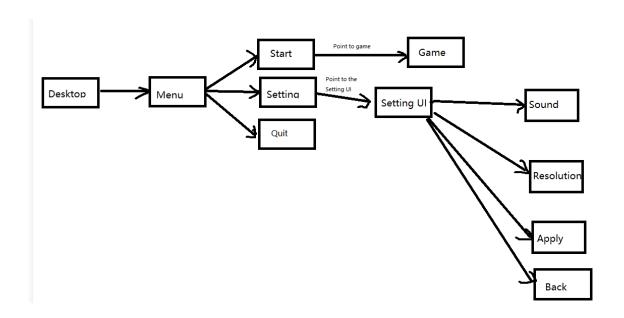
### **User Interface menu**

User Story:
User can start game by using start button
User can set the UI by using Setting button
User can quit game by using Quit button
In the Setting, the Sound can be changed
In the Setting, the resolution can be changed
In the Setting, All settings will be saved after Apply
Each time pressing Back button will back to the Main Menu
Component Diagram:



### First person move controller

#### Collection of Features:

Check floor at beginning

Keep listening to user's keyboard

Controllable move speed num

#### Move:

"w/W" go head

"s/S" go behind

```
"a/A" go left
```

"d/D" go right"

Run:

When listened "SHIFT" move speed up

**Crouch:** 

When listened "CTRL" move speed down

When listened "CTRL" make camera down

Jump:

When listened "SPACE" make camrea up, than down

**UML Class Diagram:** 

# **Move Class**

Check for floor listened keyboard speed num

```
move (listened keyboard)
jump (listened keyboard)
run (listened keyboard)
crouch (listened keyboard)
change camera (num)
change speed (num)
```

#### First person sound effect

MovingAudio: W, A, S, D control character moving send out voice.

runningAudio: when a user clicks shite to make a character runing, it will have a different

sound that moves.

landingAudio: after jumping, it will detect a character touching the ground and make a sound.

Jump: then sound by detect a character jumping

**Crouch:** detect a character crouch then it will make a sound

**UML Class Diagram:** 

# move sound class

listened keyboard start time

moveaudio (listened keyboard)
running audio (listened keyboard)
landing audio (listened keyboard,
starttime)
jump audio (listened keyboard)
crouch (listened keyboard)
paly sound (iput file)

# **First Person FOV Controller**

Collection of Features:
Check vector beginning
Keep listening to user's mouse x-axis and y-axis
Controllable camera movement
Update:
Update the vector.
Checking mouse movement:
Checking the x-axis and y-axis.

**UML Class Diagram:** 

Attributes

character: Vector
velocity: Vector
frameVelocity: Vector

Methods

Reset(vector: character)
Start(vector: character)
Update(vector: character)

FOV is often seen in games with first-person view, the wider the field of view, the more you can see, but the smaller the objects farther away on the screen. Simply put, our field of view is the area that can be covered by the visual field of the eye. In games, FOV refers to the viewing angle displayed on the screen, which mainly depends on the size of the display and the distance between the human eye and the display.