

NS-SHAFT

(i) Description

The objective of the game is to go as deep as possible in a cave, without being killed. In the game, the user controls the player on screen with the left and right arrow keys. The game begins with the player, with a row of spikes at the top of the screen and platforms below him. The spikes keep moving downwards and the player has to run off the platform he is standing on and fall to one of the platforms below, and continues to do so, until he is killed by the spikes or falls out of the screen. The player only has one life. The platforms have different functions, including a normal platform, a spike platform, a springboard platform, a moving platform and a temporary platform. For every five seconds that has passed, the score will increase by 1. There will be a scoreboard that records the five highest scores.

(ii) Details

I will use the rectangle class to check the collision between the player and the platforms. I will use the decision structures to see which kind of platform collides with the player. I will use key listener to find out which direction the player moves. I will use the timer class to allow the platforms to move.

(iii) IPO Chart

Input	Processing	Output
The name of the user is inputted in a dialog box, a string variable is needed. Left or right arrow key for moving the player I will include a "How to play" section I will let the user choose the difficulty using radio button.	The key event is going to read which key is pressed, and it will change the x position of the player No formulas are needed	The scoreboard The player moved The speed of the platforms moving