POLIMI GAMES – USER MANUAL

M4ALL PROJECT

Abstract
User manual of games developed by
Politecnico di Milano in the EU project M4ALL.

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VEP Games – "Bubble"

User Manual

Terminology

Configuration: it represents the collection of information related to a game level, as the name, the difficulty level, the reward and all the specific features of the game.

Sequence: it represents a list of conficurations for a child.

Game start

In order to start the **VEPGames** collection it is necessary to double-click the executable file:

IIT.VEP.GameTemplate.Container.exe

located into the main folder.
A window is shown where it is possible to select a specific game through a drop-down menu; the selected game can be started by clicking the *Start* button.
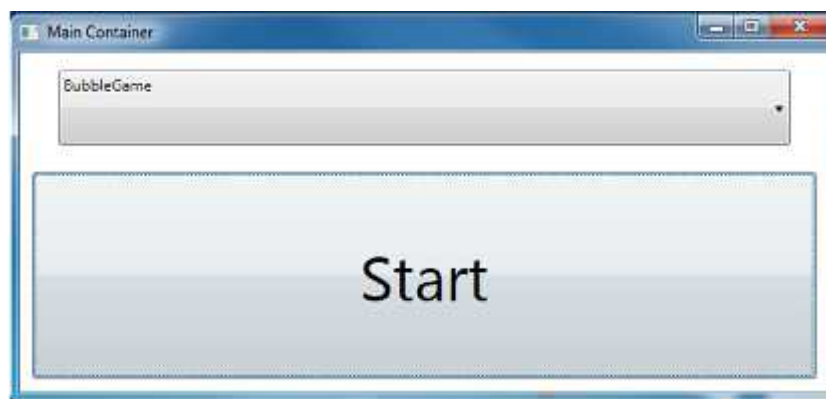

Figure 1 - Game Start

A new window shows the main page of the selected game, where it is possible to select a specific configuration sequence for the selected child.

These sequences are grouped by difficulty, from "simple", represented by the number 1, to "hard" represented by the number 5.

In the bottom-right corner of the screen there is a button in order to see the settings page.

Figure 2 - Main Page

Configurations

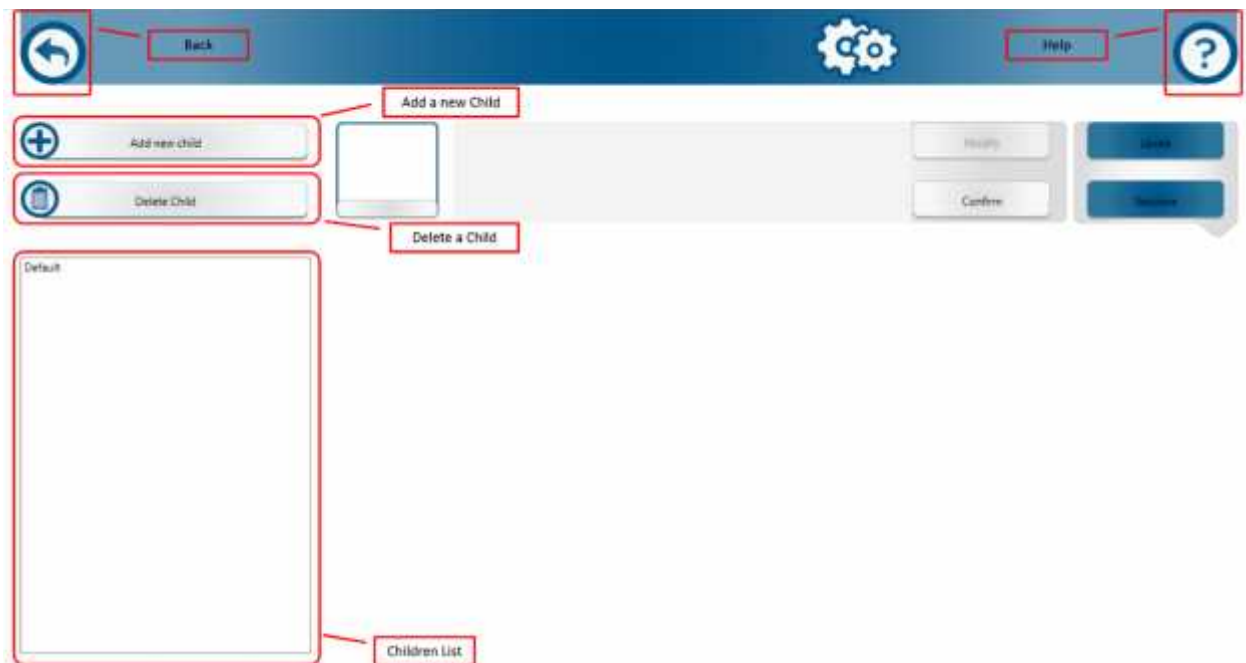Into the Setting section, it is possible to edit and create the game configurations.

