



# **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.

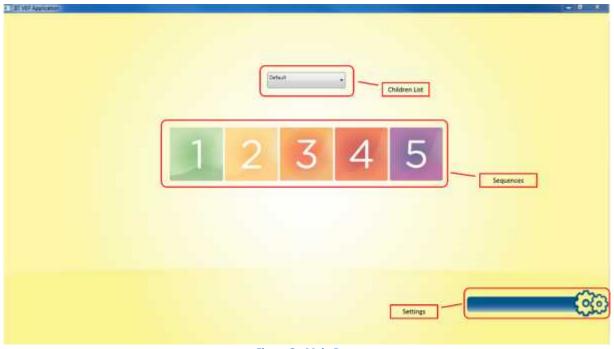
A window is shown where it is possible to select a specific game through a drop-down menu; the selected game can be started by clicking the *Start* button.

Main Container BubbleGame		
	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.

Add a	new Child	1007
Delete Dold	te a Child	Cartine
Default	ie a Chilo	
Children	List	

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;

Click on Add new child;

Insert the name of the child into the appropriate field;

Click on Confirm.

Add cess thild	Insert child name here
Delete Child	Confer

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.

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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;

Difficulty 1	Difficulty 2	Difficulty 3	Difficulty 4	Difficulty 5					
	New	1							
1	Save	3							
-	Delete	7							
Name					Difficulty			+ Reward	
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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.

### 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

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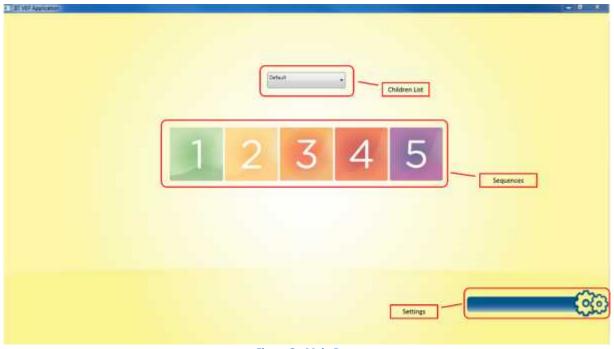
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Difficulty 1 Difficulty 2	Difficulty 3 Difficulty 4 Difficulty 5					
New	N wiemants 30					
Save	Tel Opera (I) - E					
Delete						
Name	new_level	Time fall down (sec)	5	Elem. Dimension	Small	
Description		Num. Columns	5	Input Type	Body	•
Lives	3	Num. Bements	30	Difficulty	Level one	
Max time (minsed)	1 : <sup>0</sup> El Infinite	Num: Stars	3	Reward	coppa.mp4	
					4,2	

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);

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# VEP Games – "Shape"

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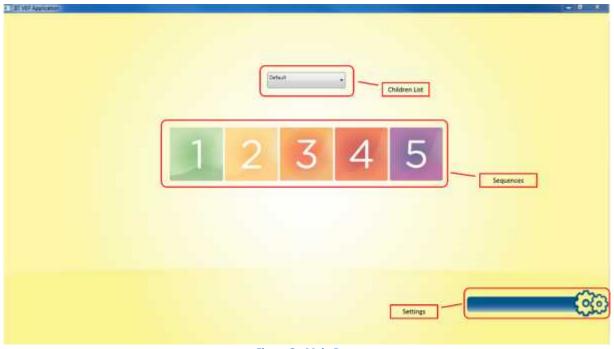
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	3. Difficulty 1 Difficulty 2 Oblively New Inst	3   Diffusity A   Diffusity 3	X	r	Ť	
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	May Sime (Minute)		Differing			

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:

Take a Picture!			Name: NewLevel
Import from a file			
Color tollerance:			
Sum color			
Área Anteprima	-	Design Are	
	import from an existing image		

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)  $\rightarrow$  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  $\rightarrow$  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:

talt shape		8 ¥		11	
Name	L R X		Tureshold	50% •) Time pose (sec) coppe-33.png	).
			Difficulty	Level one	
Mas time (mintaed)	0 3 Dinfinit		Reward	coppa mp#	

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.