



삼성 오픈소스 컨퍼런스
SAMSUNG OPEN SOURCE CONFERENCE

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Tizen game development using the EFL

—

EFL Korea Community

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2015/10/28

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Demo



Element for creating the game

Screen Layout

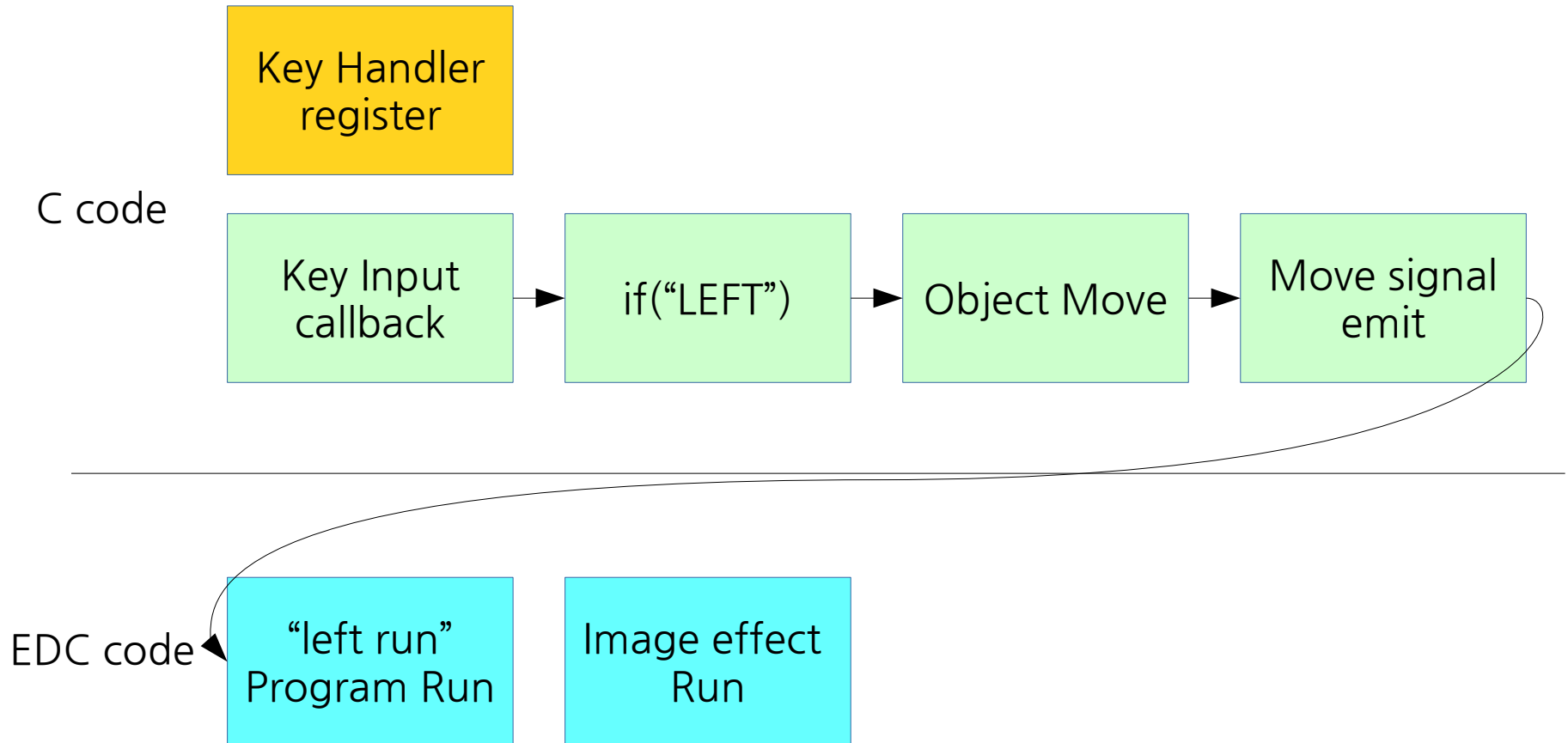
Keyboard input Process

Time progress Process

Event Process

Run Tizen

Left Key input



Key input handler register(C Code)