Figure 3 - Setting screen

Here it is possible to:

- Add a new child;
- Delete an existing child and all his related configurations;
- Select an existing child and see all his saved configurations;

1. ***Add a new child***

Click on *Add new child;*

Insert the name of the child into the appropriate field;
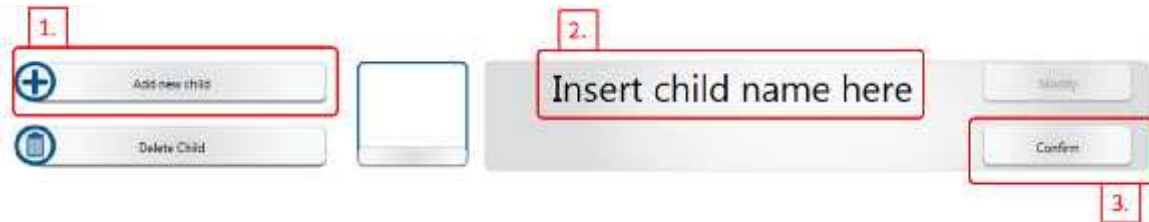
Click on *Confirm.*

Figure 4 - Add a new Child

2. **Delete an existing child**

    Select an existing child from the left sidebar;

    Click on *Delete Child.*

3. **Show the child configurations**

    In order to see the child configurations it is necessary to select a child from the left sidebar and to click on the *Levels* button; it will appear a frame used to edit the selected configuration, as shown in Figure 3.
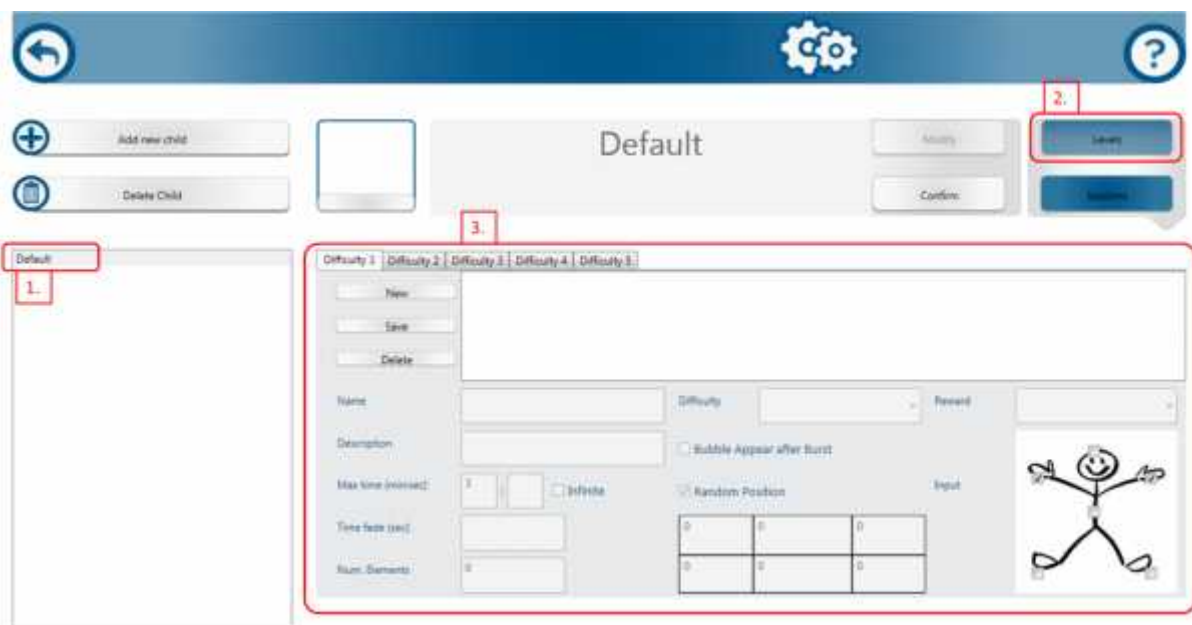

Figure 5 - A child's configurations

4. **Add a new configuration**

    Show the available configurations for a selected child;

    Select the desired difficulty *tab*;

    Click on *New level*.

