contrib

During the development of the game "Ninja Parkour" I have contributed by implementing the mechanism to update and flip to different scenes. And I also took charge of the running scene.

I have coded “main.py”, “game\_control.py”, “character.py”, “scene.py”, “game\_play.py” in this project.

"main.py" is the entrance of the program. I used a dictionary to store all the scenes linked to the game. And instantiated a game controller to control the game.

“game\_control.py” is a class which contains the functions to control the game, such as the functions to initialize the scene, update the scene, change scenes and detect keys' event. For this part I got inspiration from the article and code sample in the following link:

<https://zhuanlan.zhihu.com/p/127092232>

“character.py” contains a class to define the ninja, which including all the attributes and functions to manipulate the player and to display the corresponding animation. I separate the state of character into “idle”, “run”, “jump up” and “jump down”. Each state has a corresponding function to play animation and to move. I set the dying condition as the character touch the bottom of the screen.

"scene.py" contains the hyper class for all the scene in our game project. This class has three abstract methods which will handle starting a scene, updating a scene and setting sources for the scene respectively. Those abstract methods will be implemented in different actual scene classes.

“game\_play.py” includes a scene class inherit from Scene class mentioned above. When enter this scene, game controller will call the “start” function in this scene class, which will initialize all the resources that is needed in this scene. Then the update function will be called from controller. Character class will be instantiated in this update function and draw the image on the screen. And I wrote the press function to respond the key event. Apart from the character, the background has multiple layers, I loaded several mountains and fog images, and make it move backward in different speeds, which makes the scene more dynamic.