Key Handler
register

```
ecore_event_handler_add(ECORE_EVENT_KEY_DOWN,  
key_down_cb, player);
```

Key input callback(C Code)

Key Input
callback

if("LEFT")

Object Move

Move signal
emit

```
static Eina_Bool key_down_cb(void *data, int type, void *event)
{
    ...
    if (!strcmp(ev->key, "Left"))
    {
        evas_object_move(data, x - PLAYER_SPEED, y);
        elm_object_signal_emit(data, "left", "");
        direction = 0;
    }
    ...
}
```

Key input handler register (EDC Code)

```
program { "left";  
  signal: "left";  
  source: "";  
  script {  
    if (get_int(left_run) != 1) {  
      set_int(left_run, 1);  
      run_program(PROGRAM:"left_run");  
    }  
  }  
}
```

“left run”
Program Run

Key input handler register (EDC Code)

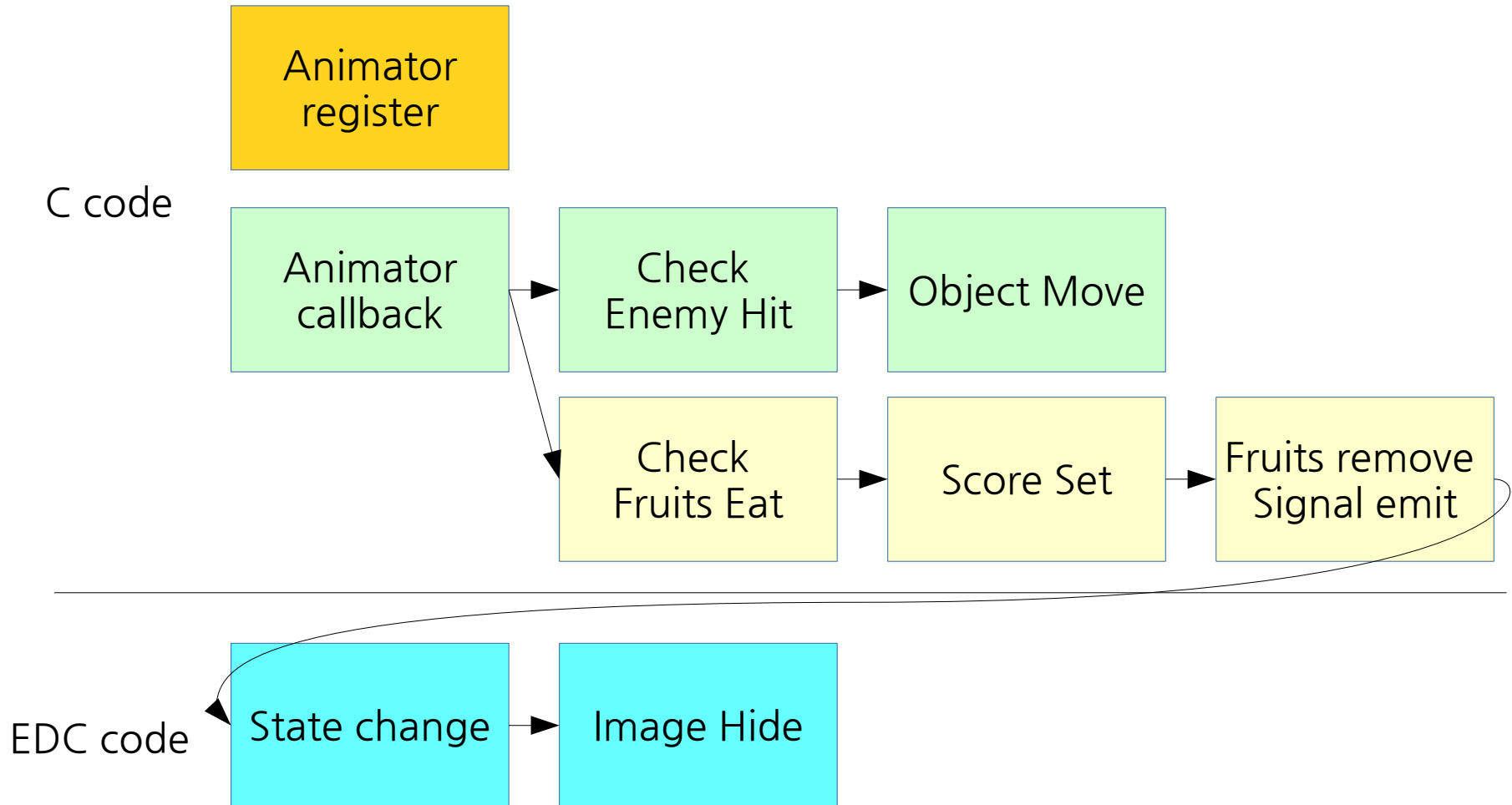
```
program { "left_run";  
  action: STATE_SET "left";  
  transition: LINEAR 0.5;  
  target: "player";  
  after: "left_default";  
}  
desc { "left";  
  inherit: "default";  
  image.normal: "player_left.png";  
  image.tween: "player_left2.png";  
  image.tween: "player_left3.png";  
  image.tween: "player_left3.png";  
  image.tween: "player_left2.png";  
  image.normal: "player_left.png";  
}
```