    A new element will appear into the list;

    Insert all the configuration parameters;

Name: the configuration name;
Description: the configuration description;
Max time: maximum game time, as minutes and seconds (it can be infinite);
Time fall down: the asteroids fall down time;
Num. Columns: the number of virtual columns in which the screen is divided and where the asteroids fall down;
Num. Elements: the total number of asteroids that fall down;
Num. Stars: the number of additional lives that fall down;
Elem. Dimensions: the dimension of asteroids (small, middle, big);
Input Type: the body part that moves the player avatar (body, right hand, left hand)
Difficulty: the configuration difficulty;
Reward: the video to show in case of victory.

After all parameters have been set, click on Save button to save the configuration.

5. ***Edit an existing configuration***
   Show the available configurations for a selected child;
   Select the desired difficulty tab;
   Select a specific configuration from the list;
   Edit the appropriate parameters;
   Click on *Save* to save changes.
6. ***Delete an existing configuration***
   Show the available configurations for a selected child;
   Select the desired difficulty tab;
   Select a specific configuration from the list;
   Click on *Delete*.

Game
In order to start the game, return to the main page and select an enabled sequence for a specific child.

VEP Games – "Space"

User Manual

Terminology

Configuration: it represents the collection of information related to a game level, as the name, the difficulty level, the reward and all the specific features of the game.

Sequence: it represents a list of conficurations for a child.

Game start

In order to start the **VEPGames** collection it is necessary to double-click the executable file:

IIT.VEP.GameTemplate.Container.exe

located into the main folder.
A window is shown where it is possible to select a specific game through a drop-down menu; the selected game can be started by clicking the *Start* button*.*
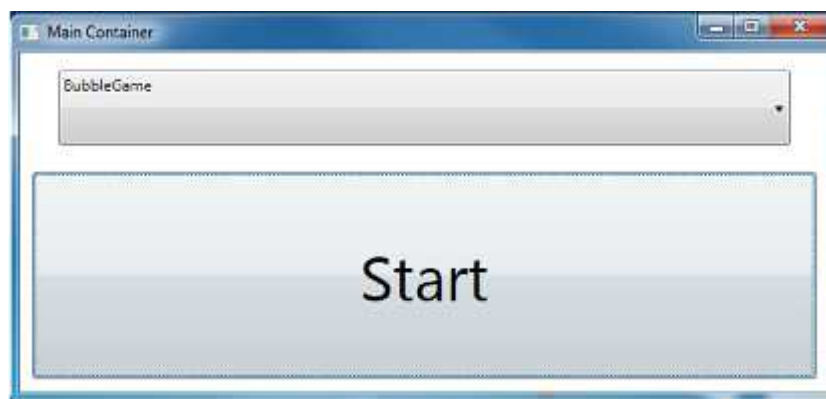

Figure 1 - Game Start

A new window shows the main page of the selected game, where it is possible to select a specific configuration sequence for the selected child.

These sequences are grouped by difficulty, from "simple", represented by the number 1, to "hard" represented by the number 5.

In the bottom-right corner of the screen there is a button in order to see the settings page.

