

GREENFOOT: SCROLLING WORLD

Klasse KnightWorld

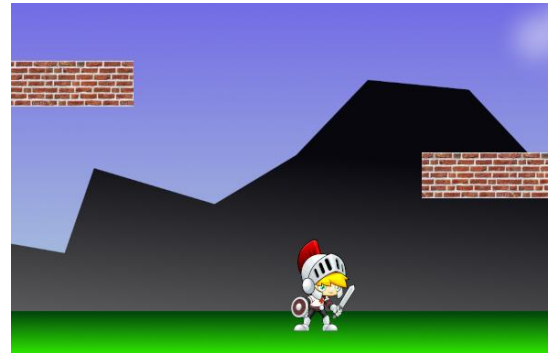
```
import greenfoot.*;

public class KnightWorld extends World
{
    public KnightWorld()
    {
        super(1000, 700, 1);
        this.fillWorld();
    }

    public void fillWorld()
    {
        Player myPlayer;
        myPlayer = new Player();
        this.addObject(myPlayer, 500, 620);

        Platform myPlatform_01;
        myPlatform_01 = new Platform();
        this.addObject(myPlatform_01, 800, 500);

        Platform myPlatform_02;
        myPlatform_02 = new Platform();
        this.addObject(myPlatform_02, 100, 400);
    }
}
```



Klasse Player: Jump und Falling

```
import greenfoot.*; // (World, Actor, GreenfootImage, Greenfoot and MouseInfo)

public class Player extends Actor
{
    private int verticalSpeed = 0;

    public void act()
    {
        this.checkKeys();
        this.checkFalling();
    }

    public void checkKeys()
    {
        if(Greenfoot.isKeyDown("a"))
        {
            this.setLocation(this.getX() - 5, this.getY());
            this.setImage("knightLeft_100px.png");
        }

        if(Greenfoot.isKeyDown("d"))
        {
            this.setLocation(this.getX() + 5, this.getY());
            this.setImage("knightRight_100px.png");
        }

        if(Greenfoot.isKeyDown("space"))
    }
}
```

```

    {
        if(this.onGround() == true || this.getY() > 620)
        {
            this.jump();
        }
    }
}

public void falling()
{
    this.setLocation(this.getX(), this.getY() + verticalSpeed);
    verticalSpeed = verticalSpeed + 1;
}

public boolean onGround()
{
    Actor groundBelow;
    groundBelow = this.getOneObjectAtOffset(0, 50, Platform.class);
    if(groundBelow != null || this.getY() > 620)
    {
        return true;
    }
    else
    {
        return false;
    }
}

public void checkFalling()
{
    if(onGround()==true)
    {
        verticalSpeed = 0;
    }
    else
    {
        this.falling();
    }
}

public void jump()
{
    verticalSpeed = - 20;
    this.falling();
}
}

```