

Algorithm:

- 1) Display main menu
- 2) Wait for user to press start
- 3) Start loading the game
- 4) Import the game assets
- 5) Start playing the music
- 6) Gravity function
- 7) Summon hitbox
- 8) Spawn player character
- 9) Let user control the character
- 10) Add bullet functionality
- 11) Exception handling
- 12) Player moves through maze and reaches boss
- 13) Player defeats boss
- 14) Display end screen
- 15) Go back to main menu

Pseudocode:

Class player:

```
Def __init__(self):  
    maxhealth=5;  
    health=maxhealth;  
    inair=True;  
    attack=1;  
    #THOSE ARE VARIABLES FOR X & Y  
    position=[0,0];  
    # VARIABLES FOR ACCELERATION  
    gravity=const(10);  
    acc=[0,0];
```

```
Def damage(self,dmg,health):  
    health=health-dmg;
```

```

Def input(self,position,acc,gravity,inair):
#MAKES SURE PLAYERS DONT MOVE TOOOO FAST
    If acc[0]>10:
        acc[0]=10;
    Elif acc[0]<-10:
        acc[0]=-10;
    If inair &&acc[1]>gravity:
        acc[1]=acc[1]-gravity;
Def displaymaze:
    Fetch the maze graphic

    Get the key that is pressed

#FOR MOVEMENT
    If touching ground:
        inair=False;
    If key==left:
        acc[0]= -10;
    elif key==right:
        acc[0]=10;
    Elif key==space && not inair:
        inair=True;
        acc[1]=50;
    Else:
        acc[0]=0;

    position[0]=position[0]+acc[0];
    position[1]=position[1]+acc[1];

displaymaze()

```

```
if key==right mouse button:
    Play attack animation;
    If attack hitbox hits class Enemy:
        Reduce hp by attack;
        Play enemy hit anim;
        Knock enemy and player back a bit.
```

```
Class enemy:
    Def init():
        hp=5;
        attack=2;
    While hp>0:
        Move left and right;
        If touching player hurtbox:
            Reduce player hp by attack;
            If playerhp>=0:
                End game
            Else:
                Play player hit anim;
                Knock enemy and player back a bit;
        If enemy hp>=0;
            destroy;
```