Figure 2 - Main Page

Configurations

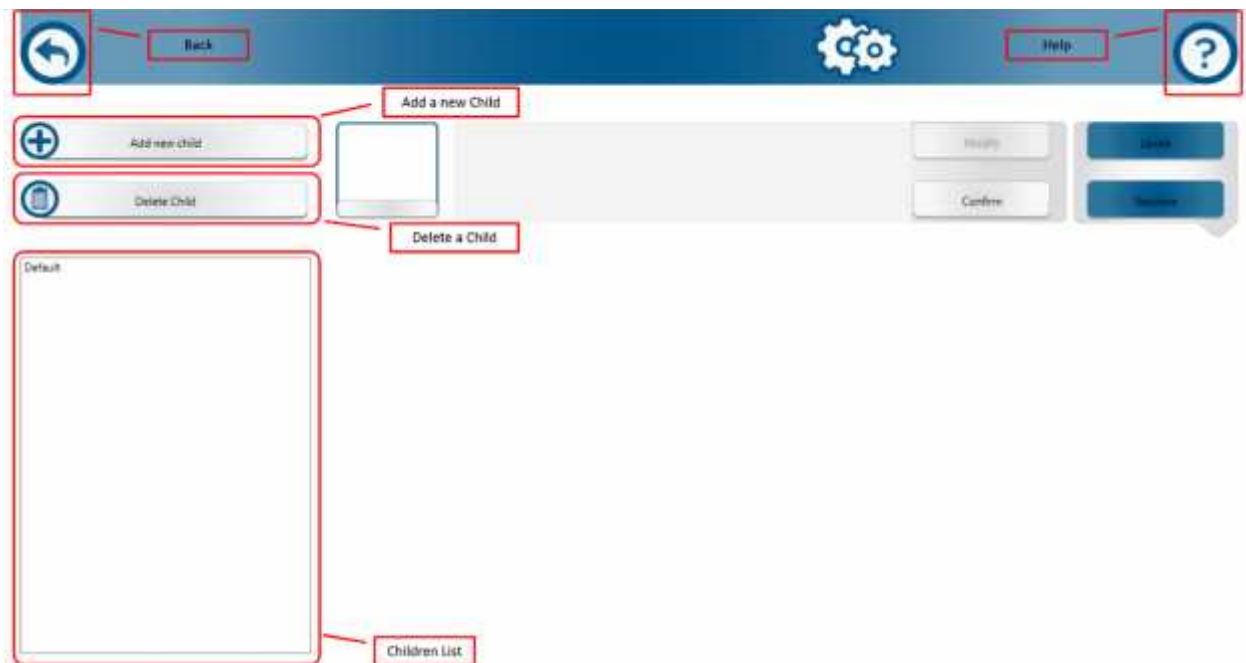Into the Setting section, it is possible to edit and create the game configurations.

Figure 3 - Setting screen

Here it is possible to:

- Add a new child;
- Delete an existing child and all his related configurations;
- Select an existing child and see all his saved configurations;

1. ***Add a new child***

Click on *Add new child;*

Insert the name of the child into the appropriate field;
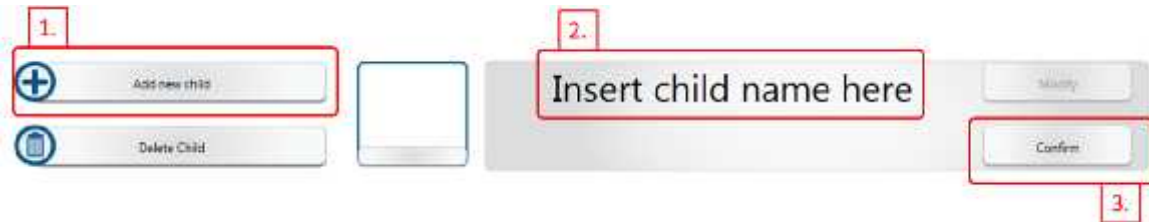
Click on *Confirm.*

Figure 4 - Add a new Child

2. **Delete an existing child**

    Select an existing child from the left sidebar;