Image effect
Run



METAL SLUG 1 SPRITES FROM NEO GEO WERE RIPPED BY CARL27 PLZ GIVE CREDIT

Event Process



Animator register(C Code)

Animator
register

```
ecore_animator_add(update_cb, player);
```

Check Enemy Hit(C Code)

Animator
callback

Check
Enemy Hit

Object Move

```
static Eina_Bool update_cb(void *data)
```

```
{
```

```
...
```

```
    evas_object_geometry_get(player, &x, &y, &w, &h);
```

```
    evas_object_geometry_get(enemy, &x2, &y2, &w2, &h2);
```

```
    if (((x + (w * 0.4)) >= x2) && ((x + (w * 0.4)) <= (x2 + w2)) &&  
        ((y + h) >= y2) && ((y) <= (y2 + h2)))
```

```
    {
```

```
        evas_object_move(data, START_X, START_Y);
```

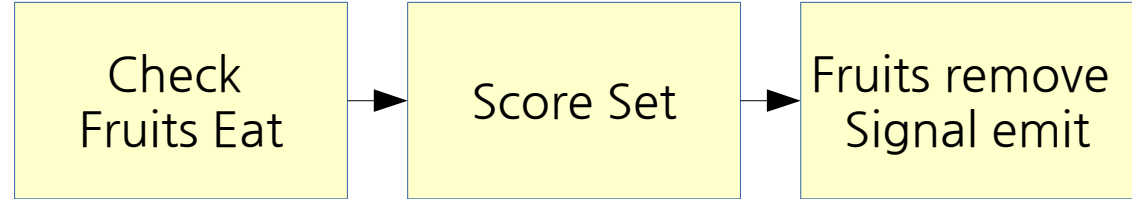
```
        return ECORE_CALLBACK_RENEW;
```

```
    }
```

```
...
```

```
}
```

