

## **KidPad 1.0 User's Guide**

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September 2001

## Credits

KidPad was developed at the University of Maryland's Human-Computer Interaction Lab ([www.cs.umd.edu/hcil](http://www.cs.umd.edu/hcil)) with the support of the Swedish Institute of Computer Science ([www.sics.se](http://www.sics.se)) and the University of Nottingham ([www.nott.ac.uk](http://www.nott.ac.uk)) under the KidStory project ([www.sics.se/kidstory](http://www.sics.se/kidstory)), which is funded by the European Union's ESPRIT i3 Experimental Schools Environmental initiative. For questions or comments about KidPad, please contact Professors Allison Druin ([allisond@umiacs.umd.edu](mailto:allisond@umiacs.umd.edu)) or Ben Bederson ([bederson@cs.umd.edu](mailto:bederson@cs.umd.edu)).

These are the people behind KidPad:

Ben Bederson	direction, development
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Britt McAlister	development
Lisa Sherman	art
Gustav Taxen	cool tool developer

## Main changes since KidPad 0.9

- **A story is always saved to the same filename**
- **Bulletin Board only loads stories**
- **New tool for starting new stories**
- **New tool for saving current story**
- **New tool for saving current story in HTML format**
- **New tool for printing current story**
- **New tool for exiting KidPad**
- **Background tool removed**
- **Toolboxes rearranged: all tools that can't be picked up go in a toolbox on the top left of the screen; all other tools organized in two toolboxes at the bottom right of the screen.**
- **No erasing of stories from KidPad (must be done from operating system)**
- **If a modified story is not saved by the user, it is automatically saved to the backup-files directory.**
- **Ability to run KidPad at resolutions higher than 800x600 pixels.**
- **When help tool picks up another tool it demonstrates what this tool does.**

## Installation

This section describes how to install KidPad on your computer. It assumes that you have at least 30 megabytes free disk space on your hard drive.

KidPad 1.0 runs on Windows 98 or higher and Windows NT 4.0 or higher.

If you have a KidPad CD-ROM, insert the CD and it will automatically start the installation. If for some reason it doesn't, you can run the 'setup' program on the CD.

Otherwise, you can download KidPad by typing in the following address into your web browser, and then running the program that gets downloaded:

<http://www.kidpad.org/download/KidPad-1.0-setup.exe>

Then, double-click on KidPad-1.0-setup.exe and an installation Wizard will take you through the steps of installing KidPad.

Unlike some previous versions of KidPad, this version will automatically install Java if necessary.

KidPad 1.0 supports multiple users through the use of multiple mice under Windows 98 and ME. In order for this feature to work, Microsoft DirectX 8.0 or higher must be installed in your system. You can obtain the latest version of DirectX at <http://www.microsoft.com/directx>.

## Using KidPad 1.0

### *Starting KidPad*

To run KidPad, select the KidPad 1.0 shortcut from the “Start/Program Files” menu and click on “KidPad 1.0”. This will run KidPad at a resolution of 800x600 pixels. To run KidPad at a resolution of 1024x768 pixels, click on “KidPad 1.0 1024x768”. To run KidPad having access to stories in the backup-files directory, click on “KidPad 1.0 backup-files”.

### *Closing KidPad*

You can close KidPad it by using one of these methods:

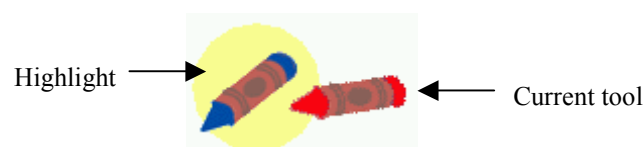
- Open the top left toolbox and click on the switch. This will save the current story to the backup-files directory if it had been modified.
- Hold the `Ctrl` key and press `Q`.
- Hold the `Alt` key and press `F4`.

### *Toolboxes*

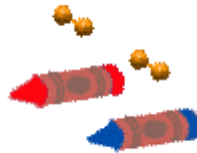
In KidPad, tools are organised in toolboxes and each tool belongs to a toolbox. There are three toolboxes. The toolboxes can be toggled on and off by holding the `Ctrl` key and then pressing one of the 1, 2 or 3 keys. If you click on a toolbox, the toolbox will open or close, depending on its current state. When a toolbox is opened, its tools are moved out onto the drawing surface. When a toolbox is closed, its tools are hidden inside.

### *Tools*

Each mouse “holds” a tool. To pick up a new tool, move the current tool so that the tool you want to pick up becomes highlighted, then click. (The left and right mouse buttons work exactly the same way in KidPad so that it doesn't matter if you're left-handed or right-handed.)



Some tools are also “collaborative”. This means that they can be combined in different ways to produce additional functionality. The idea is that you can get added benefit from collaboration. Only tools of the same type can be collaborative. For example, crayons only combine with other crayons, not with other tools. When two tools are activated close to each other at the same time, the collaborative function replaces the standard functionality of the tools. Two small orange balls appear next to the tools to indicate that an opportunity for collaboration exists.



It is also possible to “trade” tools with other users. If you select a tool that someone else is holding, the tools are swapped.

## Crayons



Crayons are used to draw lines. In the collaborative mode, a filled shape will be drawn between the two crayons. The colour of this filled shape will be the colour you get when blending the colours from the two participating crayons.

## Eraser



The eraser removes parts of shapes and whole text entries. There is no collaborative mode for the eraser.

## Hand



The hand has three functions: to pan the picture, to follow hyperlinks and to move x-ray windows. When holding the hand, press and hold the mouse button and move the mouse to pan the picture. In collaborative mode, the hands will zoom out when they are moved together and zoom in when they are moved apart. The hand turns into a pointing finger to indicate that the hand is over a start point of a link. Click the mouse button to follow the link. If the hand is over an x-ray window handle, you may hold down the mouse button and move it in order to move the x-ray window.