    Click on *Delete Child.*

3. **Show the child configurations**

    In order to see the child configurations it is necessary to select a child from the left sidebar and to click on the *Levels* button; it will appear a frame used to edit the selected configuration, as shown in Figure 3.
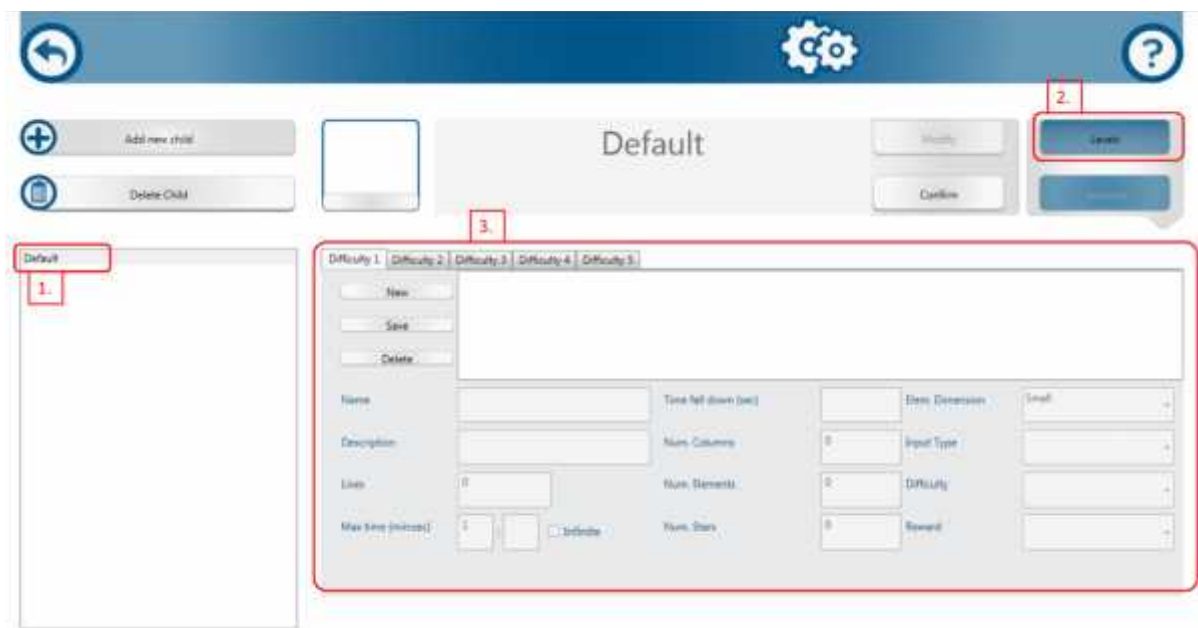

Figure 5 - A child's configurations

4. **Add a new configuration**

    Show the available configurations for a selected child;

    Select the desired difficulty *tab*;

    Click on *New level*.

    A new element will appear into the list;

    Insert all the configuration parameters;

       Name: the configuration name;
       Description: the configuration description;
       Lives: the available player lives;
       Max time: maximum game time, as minutes and seconds (it can be infinite);
       Time fall down: the asteroids fall down time;
       Num. Columns: the number of virtual columns in which the screen is divided and where the asteroids fall down;
       Num. Elements: the total number of asteroids that fall down;
       Num. Stars: the number of additional lives that fall down;
       Elem. Dimensions: the dimension of asteroids (small, middle, big);
       Input Type: the body part that moves the player avatar (body, right hand, left hand)
       Difficulty: the configuration difficulty;
       Reward: the video to show in case of victory.

       After all parameters have been set, click on Save button to save the configuration.

5. *Edit an existing configuration*
       Show the available configurations for a selected child;
       Select the desired difficulty tab;
       Select a specific configuration from the list;
       Edit the appropriate parameters;
       Click on *Save* to save changes.

6. *Delete an existing configuration*
       Show the available configurations for a selected child;
       Select the desired difficulty tab;
       Select a specific configuration from the list;
       Click on *Delete*.

Game

In order to start the game, return to the main page and select an enabled sequence for a specific child.

VEP Games – "Shape"

Terminology

Configuration: it represents the collection of information related to a game level, as the name, the difficulty level, the reward and all the specific features of the game.

Sequence: it represents a list of conficurations for a child.

Game start

In order to start the **VEPGames** collection it is necessary to double-click the executable file:

IIT.VEP.GameTemplate.Container.exe

located into the main folder.

A window is shown where it is possible to select a specific game through a drop-down menu; the selected game can be started by clicking the *Start* button.
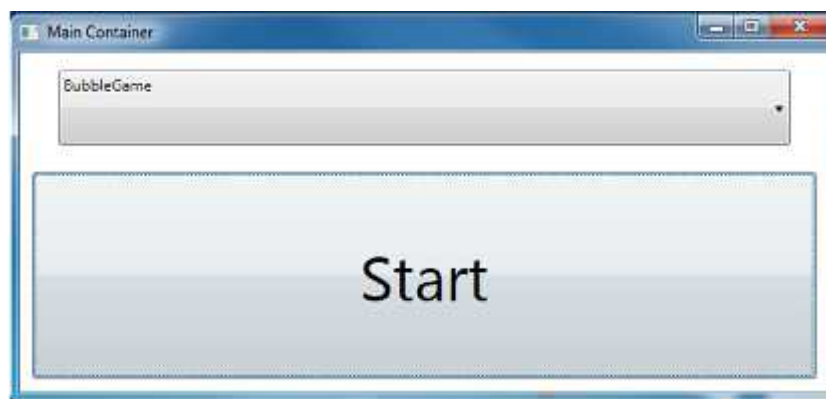

Figure 1 - Game Start

A new window shows the main page of the selected game, where it is possible to select a specific configuration sequence for the selected child.

