

Requirements Bejeweled

by Group 30

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1. Functional Requirements

1.1 Must have's

- The player shall be able to start a new game after starting the program.
- The game shall initiate and show the player's score at 0.
- The game shall start with a board filled with gems.
- The game board shall consist of a grid with 8 by 8 cells, each cell filled with a gem.
- A combination of gems is a row or column of 3 or more identical gems or both.
- The player is able to switch two neighbour gems, if and only if it forms one or more combinations.
- If a combination is formed, the gems disappear and a score is granted to the player.
- The player shall get 10 points for each disappeared gem.
- If there's an empty cell below a gem, the gem will move a cell down.
- If there's an empty cell on the top row, a random new gem will appear.
- The player shall be able to see his score during the game.
- The player shall start with a certain amount of time.
- The player shall get more time each time a combination is formed.
- The game shall be over when the time runs out.

1.2 Should have's

- The game shall be over when no more switches can be made or the player runs out of time.
- The player shall be able to pause the game.
- The player shall be able to start a new game from the pause menu.
- There shall be sound effects playing when a player makes a move.
- There shall be music playing in the background.
- There shall be 3 special gems.
- The first special gem shall appear when a combination of 4 gems is formed. This special gem shall give a double amount of points when a combination with this gem is formed.
- The second special gem shall appear when a combination of 5 gems is formed. This special gem shall remove an entire row of gems when a combination with this gem is formed.
- The third special gem shall appear when a combination of 6 or more gems is formed. This special gem shall remove all gems in the field with the same color when a combination with this gem is formed.
- The player's score shall be saved to a high score list when game over.
- The player shall be able to see the highscore list.
- When a game has ended, the player shall be able to start a new game.

1.3 Could have's

- The game shall have gems with die faces which can form yatzee rows.
- The player shall be able to switch the music on or off.

1.4 Would/Won't haves

- The player shall not be able to change the background music.
- The game shall not have a disco mode.
- The game shall not have a multiplayer mode.

2. Non Functional Requirements

- The game must be playable on Windows (7 or higher).
- The game shall be implemented in Java.
- The game shall have 6 different gems.
- The first iteration of the game, which is fully working, shall be delivered at September 11, 2015.