

Minecraft Modding - Day 7

Rain Water

Purpose: To place water at the feet of entities when it is raining.

Steps

1. In the package `org.devoxx4kids.forge.mods`, make a new class called `RainWater` and replace its code with the code shown:

```
package org.devoxx4kids.forge.mods;

import net.minecraft.entity.Entity;
import net.minecraft.init.Blocks;
import net.minecraft.util.BlockPos;
import net.minecraft.world.World;
import net.minecraftforge.event.entity.living.LivingEvent.LivingUpdateEvent;
import net.minecraftforge.fml.common.eventhandler.SubscribeEvent;

public class RainWater {

    @SubscribeEvent
    public void makeWater(LivingUpdateEvent event) {
        Entity entity = event.entity;
        World world = entity.worldObj;
        int x = (int) Math.floor(entity.posX);
        int y = (int) Math.floor(entity.posY);
        int z = (int) Math.floor(entity.posZ);

        if (!entity.worldObj.isRaining()) {
            return;
        }

        for (int i = y; i < 256; i++) {
            if (world.getBlockState(new BlockPos(x, i, z)) !=
                Blocks.air.getBlockState().getBaseState()) {
                return;
            }
        }

        if (world.isRemote || !world.getBlockState(new BlockPos(x, y - 1,
            z)).getBlock().isNormalCube()) {
            return;
        }
    }
}
```

```

        world.setBlockState(new BlockPos(x, y, z),
Blocks.water.getBlockState().getBaseState());
    }
}

```

2. Register the RainWater class by adding the following code in MainMod:

```

MinecraftForge.EVENT_BUS.register(new RainWater());

```

Gameplay

1. Use the command "/weather rain" to make the weather rainy
2. Start moving, and water should be placed wherever you go, but it will disappear quickly

TNT Thunder

Add the following method to RainWater class:

```

@SubscribeEvent
public void makeTNT(LivingUpdateEvent event) {
    Entity entity = event.entity;
    World world = entity.worldObj;
    int x = (int) Math.floor(entity.posX);
    int y = (int) Math.floor(entity.posY);
    int z = (int) Math.floor(entity.posZ);

    if (!world.isThundering()) {
        return;
    }

    for (int i = y; i < 256; i++) {
        if (world.getBlockState(new BlockPos(x, i, z)) != Blocks.air
            .getBlockState().getBaseState()) {
            return;
        }
    }

    if (world.isRemote
        || !world.getBlockState(new BlockPos(x, y - 1,
z)).getBlock()
            .isNormalCube()) {

```

```
        return;
    }

    Random random = new Random();

    if (random.nextInt(40) != 1) {
        return;
    }

    EntityTNTPrimed tnt = new EntityTNTPrimed(world);
    tnt.setLocationAndAngles(entity.posX, entity.posY, entity.posZ, 0, 0);
    tnt.fuse = 80;
    world.spawnEntityInWorld(tnt);
}
```

Gameplay

1. Use the command `/weather thunder` to make the weather stormy
2. Spawn a mob in the world, watch for TNT to be placed wherever the mob goes. The TNT will blow up after 4 seconds.