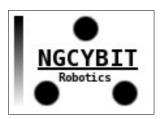
Finger Painting Animator (HD) Quick Users Guide



INDEX

- 1. Introduction to Finger Painting Animator (HD)
- 2. Finger Painting Animator (HD) drawing window
- 3. Finger Painting Animator (HD) color palette and color picker windows
- 4. Save drawing to Finger Painting Animator (HD) "Projects Archive"
- 5. Drawing animation over a generic photo background

1. Introduction to Finger Painting Animator (HD)

Finger Painting Animator (HD) is the ANIMATOR version of the software "Finger Painting".

This application was designed to create 2D animations and movies.

Once you have drawn the keyframes of the animation (drawing and editing the drawings using the fingers of your hands, using features such as edit / add / remove / copy / move / rotate / modify objects attributes, etc...), the software automatically creates all the intermediate frames (inbetweens) interpolating and animating (tweening) the control vertices of the drawn keyframes (keyframing).

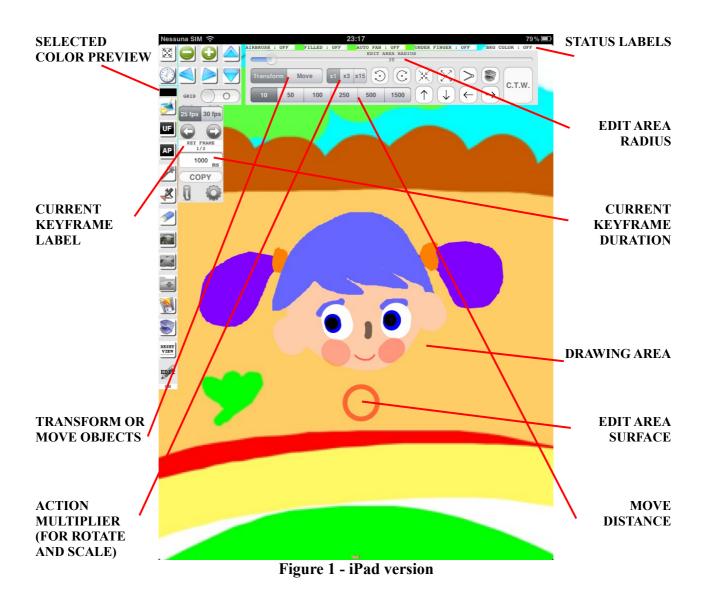
Completing all:

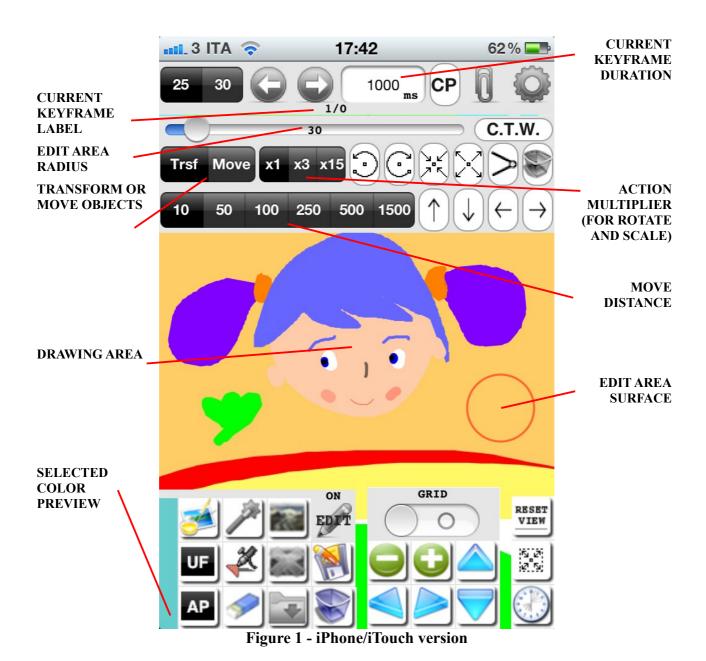
- the "play" function that allows you to view the preview of the animation movie (starting from any frame)
- the add a background music to the movie
- the movie maker feature that allows you to create .MP4 or .MOV videos exportable into the device's Photo Album (the videos/movies can be used with other installed apps, for example with "iMovie" to create for example faded transitions with animated text)
- the animation frames explorer to view all the frames of the animation
- the ability to copy via "iTunes File Sharing" all JPG images (frames) of the animation on your Mac or PC
- the ability to copy via "iTunes File Sharing" the generated .MP4 and .MOV movies on your Mac or PC
- the sharing feature to share media content with Dropbox, iDisk, Facebook, etc. ...
- the animation on a background image feature (the image can be loaded by the device's Photo Albums) and many other features...

Create your storyboard and the 2D animation movies with "Finger Painting Animator" and use the movies in the video editing app You prefer.

Create your storyboard and the 2D animation movie with "Finger Painting Animator HD".

2. Finger Painting Animator (HD) drawing window







FULL SCREEN DRAWING: press this button to enable full screen drawing (the lower control bar, the keyframe control/edit, the movies generator controls will disappear when full screen drawing is enabled: all the screen surface can be used to draw the animations keyframes)



LOAD IMAGE FROM PHOTO ALBUMS: press this button to load an image from device's photo albums. The image will be displayed on the background of Finger Painting Animator (HD). The selected image can be modified and saved; you can draw with your fingers on that image, add colors, effects, copy the image, create animation over the image background etc...



REMOVE SELECTED IMAGE: press this button to remove the selected image from the background



OPEN ANIMATION PROJECTS ARCHIVE: press this button to open the projects archive.



SET PREVIOUS KEYFRAME AS CURRENT KEYFRAME: press this button to choose the current animation keyframe (pressing this button the previous keyframe of the animation will become the current keyframe). The current keyframe will be visualized on the screen and it will be possible to add shapes, drawing them using the fingers of Your hands or move the control vertices of the shapes dragging Your fingers on the screen or edit shapes using the "edit tools": rotate, scale, v.link, color/transparency/width change, delete selected object, move, transform etc...



SET NEXT KEYFRAME AS CURRENT KEYFRAME: press this button to choose the current animation keyframe (pressing this button the next keyframe of the animation will become the current keyframe)

1000 ms

CURRENT KEYFRAME DURATION: tap the text field with Your finger and specify the time duration for the current keyframe (use the keyboard that appears under the screen to specify the time in ms and confirm the chosen value using the keyboard "Done" button). The keyframe duration is the time interval (in milliseconds) between the current animation keyframe and the next keyframe



EDIT KEYFRAME DRAWING: press this button to enable/disable EDIT tools. If EDIT is enabled the EDIT AREA SURFACE (the red circle) will appear on the screen. The circle indicator will show You the editing area under fingers (the dimension of the surface of that area can be modified using EDIT AREA RADIUS control): the drawn objects that have at least one control vertex contained into the EDIT AREA SURFACE is in the SELECTED state; only the selected objects can be modified dragging Your fingers or using the edit tools. For example, if You drag Your finger on the screen all the shapes control vertices that are contained into the EDIT AREA SURFACE will be moved together with finger movement (if "Transform" or "Trsf" is selected)



SAVE CURRENT KEYFRAME: once You have completed an animation keyframe (the current keyframe), press this button to save the current keyframe. Keyframes are used by the ANIMATOR CORE to create the animation (MOVIE CREATION)

25 FPS FPS PAL FREQUENCY : 25 frames for each second of the movie will be generated by the ANIMATION CORE

30 FPS FPS NTSC FREQUENCY : 30 frames for each second of the movie will be generated by the ANIMATION CORE



RUN ANIMATION CORE (ANIMATOR): press this button to run the ANIMATION CORE; the animator automatically creates all the intermediate frames (inbetweens) between the saved keyframes, interpolating and animating (tweening) the control points of the keyframes (keyframing). The ANIMATION CORE interpolate the control points of the drawn shapes, the colors, transparency, brushstroke width, the camera view (You can set camera view using ZOOM IN, ZOOM OUT, PAN LEFT, PAN RIGHT, PAN UP, PAN DOWN). The deleted shapes (in the next keyframe) will be dissolved automatically by the ANIMATION CORE. The ANIMATION CORE routines can be aborted pressing the "ABORT" button during the creation of the animation frames.



ROTATE LEFT: if EDIT is enabled (EDIT ON), pressing this button You can rotate left the selected shapes (the shapes that have at least one control vertex contained into the EDIT AREA SURFACE). You can specify the angle of the rotation between 1°, 3°, 15° choosing the angle with "x1/x3/x15" action multiplier: $x1 \rightarrow 1^{\circ}$, $x3 \rightarrow 3^{\circ}$, $x15 \rightarrow 15^{\circ}$ (combine them to obtain the desired

angle of rotation)



ROTATE RIGHT: if EDIT is enabled (EDIT ON), pressing this button You can rotate right the selected shapes (the shapes that have at least one control vertex contained into the EDIT AREA SURFACE). You can specify the angle of the rotation between 1°, 3°, 15° choosing the angle with "x1/x3/x15" action multiplier: $x1 \rightarrow 1^{\circ}$, $x3 \rightarrow 3^{\circ}$, $x15 \rightarrow 15^{\circ}$ (combine them to obtain the desired angle of rotation)



SCALE - : if EDIT is enabled (EDIT ON), pressing this button You can scale (make smaller) the selected shapes (only the shapes that have at least one control vertex contained into the EDIT AREA SURFACE will be scaled). You can choose the scale amplitude using the "x1/x3/x15" action multiplier control



SCALE +: if EDIT is enabled (EDIT ON), pressing this button You can scale (enlarge) the selected shapes (only the shapes that have at least one control vertex contained into the EDIT AREA SURFACE will be scaled). You can choose the scale amplitude using the "x1/x3/x15" action multiplier control



JOIN VERTICES TOOL: if EDIT is enabled (EDIT ON), pressing this button You can move the selected control points of the shapes in the center of the EDIT AREA SURFACE; use this tool for example to join two brushstrokes (to obtain continuous brushstrokes), to create arrow objects, gears, blades, etc...



ERASE SLECTED OBJECTS: if EDIT is enabled (EDIT ON), press this button to erase the selected shapes. The erased shapes will be dissolved automatically during the creation of the next animation frames

C.T.W. CHANGE COLOR, TRANSPARENCY AND BRUSHSTROKE WIDTH: if EDIT is enabled (EDIT ON), pressing this button You can change the color, the transparency and the width of the selected shapes



MOVE UP: if EDIT is enabled (EDIT ON), press this button to move up the selected shapes (use the "MOVE DISTANCE: 10/50/100/250/500/1500 pixels" segment control to choose the distance where move the selected shapes)



MOVE DOWN: if EDIT is enabled (EDIT ON), press this button to move down the selected shapes (use the "MOVE DISTANCE:

10/50/100/250/500/1500 pixels" segment control to choose the distance where move the selected shapes)

 \leftarrow

MOVE LEFT: if EDIT is enabled (EDIT ON), press this button to move left the selected shapes (use the "MOVE DISTANCE: 10/50/100/250/500/1500 pixels" segment control to choose the distance where move the selected shapes)



MOVE RIGHT: if EDIT is enabled (EDIT ON), press this button to move right the selected shapes (use the "MOVE DISTANCE: 10/50/100/250/500/1500 pixels" segment control to choose the distance where move the selected shapes)



OPEN SETTINGS WINDOW: press this button to open the brushstroke settings window (color palette and color picker windows): use this window to choose the brushstroke colors, transparency, width, to set the background color, to read the app documentation, etc...



UNDONE: press this button to "UNDONE the last drawn shapes" in normal drawing mode (EDIT OFF). If EDIT is enabled (EDIT ON) this button can be used for "UNDONE all the EDITING SESSION". Disabling the EDIT session (from EDIT ON to EDIT OFF) all the modifications will be definitively confirmed



ERASE ALL: press this button to erase the current keyframe (this button erase all the drawn shapes contained in the current keyframe; like consequence of this action the next keyframe will become the current keyframe)



SAVE PICTURE TO DEVICE PHOTO ALBUM: press this button to save the current keyframe as an image in the device's photo albums (open the device's photo albums for example to send the saved image with an email to Your friend)



ENABLE/DISABLE UNDER FINGER PREVIEW: press this button to enable/disable the "under finger preview" (a window appear upper left on the screen during the drawing: it shows the invisible area under the finger, when You touch the screen). If you are drawing using two fingers, two "drawing area preview" will appear upper left on the screen (up to 4 "drawing area preview"). Use this feature only for high precision brush strokes or for accurate drawn objects EDITING (this feature, if enabled, reduces the drawing performances)



ENABLE/DISABLE AUTO PAN: press this button to enable/disable the "auto pan" feature. When "auto pan" is enabled, Finger Painting Animator (HD) moves automatically the drawing area ("camera auto motion") in case you reach the border of the screen (while drawing with your finger). If disabled the "camera auto motion" will be disabled



ERASE TOOL: you can use this tool to erase with your fingers undesired part of your work, using the selected background color (draw using the selected background color)



AIRBRUSH: press this button to enable airbrush drawing (useful for the **spray painting**)



FILLED OBJECTS: press this button to enable the drawing of filled objects with the chosen color and the chosen transparency



ZOOM IN: press this button to zoom in (increase detail – decrease drawing surface) – CAMERA VIEW CHANGE



ZOOM OUT: press this button to zoom out (decrease detail – increase the drawing surface) – CAMERA VIEW CHANGE



PAN LEFT: press this button to go left in drawing area (the design will move right) – CAMERA VIEW CHANGE



PAN RIGHT: press this button to go right in drawing area (the design will move left) – CAMERA VIEW CHANGE



PAN UP: press this button to go up in drawing area (the design will move down) – CAMERA VIEW CHANGE



PAN DOWN: press this button to go down in drawing area (the design will move up) – CAMERA VIEW CHANGE

COPY COPY THE CURRENT KEYFRAME TO LAST KEYFRAME: pressing this button the current selected keyframe will be copied and saved in the last keyframe position of the current animation project; use this control to realize repetitive scenes

STATUS LABELS: status label for airbrush, filled, under finger preview, auto pan, background color tools. The possible values for that labels/controls are "ON" if control is enabled; "OFF" if the control is disabled

SELECTED COLOR PREVIEW: it is the selected color preview for the brushstrokes

EDIT AREA RADIUS: use this slider control to change the radius of the "EDIT AREA SURFACE"; set it to the max value for "SELECT ALL" feature: if "SELECT ALL" is enabled, dragging your finger on the screen all the drawn objects will be moved in the direction of dragging (together with Your finger movement) or the chosen transformations will be applied to all the drawn shapes of the current keyframe, etc...

EDIT (WITH FINGERS) AREA INDICATOR: If EDIT is enabled (EDIT ON), a red circle will appear in the drawing area. This circle indicator show You the "EDIT AREA SURFACE" (the surface of that area can be modified using "EDIT AREA RADIUS" control): the drawn shapes that have at least one control point contained in the "EDIT AREA SURFACE" are "SELECTED"; only the selected shapes can be modified using the edit tools. For example, if You drag Your finger on the screen all the draw control points that are contained in the EDIT AREA SURFACE will be moved together with finger movement (if "Transform" or "Trsf" is selected). The selected objects will be drawn with transparency 0.5 on the screen

ACTUAL KEYFRAME LABEL: label format:

<SELECTED KEYFRAME NUMBER> / <TOTAL NUMBER OF ANIMATION
KEYFRAME>

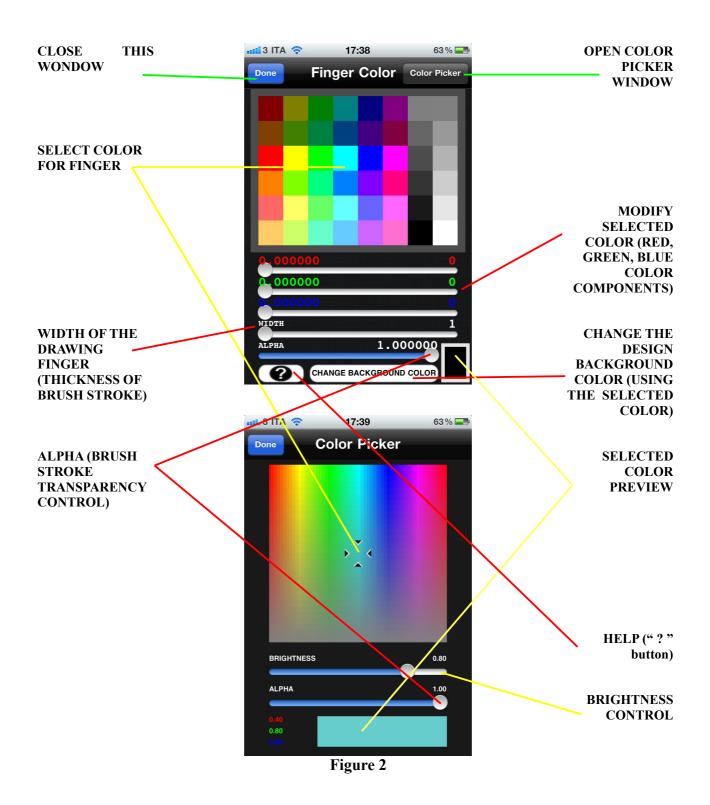
<SELECTED KEYFRAME NUMBER> : the number (position) of the current selected animation keyframe

<TOTAL NUMBER OF ANIMATION KEYFRAME> : the total number of the keyframes of the movie (animation)

if <SELECTED KEYFRAME NUMBER> is bigger than <TOTAL NUMBER OF ANIMATION KEYFRAME> it means that a new keyframe is started (at the end of the movie). The last keyframe will be automatically dissolved at the end of the movie.

TRANSFORM OR MOVE OBJECTS: If EDIT is enabled (EDIT ON), pressing "Transform" or "Trsf" only the selected control points of the drawn shapes will be moved with the finger movement on the screen (use this feature to transform shapes); pressing "Move" the shapes that have at least one control point selected will be moved with the finger movement on the screen (use this feature to move the shapes in the scene)

3. Finger Painting Animator (HD) color palette and color picker windows



The "colors" windows allows you to:

- 1) choose the fingers colors / brushstroke color (from palette or/and select RGBA color component with Red, Green, Blue, Alpha sliders you can modify with RGBA slider controls the color selected from palette)
- 2) choose the fingers colors / brushstroke color from color picker (brightness and transparency selectable you can modify with RGBA controls the color selected from color picker)
- 3) set brightness using BRIGHTNESS slider
- 4) set the color transparency using ALPHA slider
- 5) set the brushstroke WIDTH using the WIDTH slider (in pixels)
- 6) pressing button "CHANGE THE DESIGN BACKGROUND COLOR (USING THE SELECTED COLOR)" You can change the background color whenever you want

4. Save drawing to Finger Painting Animator (HD) "Projects Archive"

To save your design press the "**OPEN ANIMATION PROJECTS ARCHIVE**" button; it will open Finger Painting Animator (HD) "Projects Animation Archive".



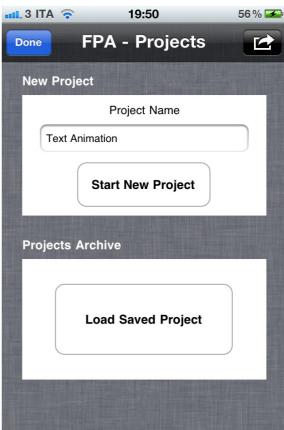


Figure 3 - iPad version

Figure 3 - iPhone/iTouch version

To start a new animation You have first to create a new animation project:

- specify a "Projects Name" and press the "Start New Project" button
- press "Done" button
- choose the keyframe number
- draw the shapes of the keyframe using Your fingers
- save the drawn keyframe with "SAVE CURRENT KEYFRAME" button
- change keyframe number, draw the new keyframe picture (You can do it for example creating a new keyframe drawing, add shapes, deleting some drawn shapes or modifying with EDIT tool the previous drawn keyframe; the previous keyframe will be automatically displayed into the new keyframe when a new keyframe is created)

- save the new keyframe with "SAVE CURRENT KEYFRAME" button when You have completed the new keyframe
- ... repeat these steps to draw all the animation keyframes You need
- press on "RUN ANIMATION CORE (ANIMATOR)" button to generate all
 the animation frames and to display the movie with "Finger Painting Animator
 (HD) Movie Display"; here You can also export the movie into .MP4 file
 (without background music) or .MOV file (with background music user can
 choose the background music directly from the device iPod library pressing on
 the note icon button)

Press the "Open In" button (upper right on the screen) to share the current design (the keyframe image displayed on the screen); use it to:

- send a JPG file to DROPBOX, iDisk or to other photo applications
- save into the Finger Painting Animator (HD) "Documents" folder the <Project Name>.jpg and <Project Name>.png files. Copy the generated high quality image (.jpg and .png files) to Your MAC or PC using "iTunes File Sharing"

The animation frames will be automatically calculated by the ANIMATOR and displayed into the "Animation Frames" display:





Figure 4 - iPad version

Figure 4 - iPhone/iTouch version

Drag Your finger on the screen to see all the generated animation frames. Press on the "play" button (upper right in the screen) to play the movie with the integrated "Finger Painting Animator (HD) Movie Display" or press on a frame image to run movie player starting from the pressed frame position. At the end of the movie the label "END" will appears upper right in the screen; from the "Movie Display" user can touch the screen to return to the "Animation Frames" display in any moment during the movie/animation play state.

Pressing the "Quick Time icon" button the MOVIE MAKER will generate the movie file for You:

- .MP4 file if background music is not selected
- .MOV file if background music is selected

To select the background music press on the note icon button and choose the music from the device's iPod library window that will be displayed on the screen. To disable background music set the switch to OFF (to re-enable the music set the switch to ON).

When user press the "Quick Time" button, if the device's orientation is portrait the MOVIE MAKER will create a movie with portrait format, if the device's orientation is landscape the MOVIE MAKER will create a movie with landscape format.

When You create the animation frames pressing the button "RUN ANIMATION CORE (ANIMATOR)" (from the "DRAWING AREA" window) You have to decide which type of movie orientation You need (if the device's orientation is portrait the created animation frames will be in portrait format, if the device's orientation is landscape the created animation frames will be in landscape format). To obtain a good results it is important that the animation frames and the movie have the same orientation. So you have to choose the animation frames and movie orientation first of the media creation (animation frames + movie creation).

At the end of movie creation process the movie will be saved automatically into the device "Photo Albums". Open the device "Photo Albums" to see the movie or to share it for example with Facebook or to send it with an email.

All the images displayed into the "Animation Frames Display", the .MP4 and the .MOV movie files are saved in the document folder of Finger Painting Animator (HD) into a folder called <ANIMATION PROJECT NAME>_JPG (<ANIMATION PROJECT NAME> is the name chosen for the animation project).

You can use "iTunes Files Sharing" to copy/save all the numerated high quality JPG animation frames images (the number of frames depends by the chosen 25 fps or 30 fps) or .MP4 or .MOV movie files into Your MAC or PC.

Do that for example to use the animation picture (JPG files) into Yours multimedia productions or to use Your movie into video editing software (such as iMovie).

The generated video (and saved in the device's photo albums) can be used/imported directly into iMove app for iPhone, iTouch, iPad.

The animation project will be stored automatically into the animation projects archive of Finger Painting Animator (HD). The saved projects can be loaded when you want (replacing the current project) with the "Load Saved Project" button.

