

Requirements

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1 Functional requirements

For the game Bubble trouble, the requirements that describe functionality and service are organized under the Functional Requirements. We divided the functional requirements into four sub groups. They are divided using the MoSCoW model. give a priority to the requirements.

1.1 Must haves

- A player must be able to start the game
- The game starts with 'Pedro' (the guy who the player controles) and a big ball somewhere in the map.
- Somewhere on the map, the levels of the player are shown.
- The map has borders where the player and the balls can't go through.
- The player must be able to move left or right with Pedro.
- The player must be able to shoot a rope, when there are no ropes in the game.
- The rope disappears when it hits the roof.
- The rope disappears when it hits a ball.
- The ball should pop into 2 smaller balls when the rope hits it.
- The ball bounces and the maximum height stays the same.
- If the ball has the smallest size and the player hits it, then it will disappear.
- If the ball hits the player, the player dies and loses 1 life.
- If the player dies the level restarts.
- If the player runs out of lifes the game is lost.
- If all balls are disappeared then the game is won.
- When a game is won, the player will go to the next level.
- When the last game is won, the player has won the game.

1.2 Should have

- The player shall be able to start a new game
- The player shall be able to pause a game of Bubble trouble that is currently in progress
- The game ends when the player stops it
- The game shall assign a color to each bubble depending on its size.
- When the game starts the player score is 0.
- Score increases when the player pops a ball.
- Score increases more when the player pops a bubble before the first bounce.
- Score increases when the level is won and there is time left.
- When the player dies the score of that level resets.
- When the bubble hits the roof the entire ball disappears and the players score increases.
- In the interface next to the board is the current score shown.

1.3 Could have

- You should be able to play the game with two players.
- A local leaderboard of scores.
- Continuing in the last level where you left

1.4 Would/Won't have

- Creating own levels.
- More than 2 player modes.
- Online leaderboard of scores.

2 Non-functional requirements

It is also usefull to provide a list of constraints. These requirements will not tell what the system should do, but instead indicate the constraints that apply to the system or the development process of the system.

- The game shall be implemented in Java.
- A basic functionally game should be delivered on friday September 11, 2015 before 23:55.
- The final product shall be delivered October 30, 2015 before 23:55.
- The game shall be playable on Windows.
- We will use the Scrum methodology to create this game.
- Our group consists of only 5 people.