

Name: Anpin Shen

Game description:

This game is about a little who wants to get honey so it has an adventure to the far away grassland. He has to go over three levels and beat the final bee boss in order to get the honey.

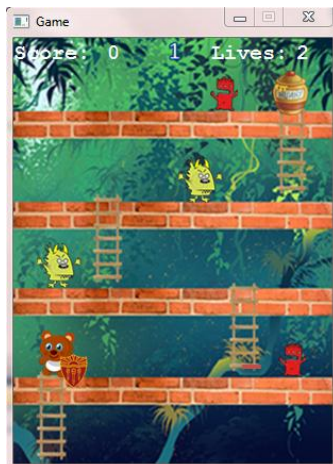
Enemies:



Evil Bee: This is the final boss you want to beat in order to get the honey. He can shoot five bullets in different heights and, compared to you, he is pretty big. You have to climb the ladder and change your height in order to avoid the bullets. (The trick to win is: go to the topmost of the ladder, and slowly move down, as it will not fire at some heights, just shoot it.). If he is shot 30 times, he may die.



Monsters deep inside the forest: They are the monsters you would first meet in level one. They only run in their own levels. But the most terrible thing is that they can shoot you! Every time you climb one level by the ladder, it will automatically shoot at you. At that time the shield is the most useful tool to defeat them. That will be mentioned later.




Monsters deep inside the sea: You can meet them in level two. Actually they are not horrible. But they moves with jumps. And they are moving fast! But you can easily defeat them with your bullets. Watch out to be not touched!



Evil Octopus: This strange sea animal would like to follow you by moving from levels to levels. If you stopped for a little bit longer, it will find you! However it could be defeated by using bullets, but they are not killed! They will just appear to the bottom and go up again! Be careful with it!



Other Elements:

 **Bullet:** This small bullet could kill most everything(except the octopus). Remember it cannot hit other bullets.



Final Target big honey: If you reached that, you win. But you have to overcome three levels and defeat the boss bee first.



Heart: If you get it you can have one bonus life! It appears in level 2



Honey jar: You can get 50 points of score. And it leads you to the next level



Ladder: you can't climb without them.



Little Bear: This is you! Help him to get the honey!!



USC Shield: This is the only weapon you can use to avoid monsters bullets! Make sure you determine a direction first, the shield will appear at either your right side or left side. To determine which side simply press “left” or “right” before you press “x” to bring out the shield. When it is already appeared, remember to press “x” again to take them back. So that it will appear at where you are when you press the x again. Remember it does no harm to monsters.

Instruction:

General keys:

Key_S: start game

Key_P pause game

Key_esc quit

Key_left go left

Key_right go right

Left and then Key_space shoot left

Right and then Key_space shoot right

(if you want to change the direction of the bullet you have to wait till all the opposite direction's bullets have disappeared. You do not need to determine the direction of the bullets in level 3.)

Level 1: Key_up climb a ladder

Key_down go down a ladder

Left and then Key_X shield appears to your left

Right and then Key_X shield appears to you right.

Press Key_X again to take back your shield (to make it appear by your side at a different position next time)

Level 2: Key_Z jump;

No go keyup or keydown.

Level 3: Key_up climb a ladder

Key_down go down a ladder

No shield in level 3.

Purpose/Overview:

To create the best game ever using Qt.

Requirements:

1. 3 screens/levels
2. Three "special" things: shoot directly at you, follow you
3. Quality of scrolling "things"
4. Player score maintained and displayed on screen
5. Player lives managed/game restart on death
6. Using Poly...

