KidsAppMaker features 4.0

1) General tool properties
   a) Compatible with Lion and Mountain Lions, Maverick and Yosemite OS
   b) Multiresolution screen auto adjustments
   c) Autosave works always
   d) Import and export project for remote collaboration
   e) Easy preview options of projects being made
   f) Makes a ZIP file format that can be understood by Kidsappmaker reader library that runs on both IOs and Android
   g) Resolution for each project can be setup in the start of each project
   h) Resolution output handling can be setup for each project based on 3 possibilities: auto stretch to whatever size, best fit of X or Y or center without any auto stretch.
   i) Kidsappmaker works with assets that comply with:
      i) Images: PNG with alpha channel, JPEG, TIFF
      ii) Sounds: MP3, mono or stereo
      iii) Video: MP4
   j) Can create template animations to use in different projects

2) Page/Scenes layout settings
   a) There are two types of pages, sequential pages, like in a book and activity pages, that users can only go using menus. So you have linear page structure as well as non-linear page structure to work on your project.
   b) Pages can be cloned, created or deleted (so that is easy to create a template structure of common elements in a page), each component can also be copied and pasted from page to page.
   c) One book can incorporate different languages in just one project, without the need of duplicating pages
   d) Page background:
      i) Each page must have a background image that will be displayed as default image. Images are auto fit automatically to the page
   e) Image and object size
      i) Each image on the page can be resized and export dimensions will be based on real dimension, not original image size for optimization purposes.
   f) Frames
      i) All the objects that are placed on each page have a frame order, which rules the super imposition of each object in relation with others. This order can be changed at any time.
   g) Transition effects between pages
      i) Each page have a transition effect setup to pass to the next page, from a collection of 30 different effects that can be setup page by page.
   h) Turn pages

    i) Each page turn can be done using swipe finger, or this control can be deactivated at each page level, in that case button menus must be used to control page turn

i) Finger feedback
    i) User can customize finger feedback image at each page, so that users can have a better understanding of their touch activities.
      (1) Also particle effects can be triggered at each page level with customizable particles effects based on touch
    ii) Background music
      (1) Music files can be setup for each page, and music can follow from one page to the other without any breaks

3) Animations
  a) Animation Triggers
    i) By touch on objects with and without Alfa channel (transparency can work or not)
    ii) After X seconds of entering on the page
    iii) In a random time (defined inside a interval) each time a user enter page.
    iv) Based on a swipe that starts from a specific object on a specific angle.
    v) Based on another component behavior (starting or finishing, or even in a specific part of it)
    vi) By Shaking the device
  b) Sound and Image
      (1) Used to trigger sounds based on animation triggers
      (2) Used to rotate objects based on accelerometer and their gravity point position
  c) Sequence animations
    i) Frame by frame by touch on the object
    ii) All frames play to the end
    iii) Frames play in loop
    iv) Sound can be synchronized with the start of the frames and in loop
    v) Each frame speed can be adjusted in seconds
    vi) Sequences can start as invisible in the page
    vii) Based on different user trigger, one sequence animation can perform different tasks for the same object
    viii) Sequences can be dragable
  d) Transformations
    i) Transformations are all based on a gravity point inside the object that users can position inside the image anywhere
    ii) Transformations can be played in a sequence or isolated with each effect having a specific duration setup in seconds.
    iii) Transformation can be played once or in a loop
    iv) Transformations can start as invisible in the page
    v) Transformation can move in or out of the page without any problem
    vi) Transformations can activate a sound and the sound can be synchronized with the loop, so it restarts in the beginning of each loop.

vii) Effects on images:
   (1) Move to or move by, or with a path
   (2) Rotation (positive or negative)
   (3) Zoom (in or out)
   (4) Fade
   (5) Skew (on x and y)
   (6) Flip(on x or y)
   (7) Jump (height and bounce)
viii) Based on different user triggers, one transformation animation can perform different tasks for the same object
ix) For each transforming effect you can choose several switches that affect the velocity of the effect as well as the smoothness level on in and out of the effect.

e) Drag and drop spaces
   i) Users can create as much drag and drop spaces as they like in a page. Each space will not interfere with the other and objects can only be dragged by touch inside the specified space.
   ii) Each space can have multiple objects inside that are only dragable on that specific area
   iii) Each object can have a sound feedback each time it is touched
   iv) Each object can have a Particle effect feedback each time is touched. The particle effect can be chosen from a set of 25 different effects with the capacity to personalize the image of the particle.
   v) Each object can be setup to close itself, making the effect of a sticker object.

f) Physics spaces
   i) Users can create as much physics spaces as they like in a page. The objects in one space will not interfere with the objects created in another physic space on the same page. Each space will have its own rules and settings.
   ii) Each space can have multiple objects inside that only work with physics rules on that space.
   iii) Each space can have values setup for X and Y gravity amount (positive or negative).
   iv) On each space user can define if accelerometer interferes on the gravity or not.
   v) Each object can have a sound feedback each time it is touched.
   vi) Objects in the space can have:
      (1) Whatever shape and they will behave according to their individual shapes in a physics way. Avoid too complex shapes as this might confuse the system.
   vii) Trigger options work like any animation (with all the possible options available).
   viii) Objects can have a starting velocity and direction
   ix) Objects can be setup to be able to Dragable with a touch or not.

g) Objects can be setup to be static in the space, but still interact with other objects in a physical manner, so they become obstacles.

h) Object can be pined to the ground on any defined point so that you can setup effects like a pendulum object.

i) Objects have properties that rule their physical behavior like:
  i) Density (how heavy they are on the space)
  ii) Restitution (how much they bounce back)
  iii) Friction (how they decelerate when touching other physical objects)

j) Particles
  i) Users can choose from a set of 30 different particles effects (from snow, fire, explosions, rings, fog, star burst, bubbles, vortex, water, converging lights...)
  ii) Each effect can be customized using:
    (1) Duration of the effect setup in seconds or infinite once triggered.
    (2) Customized image, so that the effect is done using the image of the user but maintaining the animation effect chosen.
    (3) Users can add more user made particles effects using external particle designer Apps like – "Particle designer", and adding the new particle effect produced so it comes life on their own library

k) Spawn actor
  i) A frame-by—frame animated object can appear at any coordinate and follow a path based on linear movement or even random
  ii) This can be used to:
    (1) Make appear animated objects that follow a specific path
    (2) For things like bullets or throwing objects

l) Group Animations
  i) Will work on a set of other animations, so that they will behave as a group.
  ii) Can be used to animate complex movements or to make more complex animation sequences with multiples effects acting at same time.
  iii) Animation groups can be setup to:
    (1) Move, rotate, fade, skew, scale and jump
    (2) In a sequence or isolated
    (3) In a loop or just once
    (4) Triggered by the normal animation triggers
    (5) Inside the group you can add:
      (a) Sequence animations
      (b) Transformations
      (c) Particles
      (d) Videos
      (e) Menus
      (f) Text
    (6) It is not possible to have a group inside a group.

m) Video

      i) Videos can be placed inside any part of the page; they will be embedded inside the project and restricted to the space provided. Format accepted is MP4.

      ii) Videos can also be transformed as they are played using movement, rotation, fade, skew or zoom.

      iii) Videos include the normal Play/pause control, as well as the ability to move to a specific part of the video.

n) Web frame

      i) User can place a web frame inside the page together with a predefined image.

      ii) If device have no web connection nothing will happen and the default image will be displayed, but if device have a web connection, then based on the trigger events it will be rendered the HTML found on the space available so that it behaves as a normal browser, that can have links and interaction as on a web browser.

      iii) Due to the nature of the web frame environment, it always must come as a front layer in terms of order with other layers.

4) Text Options

a) Text box

      i) Can be used to place a text anywhere on the page, like an image object. Users can use all the fonts installed on the MAC. Users can choose font size, font type, and color for each text box.

b) Read a along text

      i) This more complex component is used to synchronize a narrator sound and text being highlighted in a synchronized way, like Karaoke. Can hold multiple paragraphs placed on the same space as well as multiple audio files, one for each paragraph. So that big narrations and story text can be placed in a limited space. The tool allows user to make the synchronization work in a simple way by clicking on each right position by listening to the sound. Can be setup so that user can only be able to play with the page after the reading finished, defined in the settings of the project.

c) Voice recorder

      i) This component is used so that a user can record its own voice as a narrator based on the synchronized text component. This option is dependent from the use of the read along text component and will only work if the other component exists in the project.

      ii) Users can record and playback each paragraph and then setup a action that goes through the book listening to the user recorded narration.

d) Text to speech

      i) Can be used to make automatic narrator speech using operating system TTS technology. Quality and availability will depend from different OS environment.

5) Actions

a) Actions are used to setup buttons in the project that perform tasks.
b) Each action is based on a button that have a image object and can have a personalized or standard feedback sound
c) Actions can be used to move inside pages like:
   i) Go to next page or previous page;
   ii) Go to home page;
   iii) Go to a specific page of the project;
   iv) Go to a random page on the project based on a list of available pages;
   v) Go to the last page user have been;
   vi) Once moving through the page project user can setup how the read-a-long will work on the target page from the options (using synchronized sound, no sound or using narrator recorded sound).
   vii) Also user can define how the page turn will work in terms of render effect from a set of 30 different effects to turn pages.
d) Actions can also be used to go to a webpage outside the project using a normal browser.
e) Actions can also be used to trigger page actions like:
   i) Stop all animations on the page;
   ii) Restart all animations on the page;
   iii) Share page by email;
   iv) Shave page to photo library.
f) Action can be used to trigger advertising network requests

