

Pseudocode showing player movement

```
bool is_grounded = true
bool is_running = false
sf::Clock jump_timer
bool is_crouching = false
bool sword_equipped = false
```

Left and Right

```
if (A pressed)
{
    move player X (speed * dt)
    is_running = true
    player faces right
}
if (D pressed)
{
    move player X (-speed * dt)
    is_running = true
    player faces left
}
```

Jumping

```
if (Space pressed)
{
    player Y direction = -speed * dt
    is_grounded = false
    jump_timer restart
}
if (jump_timer > 0.15 && !is_grounded)
```

```
{  
    player Y direction = speed * dt * 0.05  
}  
if (player collides with blocks)  
{  
    player.setPosition(current X position, blocks Y position – player height / 2  
    is_grounded = true  
}
```

Crouching

```
if (S pressed && !is_running)  
{  
    is_crouching = true  
}  
if (S released)  
{  
    is_crouching = false  
}
```

Attacking

```
if (player collides with sword)  
{  
    sword.visibility = false  
    sword_equipped = true  
}  
if (Left Click pressed && sword_equipped)  
{  
    attack_range.visibility = true  
    if (player faces left)  
    {
```

```
        attack_range.setPosition(left of sprite)
    }
    Else
    {
        attack_range.setPosition(right of sprite)
    }
    if (enemy collides with attack_range)
    {
        enemy.visibility = false
        enemy_counter++
    }
}
```