



Bubble Breaker

Try to arrange big areas of bubbles with the same color. The more bubbles of the same color are part of an area, the more points you will get. 500 is quite good, 1000 is outstanding.

Product description

The aim of this game is to arrange big areas of bubbles of the same color. The more bubbles of the same color are part of an area, the more points you will get. 500 is quite good, 1000 is outstanding.

At the beginning the field is initialized and random color values are assigned to the bubbles. The High Score is loaded from a file. By selecting a bubble for the first time, the game calculates the possible points for removing the area around the bubble. Clicking a second time, all bubbles in the area which have the same color are removed. Only areas with more than one bubble are removed.

In the next step the program checks if there are areas remaining or if the game is over. When the user finishes the game and reaches a new high score, it is stored in a file. A new game can be started.

More information

```PLC_PRG```: The main program, which initializes the game, controls the user action and checks if the game is over. The selected bubbles are stored and the possible points calculated.

`GenerateColor`: Randomly generates one out of five colors.

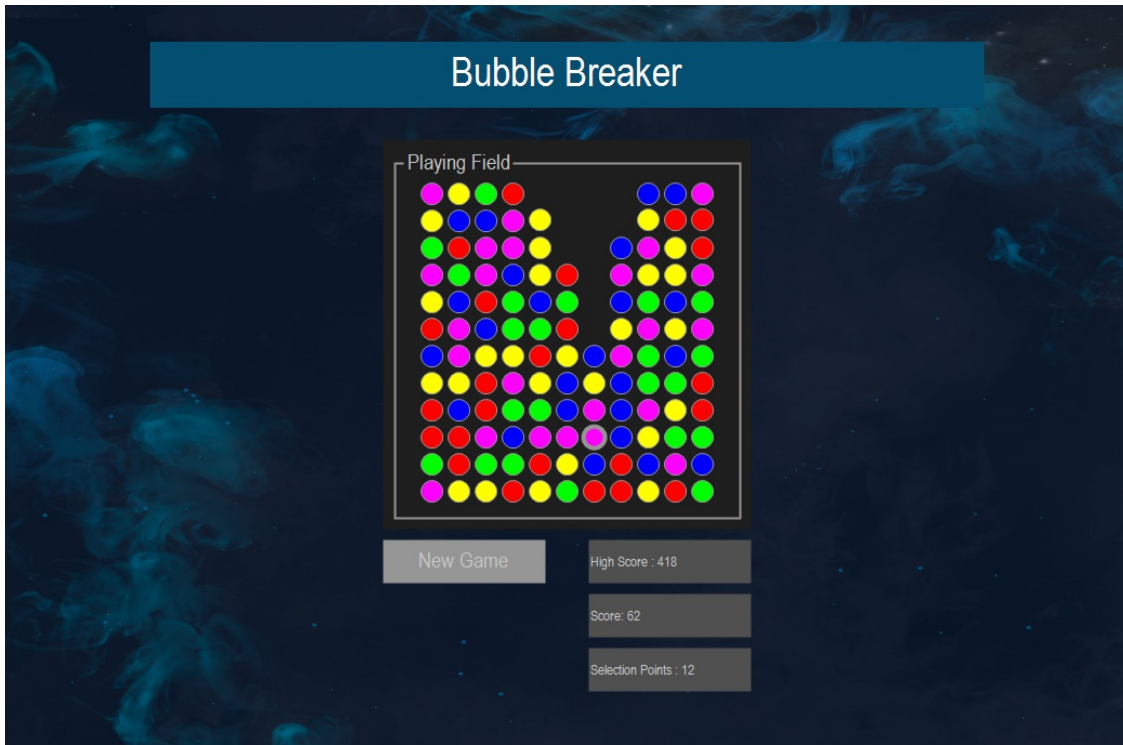
`GameOver`: This program proves if there is an area with at least two bubbles of the same color. If not, the game is over.

`Random`: Generates a random value, which is used to generate a color for the bubbles.

`RemoveBubbles`: Based on the selected bubble, the area with bubbles of the same color is marked and the according points are calculated. When the area consists of more than one bubble of the same color all bubbles are removed if the selected one gets clicked again. Emerging gaps will be filled with the remaining bubbles and empty rows removed.

`visu`: The visualization shows the game field with all bubbles. Pressing the `New Game` button initializes a new game in the `PLC_PRG`. The `High Score` displays the value from the High Score file. `Score` shows the current point. `Selection Points` shows the possible points for the selected area. Depending on the score at the end of the game one of three banners is displayed.

Screenshots



## General information

### Manufacturer:

3S-Smart Software Solutions GmbH  
 Memminger Strasse 151  
 87439 Kempten  
 Germany

### Support:

<https://support.codesys.com>

### Item:

Bubble Breaker

### Item number:

000010

### Sales:

CODESYS Store

<https://store.codesys.com>

### Included in delivery:

- CODESYS software and / or license key with billing information
- For training courses and events: Booking confirmation

## System requirements and restrictions

<b>Programming System</b>	CODESYS Development System Version 3.5.14.0 or higher
<b>Runtime System</b>	CODESYS Control Version 3.5.14.0
<b>Supported Platforms/ Devices</b>	Note: Use the project "Device Reader" to find out the supported features of your device. "Device Reader" is available for free in the CODESYS Store.
<b>Additional Requirements</b>	-
<b>Restrictions</b>	-

*Note: Not all CODESYS features are available in all territories. For more information on geographic restrictions, please contact [sales@codesys.com](mailto:sales@codesys.com).*

*Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.*