

```
package com.blindtigersgames.werescrewed.entity.mover;

import com.badlogic.gdx.math.Vector2;
import com.badlogic.gdx.physics.box2d.Body;
import com.blindtigersgames.werescrewed.entity.Entity;
import com.blindtigersgames.werescrewed.entity.platforms.Platform;
import com.blindtigersgames.werescrewed.entity.screws.Screw;

public class DirectionFlipMover implements IMover {

    boolean moveLeft;
    Vector2 impulse;
    float prevXPosMeter;
    float accum, timeToFlipAfterNoMove, maxSpeed;

    //private variables to prevent re-allocating them each time move() is called
    private float pos, diff, len;

    /**
     * Attach this mover to a dynamic body. IT will roll it left and right, and
     flip directions if stuck on a wall
     * @param moveLeft Starting direction
     * @param impulseStrength 0.001f is a good slow acceleration speed
     * @param entityToMove Must be dynamic
     * @param timeToFlipAfterNoMove seconds to flip after being stuck on a wall.
     1.5 is a good time.
     * @param maxSpeed 0.03 is a good speed
     */
    public DirectionFlipMover(boolean moveLeft, float impulseStrength, Entity
entityToMove, float timeToFlipAfterNoMove, float maxSpeed){
        this.moveLeft=moveLeft;
        this.impulse=new Vector2(impulseStrength,0);
        if(moveLeft)impulse.x*=-1;
        this.prevXPosMeter = entityToMove.getPosition( ).x;
        this.accum = 0;
        this.timeToFlipAfterNoMove=timeToFlipAfterNoMove;
        this.maxSpeed=maxSpeed;
    }

    /**
     * Initialize this mover with default values
     * @param moveLeft
     * @param entityToMove
     */
    public DirectionFlipMover(boolean moveLeft, Entity entityToMove){
```

```
        this(moveLeft, 0.001f, entityToMove, 1.5f, .03f);  
    }
```

**@Override**

```
public void move( float deltaTime, Body body ) {  
    pos = body.getPosition( ).x;  
    diff = pos- prevXPosMeter ;  
    len = Math.abs( diff );  
    if (len< 0.01f){ //0.01 means the enemy hasn't move much  
        accum+=deltaTime;  
    }  
    prevXPosMeter=pos;  
    if(accum>timeToFlipAfterNoMove){  
        moveLeft = !moveLeft;  
        accum = 0;  
        impulse.x=impulse.x*-1;  
    }  
    if(len<maxSpeed){  
        body.applyLinearImpulse( impulse, body.getWorldCenter( ) );  
    }  
}
```

**@Override**

```
public void runPuzzleMovement( Screw screw, float screwVal, Platform p ) {  
    // TODO Auto-generated method stub  
  
}
```

**@Override**

```
public PuzzleType getMoverType( ) {  
    // TODO Auto-generated method stub  
    return PuzzleType.OVERRIDE_ENTITY_MOVER;  
}
```

```
}
```