

Documentation

1. Description

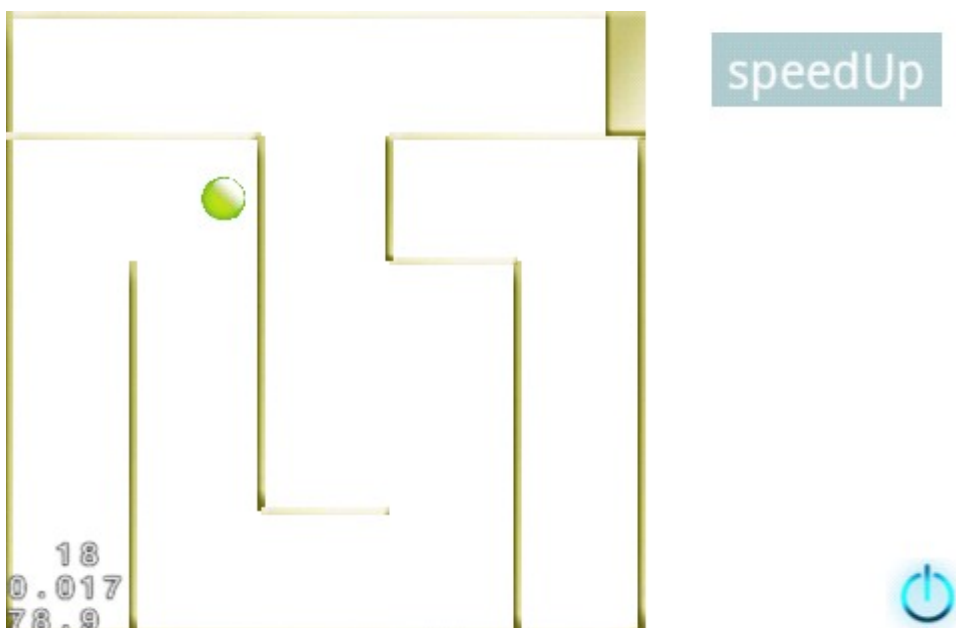
This is maze game for children learning with gravity and physics effect by using the cocos2dx and box2d game engine on the android platform.

In this game, we create a ball and maze ,you can move the ball by shake the mobile,and the interesting part is the gravity direction will change randomly as time went by,which means that when you shake to left it will move to right. Obviously,it will train you reaction ability which is part of the IQ.

And it also has physics effect,when the ball hit the maze,it will bounce just like in real world.

2. gameplay instruction

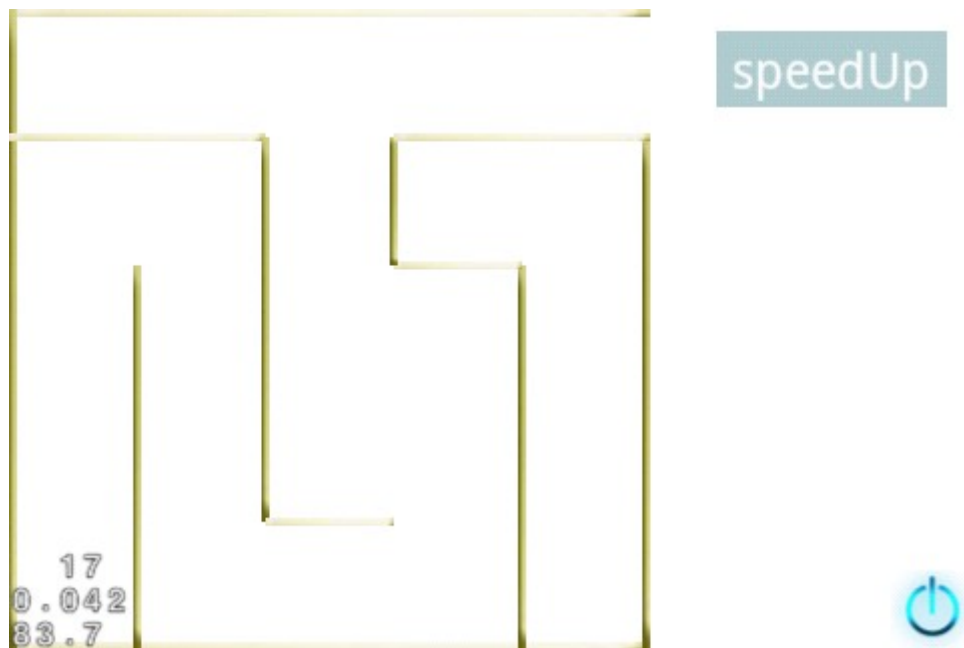
Firstly, this game create a maze and a ball to you. Just as below picture.



Then, you need to shake you mobile to move the ball. It will bounce like real world when you hit the maze. What's more ,the gravity direction will change randomly in ordered time ,which means that when you shake to left,the ball shake to right.

Thirdly, if you want to increase the difficulty,you can just press the speed up button,the time that the game change the gravity direction will speed up.

Finally, when you reach the exit,the exit edge will disappear,and the ball will escape. Just as below picture.



3. sourceCode build enviroment

3.1 NDK plugin

This project is build on eclipse. Firstly ,we need to install the ADT plugin. What's more ,we also need to install the NDK

plugin. Because we need to use the cocos2dx and box2d game engine which is write in C++.

And the method to install the NDK is not like the way to install ADT plugin. We just download it and remember or set the path at system enviroment(because we need to set it at our every project).

3.2 cocos2dx and box2d game engines

My cocos2dx version is 2.2.3. And I need to emphasize that the different version of cocos2dx will have different function names! So if you version is older of newer than my version ,you may could not run my code at you computer.

As the cocos2dx downloaded file already include the box2d engine file. So we just need to download the cocos2dx.

If you system is windows ,you need to install sygwin(maybe at higher version of cocos2dx do not need it),because we need to compile the file of cocos2dx. And my system is Ubuntu,so I do not need to install it.

What's more ,depend on the version of the cocos2dx ,the way to compile and create new project is different. So you need be careful and check it at the official website,it really take me some time to figure it out.

When you compile the cocos2dx and create the project at the

cocos2dx as the manual said. You need to import it to the eclipse.

But this is not over ,you need to add the NDK path to the corresponding file as the manual said. Be careful ,the version is different, the file you need to add is also different.

Finally, we can do our work at eclipse.

3.3 the source code place

But the source code is not write in java , we write at the cocos2dx project place by C++.We just run it on eclipse,which means that we can run this game at IOS or Windows .etc. After we compile them again.