Classes:

class Me: describe the behavior of your little bear

member data: QImage image; QRect rect;

class Game: describe the process of the whole game

member data: int x; int timerId; Me *me(little bear); M1 *m1[2](two monster 1); M2

*m2[2](two monster 2); Target *honey(The target honey); bool gameOver(check whether the game is over or not); bool gameStarted;(Check whether you have started the game or not)

bool paused;(check whether you have paused the game) bool top;(check whether it is the first

time you open the game) int score;(record the scores you get) int life;(record the number of your lives)

class Bul: behavior of bullets
int xdir; int ydir; QImage image; QRect rect;

class BIGHoney: behavior of the final target
QImage image; QRect rect;

class Heart: behavior of the heart
QImage image; QRect rect;

class M1,M2,M3,M4,Oct,Boss inherit class Mon
int xdir; int ydir; QRect rect; QImage image; bool destroyed

class Shell: behavior of the shield
QImage image; QRect rect;

Global Data/Functions:
Global Data:
QApplication app(argc, argv);

Game window;//create a window for the game

window.setWindowTitle("Game");//set the window's name to be "Game"
window.show();//show the window
center(window);

High-level Architecture
use the keyboard to control the game.
The game is based on Qt

User Interface
Users use keyboard to input the command. Simply each letter stands for a command
They need to enter the type of command they want according to the game introduction above

Test Cases
Before the game starts
press "s" Game started, else, no use
after the game has started
"up" "down" "left" "right" to control the bear's movement.
"z" to jump
"Space" to fire
"x" to get out/take back shield

"p" for pause the game
"Esc" for quit the game
else, no use.

Picture Resources:

jungle back:

<http://one1more2time3.files.wordpress.com/2008/10/0jungle-test-a-flat.jpg>

usc shield:

http://www.usc.edu/dept/obp/Small%20Use%20Shield_GoldOnCard.jpg

bear:

<http://www.clker.com/cliparts/k/H/I/V/m/0/little-bear-toy-md.png>

beginning background:

http://image1.masterfile.com/em_w/04/41/71/400-04417191w.jpg

grassland back:

http://imgs.mi9.com/uploads/3d/7/green-grassland_1280x1024_110.jpg

seaweed:

http://www.qacps.k12.md.us/ces/clipart/Carson%20Dellosa%20Clipart/Carson%20Dellosa%20Learning%20Themes/Images/Color%20Images/Ocean/OCEAN_SEAWEED.jpg

lobster:

<http://englishlobster.wikispaces.com/file/view/Lobster-cartoon.jpg/299791934/Lobster-cartoon.jpg>

crab:

<http://www.how-to-draw-cartoons-online.com/image-files/cartoon-crab-11.gif>

sea background:

<http://animatedviews.com/wp-content/uploads/2008/09/bleu.jpg>

ladder:

http://image.shutterstock.com/display_pic_with_logo/101720/101720,1246634110,3/stock-vector-three-wooden-ladders-isolated-on-white-background-33065017.jpg

monster 1:

http://image.shutterstock.com/display_pic_with_logo/483673/483673,1292555186,1/stock-vector-little-monster-cartoon-67380682.jpg

monster 2:

http://thumbs.dreamstime.com/thumblarge_254/1207160538iym65i.jpg

honey in level 1:

<http://www.partystore.com/images/products/1fbg2292.jpg>

bricks wall:

<http://www.healthyvending.com/blog/wp-content/uploads/2011/01/brick-wall.jpg>

octopus:

http://www.mystockvectors.com/Evil_Little_Octopus_Royalty_Free_Cartoon_Vector_sjpg4442.jpg

heart:

<http://www.wcdn.net/ev/assets/images/vectors/afbig/pink-lace-heart-clip-art.jpg>

you win back:

http://image.yaymicro.com/rz_1210x1210/0/823/honey-background-8238fd.jpg

bear with honey:

http://image.shutterstock.com/display_pic_with_logo/542959/542959,12651

[84270,1/stock-vector-cheerful-bear-cub-with-honey-and-the-butterfly-cartoon-stile-isolated-on-a-white-background-45851566.jpg](http://image.shutterstock.com/display_pic_with_logo/542959/542959,1265184270,1/stock-vector-cheerful-bear-cub-with-honey-and-the-butterfly-cartoon-stile-isolated-on-a-white-background-45851566.jpg)

you lose back:

<http://us.123rf.com/400wm/400/400/tokhiti/tokhiti0905/tokhiti090500007/4796712-stylized-bees-and-honey-on-a-white-background.jpg>