

Minecraft Modding - Day 8

Wall Climber

Purpose: To allow players to climb up straight walls without any blocks or other help.

Steps

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

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

import net.minecraft.entity.player.EntityPlayer;
import net.minecraftforge.event.entity.living.LivingFallEvent;
import net.minecraftforge.fml.common.eventhandler.SubscribeEvent;
import net.minecraftforge.fml.common.gameevent.TickEvent.PlayerTickEvent;

public class WallClimber {

    @SubscribeEvent
    public void climbWall(PlayerTickEvent event) {

        EntityPlayer player = event.player;

        if (!player.isCollidedHorizontally) {
            return;
        }

        if (player.isBlocking()) {
            player.motionY = -0.5;
        } else if (player.isSneaking()) {
            player.motionY = 0;
        } else {
            player.motionY = 0.5;
        }
    }

    @SubscribeEvent
    public void negateFallDamage(LivingFallEvent event) {
        if (!(event.entity instanceof EntityPlayer)) {
            return;
        }
    }
}
```

```
        EntityPlayer player = (EntityPlayer) event.entity;
        event.setCanceled(true);
    }
}
```

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

```
FMLCommonHandler.instance().bus().register(new WallClimber());
MinecraftForge.EVENT_BUS.register(new WallClimber());
```

Gameplay

1. Build a wall straight up with any solid block you want
2. Run into that wall and you should start going up
3. Block with a sword to go down instead of up
4. Hold Shift to stop moving up or down

Arrow Shotgun

Purpose: To turn a stick into a shotgun that fires 20 flaming arrows on right click.

Steps

1. In your package, create a new class called ArrowShotgun and replace its contents with the following:

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

import java.util.Random;
import net.minecraft.entity.player.EntityPlayer;
import net.minecraft.entity.projectile.EntityArrow;
import net.minecraft.init.Items;
import net.minecraft.world.World;
import net.minecraftforge.event.entity.player.PlayerInteractEvent;
import net.minecraftforge.event.entity.player.PlayerInteractEvent.Action;
import net.minecraftforge.fml.common.eventhandler.SubscribeEvent;
```

```
public class ArrowShotgun {

    private final int arrows = 20;

    @SubscribeEvent
    public void shootArrows(PlayerInteractEvent event) {
        EntityPlayer player = event.entityPlayer;
        World world = event.world;

        if (player.getHeldItem() == null) {
            return;
        }

        if ((event.action != Action.RIGHT_CLICK_AIR && event.action !=
            Action.RIGHT_CLICK_BLOCK)
            || player.getHeldItem().getItem() != Items.stick) {
            return;
        }

        Random random = new Random();

        for (int i = 0; i < arrows; i++) {
            EntityArrow arrow = new EntityArrow(world, player, 2);
            arrow.posX += arrow.motionX + random.nextFloat() - 0.5F;
            arrow.posY += arrow.motionY + random.nextFloat() - 0.5F;
            arrow.posZ += arrow.motionZ + random.nextFloat() - 0.5F;
            arrow.canBePickedUp = 0;
            arrow.setFire(10000);
            if (!world.isRemote) {
                world.spawnEntityInWorld(arrow);
            }
        }
    }
}
```

2. Register it using the line shown:

```
MinecraftForge.EVENT_BUS.register(new ArrowShotgun());
```

Gameplay

1. Get a Stick item from your inventory
2. Right click anywhere to shoot arrows