These sequences are grouped by difficulty, from "simple", represented by the number 1, to "hard" represented by the number 5.

In the bottom-right corner of the screen there is a button in order to see the settings page.

Figure 2 - Main Page

Configurations

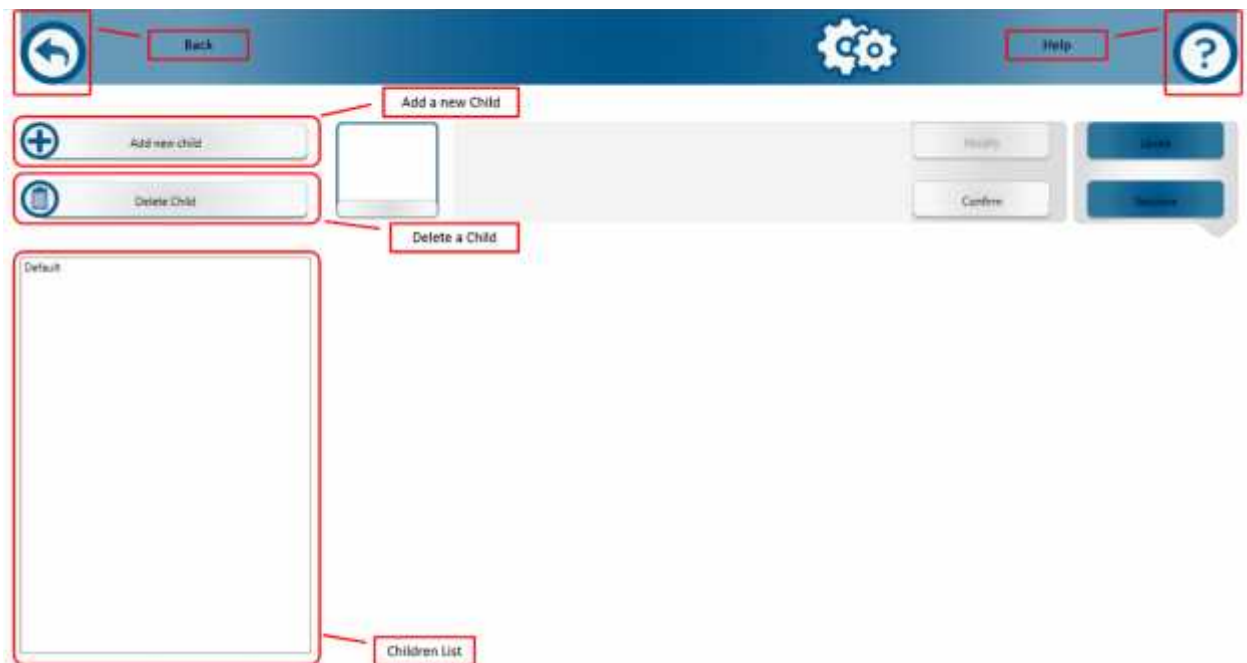Into the Setting section, it is possible to edit and create the game configurations.

Figure 3 - Setting screen

Here it is possible to:

- Add a new child;
- Delete an existing child and all his related configurations;
- Select an existing child and see all his saved configurations;

1. ***Add a new child***

Click on *Add new child;*

Insert the name of the child into the appropriate field;
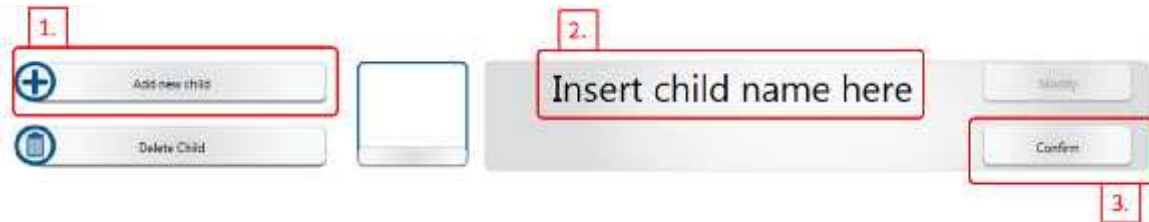
Click on *Confirm.*

Figure 4 - Add a new Child

2. **Delete an existing child**

   Select an existing child from the left sidebar;

   Click on *Delete Child.*

3. **Show the child configurations**

   In order to see the child configurations it is necessary to select a child from the left sidebar and to click on the *Levels* button; it will appear a frame used to edit the selected configuration, as shown in Figure 3.

