

# Documentation

**Resolution: 1024 x 768**

## Controls

WASD → Move

1-9 → Inventory

## Collision Check Function

```
// Collision Check, Check if two rectangles intersect
bool CheckCollision(const SDL_Rect& a, const SDL_Rect& b) {
    // Check if two rectangles intersect
    return (a.x < b.x + b.w) &&
        (a.x + a.w > b.x) &&
        (a.y < b.y + b.h) &&
        (a.y + a.h > b.y);
}
```

Basically if you're on the ground, it needs collision check in order to no clip downwards

And it's for placing blocks and being able to stand on it

## Cloud Animation

```
// Initialize clouds
for (int i = 0; i < 5; ++i) {
    Cloud cloud;
    cloud.position.x = static_cast<float>(rand() % 1024);
    cloud.position.y = static_cast<float>(rand() % 200);
    cloud.speed = 0.0f + static_cast<float>(rand() % 100);
    cloud.texture = cloudTexture;
    SDL_QueryTexture(cloud.texture, NULL, NULL, &cloud.width, &cloud.height); // Get width and height from texture
    clouds.push_back(cloud);
}
```

## Sources

[OpenGameArt.org](https://opengameart.org) → Character and Soundtrack

<https://fc.sitefactory.info/> (ファミコン風 オリジナル効果音 - FC音工場 (sitefactory.info)) → Jump Sound Effect

<https://pngtree.com/> (Pixel Set Vector PNG Images, Pixel Cloud Set, Pixel, Cloud, Set PNG Image For Free Download (pngtree.com)) → Cloud png