Hello everyone. My name is Pavel and today I'm gonna tell you about the "Save Princess" game.

So here are some screen-shots, we can see the level map, the Main hero, the enemies, some diamonds and food to collect, the poisonous mushrooms that needed being jump over, the water where the Main hero can sink and the Main boss for the Final fight. Also we can see the traffic-light at the end of first level. Now the light is red, so we can't move second level. We need to kill all enemies to make the traffic-light green.

So this game's a classical platformer.

So, let's try to play. *(playing)* We press "S" and gets to Level1. We start at bottom left corner. We can kill enemies three ways: by throwing a bomb, by planting the bomb and by the jump. Like this. When we kill the enemy he disappears from the screen and the coin appears. We collect diamonds and coins. We should collect at least 12 diamonds in case to make the Princess happy. As we've killed all enemies, the green light appears and we move on the next level. We can use "K" and "L" keys to get a look at the level map. To start the final battle we should ring the gong. Simply touch it. As the gong rings, all enemies disappear and the Main boss stand up "who is disturbing me?". After this he sees the Main hero and keeps moving to him. We also can destroy him by throwing bombs and by the jumps. After the Main boss has been killed the Princess appears. She could be either happy or worry, it depends on the quantity of diamonds we've collected. If the quantity is enough, we win the game. If not, the Princess kills us because she doesn't need a poor man. The game ends by ringing the gong again.

The game is made by using HTML5, canvas, PointJS engine and a little of CSS (just to make a border over the canvas). Here is the whole code structure. We start with connecting PointJS at index.html and then is the global variables declaration, then we describe game loops. What is the loop? It's just the function which will be invoked at every current level game frame. So we starts with "Start" loop, and when we press "S" we move on the "Level 1" loop. If we die during the "Level 1" loop, we move on the "Game Over" loop, and if we press "R" we go back to the start loop. If we successfully pass the "Level 1" loop, we move on "Level 2" loop and so on. We also can press "P" key to pause the game any time we like.

So let's take a look at a single level loop structure. He we can see the three main points. At first we should clear the canvas and then to draw all objects at the screen. These objects are: the map, the surface map, the nature objects (such as the trees, the mushrooms, the house), the stairs, the food, the coins, the diamonds, the enemies and of course the Main hero. All these objects are structured as arrays. We draw it using draw() method of PointJS like this. Next, we should check for the keys, that is being pressed by the player. We use key.isPress() and key.isDown() methods of PointJS. According to keys being pressed, we change some properties of objects, for example we change "Position X" of the Main hero when we press "LEFT" or "RIGHT" button, so the next frame the Main hero will be drawn at another place and it seems like he is moving. And the third main thing that we doing every frame is checking for collisions. Here they are: main hero <> surface, main hero <> enemies, main hero <> bombs, enemies <> bombs, main hero <> food and so on. We use item1.isIntersect(item2) method of Point JS which returns the Boolean. Also we use a lot of "if" constructions every frame, it's very boring to describe them all.

Next, as you can see, we use animation, so it looks like main hero can stand, walk, enemies can walk too. What does the animation looks like? Here is the example of enemy animation. It's a simple png-file which contains several drawings of different stages of enemies and also presented as RGB-data and also alpha-channel for transparency. We keep changing single pictures every frame so it looks good. We use this construction of PointJS to make this.

You can get more information about PointJS at this address http://pointjs.ru/. It's a Russian project.

So that's all for me, thank you for listening.