Check Fruits Eat(C Code)



```
static Eina_Bool update_cb(void *data){ ...
    evas_object_geometry_get(player, &x, &y, &w, &h);
    EINA_LIST_FOREACH_SAFE(fruits, l, ll, fruit) {
        evas_object_geometry_get(fruit, &x2, &y2, &w2, &h2);
        if ((x + w >= x2) && ((x) <= (x2 + w2)) && (y + h >= y2) && ((y) <= (y2 + h2))) {
            char buf[256];
            score += 100;
            sprintf(buf, "%d", score);
            elm_object_part_text_set(overlay, "score", buf);
            sprintf(buf, "fruit%d,remove", (int)evas_object_data_get(fruit, "idx"));
            elm_object_signal_emit(stage, buf, "");
            fruits = eina_list_remove(fruits, fruit);
        }
    }
    ...
}
```

Check Fruits Eat(EDC Code)

State change



Image Hide

```
program {  
  signal: "fruit1,remove";  
  source: "";  
  action: STATE_SET "hide" 0.0;  
  target: "fruit1";  
}
```

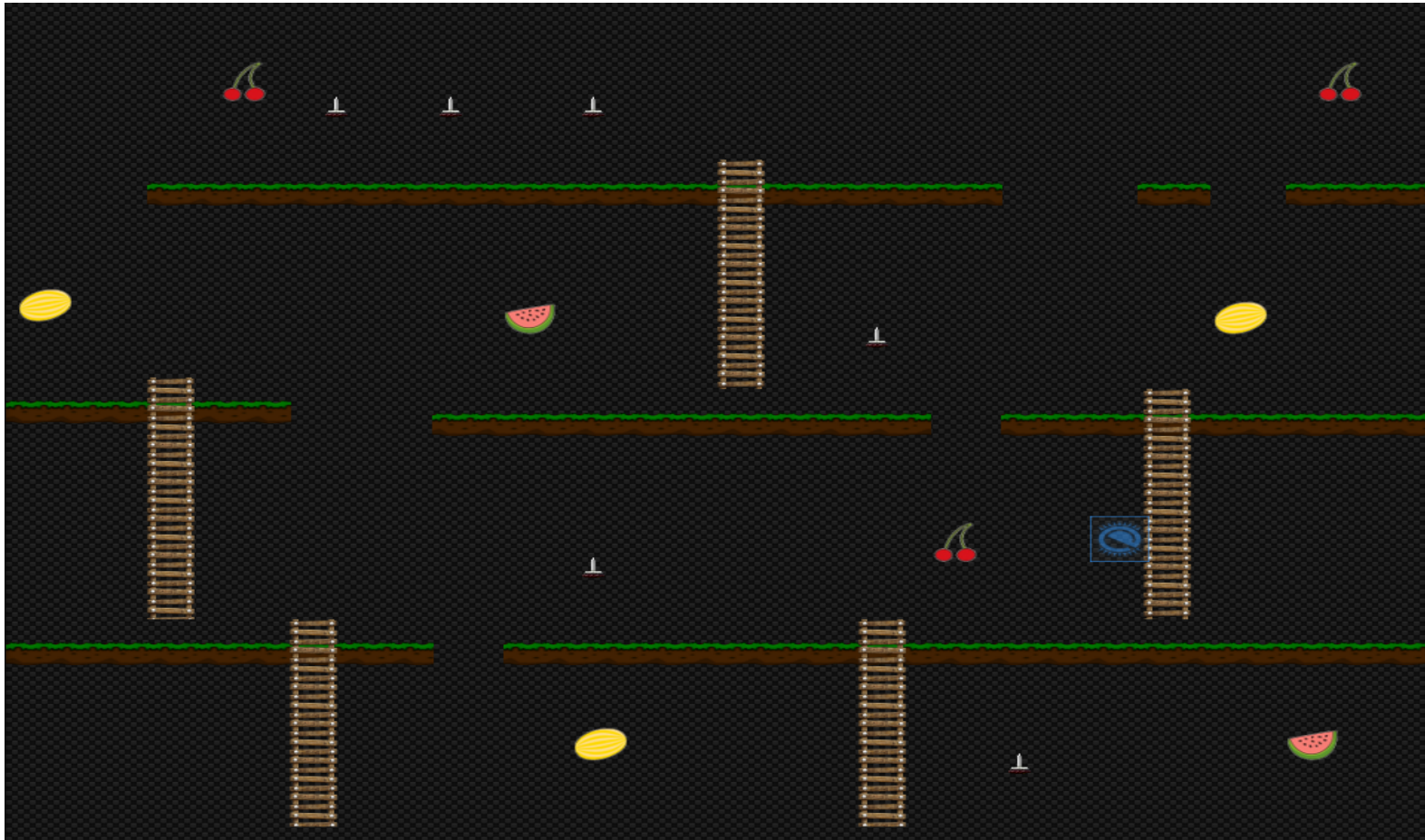
```
desc { state:"hide" 0.0;  
  inherit: "default" 0.0;  
  visible: 0;  
}
```

