decals and particle effects to give the overall project much more atmosphere than without.	Unreal Engine 4 Unreal Tournament Editor	Add in decals and particle effects to create more life and atmosphere on the level. This can be done by placing particle effects such as fire or smoke, and decals such as paintings or even blood, just to make stuff stand out more.  This will make sure that the level doesn't look bland and make it more enjoyable when players are playing the level in unreal tournament.	27/08/2021
Playtest level in Unreal Tournament as a packaged game if possible.	Play test the level in Unreal Tournament to make sure it works as intended with the gamemode that it has been created for.  Make sure that the level gets play tested so feedback can be gathered so any final changes can be made.	Unreal Tournament	Once everything is finalised make sure that I get the level tested within Unreal Tournament itself as a packaged level so that I can get some final feedback on the style and feel of how the gameplay goes.  This will allow me to do some final changes to show the level itself looks, along with change parts of the level such as lighting or even just add in more stuff if time allows it.	27/08/2021
Use research to start planning / drawing out a level design.	Plan out how I want my own level to look based off research and ideas.	Photoshop	Plan and create a level idea in photoshop so that I can get a rough idea for how I would like my level to look once I start creating a blockout in engine.  This design can be changed multiple times but must have a set design by the due date set so that creation in editor can be completed on time.	06/05/2021

Screenshots of Level Blockout:







