

CS 3540 – Game Design Document

Galactic Resurgence

The first deliverable of the project is effectively a proposal for your game vision. For this purpose, you will need to engage in brainstorming and ideation activities **as a team** to flush out your vision for the 3D game you want to develop and come up with functional specifications of your game. The goal of this document will be to capture who, what, when, where, and how of gameplay. The document will include sufficient detail to enable readers to get a good conceptual understanding of what your proposed game is about.

Do your best to come up with an interesting game idea! Also review the project description and generic requirements while formulating your idea.

Please delete all the prompts and submit a well-formatted PDF document. Failing to delete the prompts will lead up to 50% penalty.

1. CHARACTERS

1. Main character is an astronaut whose goal is to take down the evil corporation that is corrupting the planets of the solar system
2. Evil Corporation/Military - Nova Corp
3. Evil CEO/Boss of the corporation who is hiding out on a command ship (Mr. Nova Nemesis).
4. Company Employees who resemble private military forces
5. Enemy pilots in spacecraft

2. STORY/NARRATIVE

There is an evil corporation that's ruling over planets. Our main character wants to stop this corporation but needs parts of evil-destroyed spaceships located on different planets. Using these parts, our main character will be able to make his own ship seem like an enemy spaceship to get through the blockade around the evil base space station to destroy the corporation.

3. GAME WORLD

The game will primarily take place on 4 levels that the main character will traverse through space to get to each level. The 4 3d levels will include a sand planet, snow planet, grass planet, and the final level will be the evil space station. Between each level, the character will be in a spaceship and have to get through enemy spacecraft to reach the next level. There will be 4 spaceship sections.

4. GAMEPLAY

The gameplay will be a first person shooter in the 3d levels. The 2d levels will be a galaga-like space shooter. Overall, the goal of the game is to take down the evil space corporation by destroying the space station/eliminating the evil CEO. Short term, the goal is to defeat the enemies in each level, retrieve the parts, and get back to your spaceship in the 3d levels. For the 2d levels, the goal is to defeat the enemy spacecraft and reach the next planet/level.

5. GAME MECHANICS

3d Player:

- Shoot and defeat enemies with laser
 - Pick up power-ups
 - Pick up spaceship parts
 - Finish the level by reaching the spaceship
- 3d Enemies:
- Shoot at the player to deal damage
- Player in spaceship:
- Shoot enemy spaceships
 - Reach next world
- Enemy spaceships
- Shoot at main character's spaceship to deal damage

6. ITEMS, LOOTS, AND POWER-UPS

The character will start with a laser item with infinite ammo to fight enemies and will be able to pick up a spaceship part in each level to complete win condition. There will be power-ups littered throughout each level that upgrades the main character permanently. These will include a health pickup that increases max health and replenishes health, movement speed power-up, damage power-up, firing speed power-up, and jump power-up.

7. GAME RULES

1. In order to “win” in a level, the player character needs to retrieve an item related to the evil space corporation and return back to their ship.
2. The player character loses by losing too much health
 1. When the player loses, the lose screen will show the player character dead with the player’s achievements below the Game Over Screen.
3. Players lose health by getting shot/hit by enemies

8. TARGET AUDIENCE

The target audience of this game is people who like looter-shooter-style games that have platforming elements. Additionally, it appeals to people who enjoy space-style stories such as Star Wars and Star Trek.

9. ARTWORK

We need environment artwork for each world, so sand, snow, grass, and spacestation assets. We need pixel artwork for the 2d section for the spaceships. We need to make models for the corporation enemies and the final boss, Mr. Nova Nemesis. We need an astronaut character model and laser gun model. We also need to make models for the powerups, 3D spaceship, and the space parts you have to pickup.

Examples of relevant assets we found online that might be used:

<https://dbarabas88.itch.io/urpmobile-deformable-grass>

<https://brokenvector.itch.io/low-poly-tree-pack>

10. GDD PROCESS

We had a discussion over Discord and had a brainstorming session for game ideas. We prepared our GDD on a shared Google Doc to compile our ideas. We also intend on using Trello/Jira to organize ideas and tasks amongst ourselves.