6) Activities and learning games
   a) Paint
      i) Paint activities allow user to define, paintable areas based on white closed open areas in an automatic way. KidsAppmaker will recognize all the paintable areas of the drawing so that it can fill them with paint.
      ii) Paint activity can be setup as free color filling or conditional color filling.
      iii) Paint activity can also be setup to free finger painting with special brush types, conditional to specific spaces or completely free
      iv) Conditional color filing will only allow a specific area of the screen to be painted with a specific color.
      v) Each color pallet can be defined by using any image object and any color.
      vi) vi. Sounds can be specified to each feedback situation. Start of the activity, successful and wrong painting of each area and the end of the activity with success.
   b) Memory activity
      i) Memory activity can be setup based on the different image objects based on a grid of 8 different images.
      ii) Each time the game starts it will be scrambled in a different way.
      iii) Sounds can be specified to each feedback situation. Start of the activity, successful and wrong match of pairs and the end of the activity with success. activity
   c) Eraser

i) Eraser activity allows a child to erase or clean part of a image to discover another image that in under it.
ii) This can be done several times, like a human body being discovered layer by layer.
iii) There can be set a special trigger action for when the image is completely cleaned.

d) Drawing area
   i) This activity enables users to have a free drawing area
   ii) Users can choose brush type, size of the brush, color and if speed affects the thickness.

e) Photo Grabber and placer
   i) i. This Activity allows to setup a photo grabber that once triggered will start the camera function, and then the user can trigger a photo in any part of the screen and size.
   ii) Some photo transformation effect can be applied in real time.
   iii) Photos can be saved with a variable name and be used in other pages later on the book

f) Draw comparison
   i) This activity enables users to free draw a shape and later compares it to an ideal shape giving a classification on how well it was done.
   ii) This is meant to be used for kids to learn how to draw shapes, letter, numbers in general

g) Puzzle game
   i) This activity allows setup puzzle games with different level of difficulty ii. You can setup the number of pieces, sound feedback and opacity of the original image

h) Maze game
   i) This activity allows to setup a very flexible number of maze type of games that are played with the accelerometer on the devices. ii. You can define a game area, that will work with physics rules, then you can setup your objective wining objects, enemy objects as well as obstacles

i) Text comparison game
   i) This activity will allow asking the input of the user by keyboard to write a word or sentence in a specific space and later compare it with the right answer as the victory condition.

j) Connecting the dots game
   i) This activity will allow to make the typical game where you need to connect the dots in a specific order to reach the victory condition.

k) Wack-a-mole game
   i) This activity allows to make several types of games based on the idea of killing bad objects that follow a specific path, or not killing other objects that also follow another path.

l) Score component
   i) Score will allow you to setup score conditions and show score numbers along the project from page to page, so that you can track the progress along your multimedia storyline.

m) Timer
   i) Timer component will allow you to setup a counter up and down, like a clock, so that you can setup time limits, or use it to broadcast the time to other component inside a page.

7) Augmented reality
   a) This component will allow you to setup complex augmented reality projects that will interact with physical print pages or parts of photos by using the camera sensor.
   b) We use Vuforia augmented reality SDK to allow you to setup inside our app the capacity to recognize a photo environment and start a action based on its result.
   c) You can setup 5 different actions based on different pictures being presented that will trigger different animations inside your projects in each page.
   d) This component requires that you register in Vuforia website and use it to compile the images being recognized and put them inside our app.

8) Prototyper
   a) Proto typing can be done in several ways, so that user can check how the project is working in real life conditions fast.
   b) Proto typing can be done for a simple page or for the entire project by user choice.
   c) Options:
      i) Built in viewer. User can view project in the MAC itself without leaving the MAC environment. Limitations are just not being able to shake the device or record its own sounds.
      ii) IOs device through Wifi. Using the prototyper App of kidsbookmaker, user
      iii) can send automatically the project to its device through wifi (just by being in the same network), so it can check the project in real life conditions. User can use more then one device, so it can deploy to several devices for testing purposes.
      iv) IOs device using cable. User can use cable to connect its IOs device to the MAC and use Itunes to copy paste the project or page using the prototyper App of kidsbookmaker. User can then view the project in real life conditions inside the kidsbookmaker app.
      v) Android device using cable. It can deploy to any number of Android devices using the cable and passing it directly to android as a stand alone application.
      vi) Windows Phone using Wifi

9) Deploy finished project options

   a) Deploy as a stand alone app
   b) Finished projects are uploaded to kidsAppmaker server using a login account, compiled and then returned to user for certificated signing.

c) At the end user will get its APP and APK so it can submit to its Itunes and Android developer account for selling on the different markets.
d) Deploy to user library app
e) User will get a ZIP file from the kidsAppmaker that after must submit to its library backoffice management console to sell it under in app purchase system