

Game Development Test #1

Part 1: Create PreFab Lamp (5pts)

Using the base 3D Game Objects, recreate this Lamp and turn it into a PreFab. You will need to create three materials and use six components.

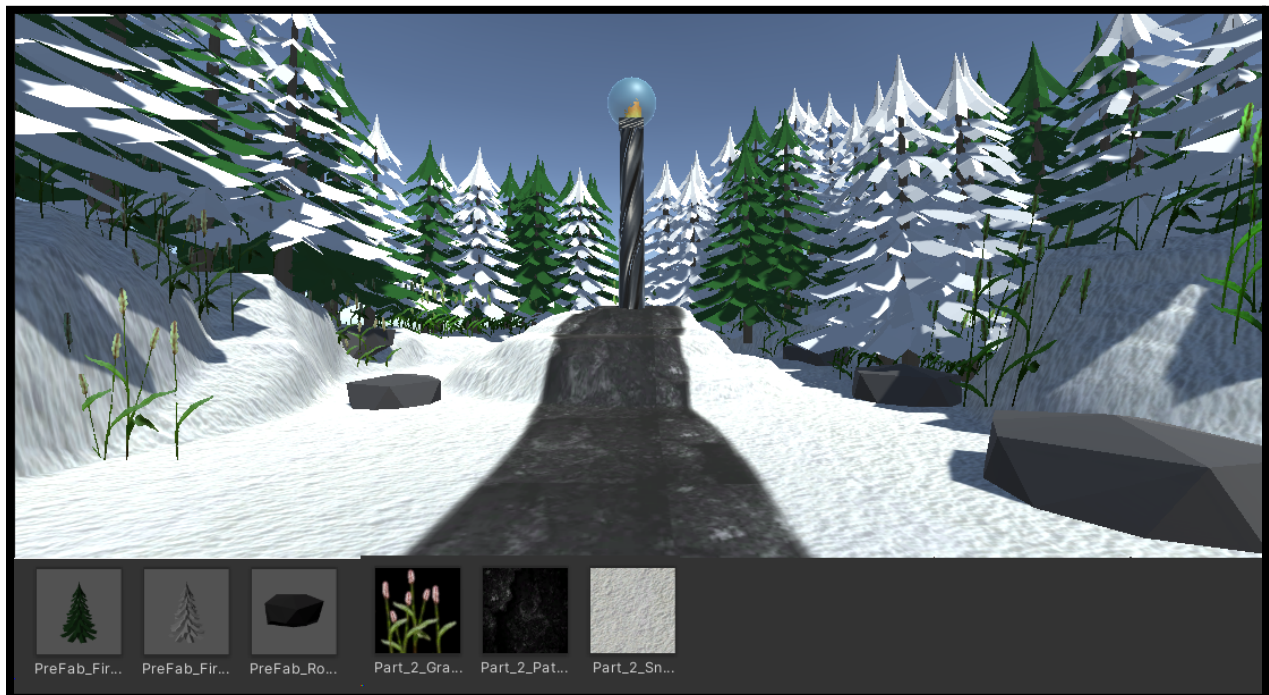
1. Create an empty game object named Lamp to be a parent to all other game objects.
2. Create the body of the Lamp using a Cylinder and two Cubes at each end of the Cylinder.
3. Create an Opaque Metallic Material using the Normal Map and Heightmap and connect it to the body Game Objects.
4. Create a Cutout Material using the Fire Albedo Texture and connect it to a Cylinder rested on top of the body of the lamp.
5. Create a Transparent Material and connect it to a Sphere containing the fire.
6. Once all of that is completed make it into a PreFab.



Part 2: Terrain Snowy Path (5pts)

Using the 3D Terrain Game Object create this snowland scape. You are provided with the three PreFabs, two for Trees and one for Rock as well with three textures on for Grass Detail and two for Painting Layers. Finish the Terrain off by placing the Lamp in the middle of it.

1. Create a 3D Terrain Game Object.
2. Make to download Terrain Tools from Package Manager.
3. Using the Sculpting tools raise and lower parts to create small hills.
4. Using the Paint Texture setting the Sculpting tools create two layers using the Snow and Rock Textures, and paint the level.
5. Using the Tree Tools in the terrain, connect the two Tree PreFabs and create a forest.
6. Using the Detail Tools connect the Rock Prefab and the Grass Texture to the Detail brush and add them to the level.
7. Place the Lamp PreFab you made in Part 1 in the center of the level.



Part 3: 2D Football (5pts)

Using the provided Tile Palette, recreate this scene. You will create two Tilemaps, one used as a background and another as a border for the game. You will also create two Empty game objects with 2D Colliders and Area Effectors that send the ball flying back when it enters the goal. The Ball and Player are provided to you as PreFabs to test the physics of your level.

1. Create a tilemap and draw the Football field.
2. Go into the Palette Folder and change the X tile to red.
3. Create a tilemap and use the Red X tile to make a border around your level. Make sure to apply a Tilemap Collider and a Static 2D Rigidbody to it.
4. Create two empty game objects with 2D Box Colliders and Area Effectors Covering the two painted on Goals that sends the ball back towards the center when it enters.

