

Team 15

Transporter

Purpose

The purpose of this project is to allow the player to manipulate the sky tram to move forward, backward and stop. While the sky tram is moving, there will be some balls targeting the sky tram. If the sky tram got hit less than 4 or 5 times, the sky tram would start shaking. If the sky tram got hit more than 4 or 5 times, the sky tram would start falling. The player will be allowed to use gun to shoot those ball bullets to make the bullets bounce in other direction. We also want the player to see the view in sky tram to see when the sky tram has arrived. Moreover, we want the player to see the physics when an object gets collided to another object.

Graphical Objects

- **SceneNode Hierarchy**
 - Our three generations will be the tram line, which carries the tram. The tram, which will carry the packages. And finally the packages themselves.
 - You will have the option to move the packages to fit them all into the tram.

Object Interaction

- The enemy gun will be shooting spheres at the tram, if the sphere hits the tram too many times you'll lose.
- You can shoot down the enemy spheres with your own gun. Which will also shoot spheres. Using the same ideas from MP3 we will have the sphere's collide and bounce accordingly.
- There will be a slider bar to control the speed of the tram, this will demonstrate that the hierarchy works when the object moves.

Two Different Views and Camera Manipulation

- First camera will be put on the player to allow the player interacts with the sky tram controller, gun, and packages. Second camera will be put in front of the sky tram to allow the player to see the view outside of the sky tram and be able to know when the sky tram arrives.
- Player will be able to switch the camera view between player and sky tram. If the main camera is on player, then the small camera will be on the sky tram. When the player switches camera, the main camera will now be on the sky tram and the small camera will be on the player.

Timeline:

Date	Milestone
Week 1 (Nov 10 - 16)	Design, sky tram, tram line, and packages movement

Week 2 (Nov 17 - 23)	Shoot the ball, sky tram got hit physics, ball bounce physics
Week 3 (Nov 24 - 30)	Press button, pick up packages, gun
Week 4 (Dec 1 - 7)	Ball floats on the sea, sky tramp falls when it carried overweight packages, debug