화면을 구성하는 것들

- 시간 게이지
- 점수
- 캐릭터 (주인공, 적)
- 아이템/함정
- 안개 효과
- 배경화면
- 테두리



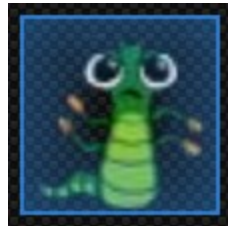
스테이지 구성



배경 화면 구성



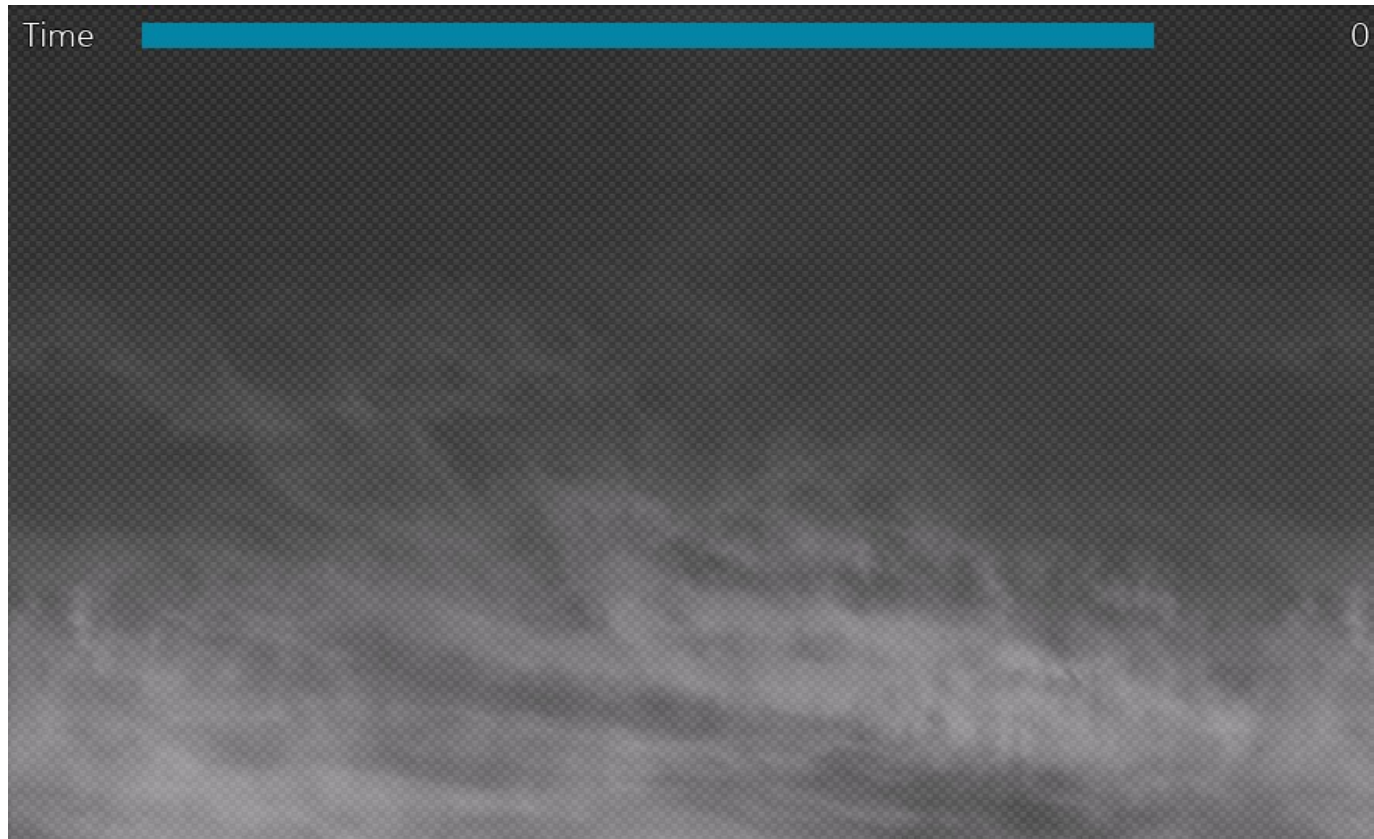
캐릭터(적)