Figure 5 - A child's configurations

4. **Add a new configuration**

   Show the available configurations for a selected child;

   Select the desired difficulty *tab*;

   Click on *New level*.

   A new window is shown where it is possible to add the shape that must be replicated by the child during the game:
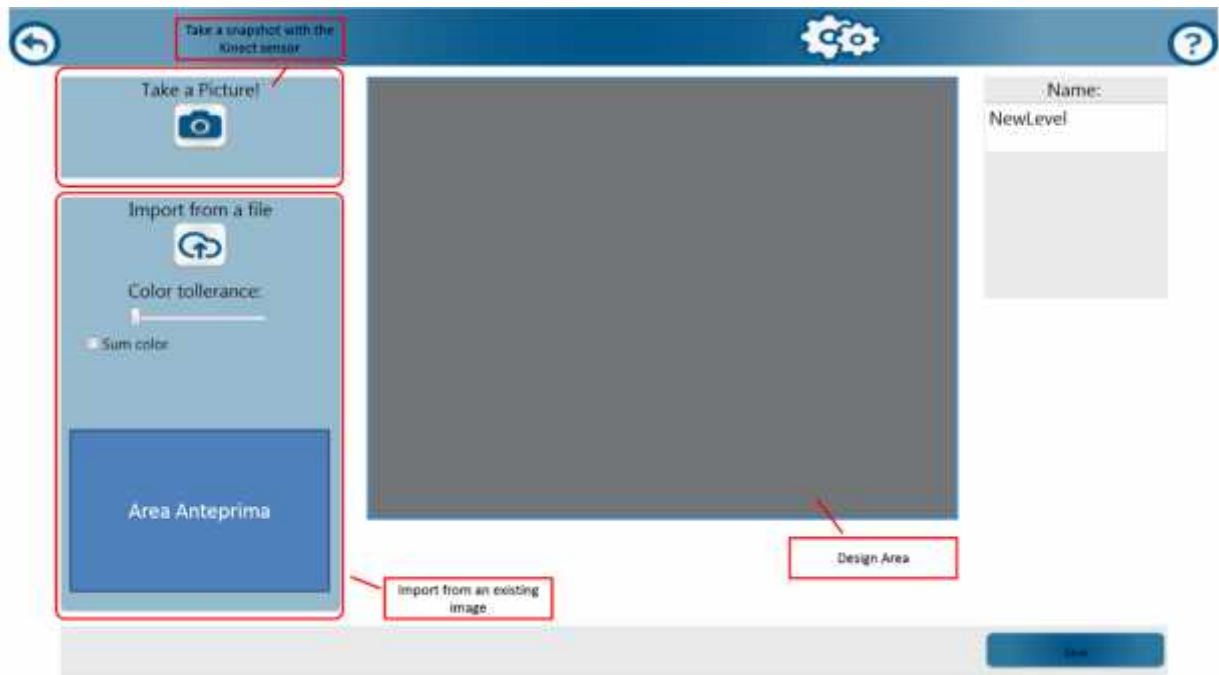
Figure 6 - Add a new Shape

In particular, with this feature it is possible to add a new shape through two different modalities:

- Take a snapshot using the Kinect sensor;
- Import an existing image from the file system.

With the second method, it is necessary to follow these steps:

(1) Click on *Import from a file* and import an image (a PNG format is preferable) → it will appear the preview of the image;
(2) Set the covering threshold;
(3) Select from the preview the image portions that will form the shape → the parts will appear into the design area;
(4) If necessary use the left mouse click to draw and the right mouse click to erase parts of the image into the design area;
(5) When completed, insert a name for the shape and save it.

NOTES: the shape that has to be covered is formed by the **BLACK** pixels.

After the new shape is saved, it is possible to insert all the other configuration's parameters:

Name: the configuration name;
Description: the configuration description;
Max time: maximum game time, as minutes and seconds (it can be infinite);
Threshold: the shape covering threshold, in percentage;
Time pose: the time to maintain the shape;
Background: the background image (usually the same of the shape);
Difficulty: the configuration difficulty;
Reward: the video to show in case of victory.

Game

In order to start the game, return to the main page and select an enabled sequence for a specific child.