Press "Load Saved Project" button to display the animation projects archive window and to choose a previously saved animation project:

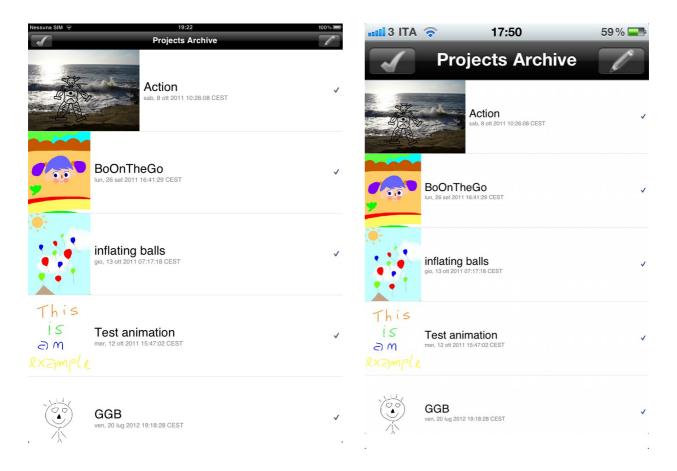


Figure 5 - iPad version

Figure 5 - iPhone/iTouch version

To load an animation project tap on the desired project name.

If You want You can delete one or more animation projects:

- press the upper right "Edit" button (with pen icon)
- tap the red circle of the animation project You want to delete
- press on the "Delete" button (to erase the selected project)

5. Drawing animation over a generic photo background

Using the "LOAD IMAGE FROM PHOTO ALBUMS" button you can select an image acquired with the device's camera or with a generic camera or with a scanner (and saved in the device's photo albums using "synchronization" with the Apple iTunes software). Once the image is loaded, it will be displayed as the animation background. You can draw Your animation over that image (animation over a photo background) and at the end you can animate all (background + finger drawn animation → animation over photo background). Save/copy the automatically generated JPG animation frames (with photo background) into MAC/PC and/or display the movie/animation.

Background can be changed in any moment: the animation drawn shapes will be automatically applied over the new chosen photo background. Use that feature to create multiple movie with different backgrounds. The background image can also be animated using the camera view animation feature.

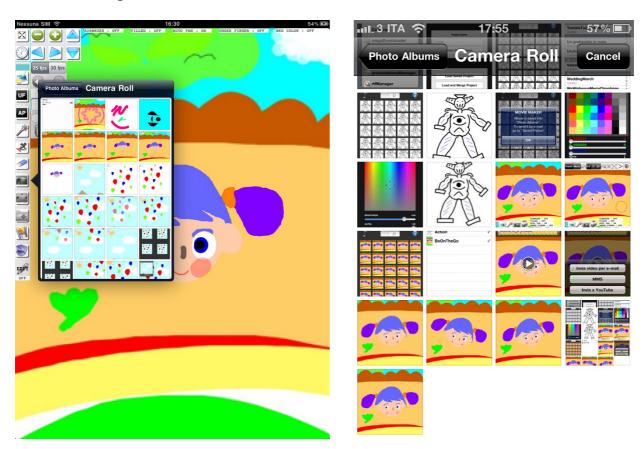


Figure 6 - iPad version

Figure 6 - iPhone/iTouch version

"LOAD IMAGE FROM PHOTO ALBUMS" give You the ability to apply an animation over Your preferred photos: for example You can handwrite a text manually over a photo (loaded from the device's photo albums) and animate the written text over the chosen photo...

At the end You can save all and send the "animated photos movie" to your friends.



Figure 8

Our first introductory guide ends here.

In this introductory guide I have showed only a small part of the functionality of this app.

Thanks everyone for the attention.

For any questions please send an e-mail to:

natalini.gianluca@gmail.com

NGCYBIT Robotics web site:

www.ngcybit.it

App documentation URL:

http://www.ngcybit.it/iTunesApp/finger-painting-animator/finger-painting-animator-hd-quick-user-guide.html