캐릭터(주인공)



오버레이 (안개 효과, 시간 게이지, 점수)



프레임



eio

```
bg_monitor = eio_monitor_add("bg.edj");  
ecore_event_handler_add(EIO_MONITOR_FILE_MODIFIED,  
overlay_changed_cb, overlay);
```

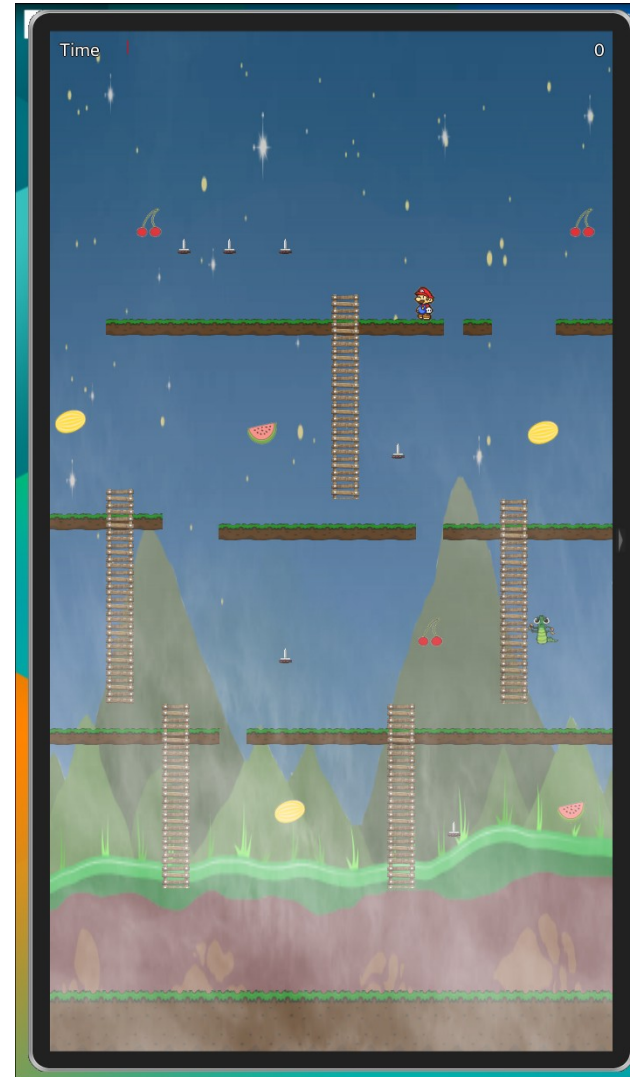
```
$enventor file.edc file.edj
```

Build

GBS/chroot

Rotation,
Key Input

GBS install :
<http://seoz.egloos.com/3900549>



THANK YOU!