## Zoom-in tool



The zoom-in tool zooms you into your drawing.

## Zoom-out tool




The zoom-out tool zooms you out of your drawing

## Magic wand



The magic wand draws hyperlinks. Each hyperlink requires a start point and an end point to be complete. To draw the link, move the wand onto a shape or a text entry (a magenta box will appear around it) and press the mouse button to select it as start point. Repeat for the end point. This creates a green arrow from the start point to the end point. You can now use the hand tool to follow the hyperlink. When the hand tool is picked up, hints will show you where the links are. Hints look like

this: . If you don't want hints to show, press Ctrl+H, and the next time you pick up the hand tool, they will not be there. There is no collaborative mode for the magic wand.

## Text tool



The text tool draws text characters. Click the mouse button to choose a start point for the text. A magenta box will appear. You can now type characters on the keyboard to add text, just as in any word processor. The red vertical line is the text cursor. It can be moved with the cursor keys on the keyboard.

## Filler



The filler is used to fill line shapes with colour. To fill a shape, click on it with the mouse button. If you click on a filled shape, it will turn back into a line shape. Note that the filler only fills shapes – if you click on an empty area, nothing will happen.

## Puller



The puller tool is used for pulling shapes. To start pulling, click and hold the mouse button. Then move the mouse. Release the mouse button to drop the shape.

## Selection tool



The selection tool is used to select and move objects from one place to another. You can move individual objects or several objects at once. To move one object, move the selection tool onto it. Then

press and hold the mouse button. Move the mouse to move the object and release the mouse button to drop it. To move several objects at once, move the tool away from the objects, then press and hold the left mouse button. Move the mouse button to draw a black box. Magenta boxes will appear around all the objects that are contained within the black box. Release the mouse button when all the objects you want to move are inside the black box. To move the objects, put the tool on one of the selected objects, then press and hold the mouse button and drag. In collaboration mode, the selection tools stretch the selected shapes. Text entries are not stretched.

## Grouping tool



The grouping tool makes pieces of a drawing act as one. Drag the grouping tool over the pieces of a drawing, let go of the mouse button, then click on one of the pieces to make them act as one. To ungroup, just click on one of the members of the group with the grouping tool.

## Clone tool



The clone tool creates copies of tools and objects. The copies of tools have exactly the same functionality as the originals. The tools in the top left corner toolbox, the text tool and the clone tool cannot be copied. There is no tool to delete copied tools. Instead, when a toolbox is closed, all copied tools belonging to that toolbox are deleted. There is no collaborative mode for the clone tool.

## Turn alive tool



The turn-alive tool turns shapes alive. In collaborative mode, the distance between the turn alive tools controls how much alive the shape should be. The greater the distance, the more lively the shape becomes.

## X-Ray tool



The x-ray tool makes x-ray windows. If you draw inside an x-ray window you will only be able to see that drawing through that x-ray window. Move x-ray windows by moving their handles with the hand or the selection tool.

## Help tool



Moving the help tool over another tool plays an audio file describing the functionality of the other tool. Clicking on another tool, except those in the top left corner toolbox, will show how to use that tool.

## New Story tool



The new story tool starts a new story, removing the current story from the screen. If the current story has not been saved, a copy will be saved in the backup-files directory. To retrieve this copy, you may either copy it to the saved-files directory through the operating system, or you may run KidPad using the option to view backup files.

## Bulletin board



The bulletin board tool opens up the bulletin board where stories can be loaded. All previously saved stories are shown on the light brown bulletin board area as thumbnails (small pictures). At the bottom center of the screen, the current story can be seen. To go back to the current story, click on it with the hand tool. To load a story from the bulletin board, click on it with the hand tool. If you load a story and the current story hasn't been saved, the current story will be saved to the backup-files directory. To retrieve this copy, you may either copy it to the saved-files directory through the operating system, or you may run KidPad using the option to view backup files.

## Save Story tool



The save story tool saves the current story. It saves it always to the same filename, overwriting the previous version of the story. If you would like to change filenames, press Ctrl+W and save the story again.

## Save As HTML tool



The save as html tool saves the current story in HTML format. It stores it in the htlm-files directory.

## Print tool



The print tool prints the current story.

## Exit KidPad tool



The exit KidPad tool exits KidPad. If the current story hasn't been saved, the current story will be saved to the backup-files directory. To retrieve this copy, you may either copy it to the saved-files directory through the operating system, or you may run KidPad using the option to view backup files.

## ***Zooming and panning***

You may also pan and zoom with the keyboard. To zoom out to display the entire picture, press the Home key. To zoom in at the place where the cursor is, press Page Up. To zoom out at the place where the cursor is, press Page Down. To pan the image, use the cursor keys.

Sometimes, you may want to zoom to a specific area of the image or to a specific level of detail. One way to do this is to “pre-program” views. When you’ve zoomed and panned to a specific view, hold the Shift key and press one of the twelve function keys at the top of the keyboard (F1 through F12). To get back to that view at a later time, press the function key again (without holding Shift). To remove the association between a view and a function key, hold Ctrl and press the function key.

It is also possible to “re-program” the Home key. By default, the Home key displays all objects, but if you hold Shift and then press Home, the Home key will now bring you back to the current view. To restore the default behaviour, hold Ctrl and press Home.

## ***Logging***

When KidPad is exited, two log files containing user actions are saved in the folder

*Folder where kidpad is installed\log-files\*

The files are named according to the date and time KidPad was exited. The file with the .txt extension can be imported in *Microsoft Excel*. The file with the .ltd extension can be viewed in *Lifelines*, a HCIL product. KidPad never connects to the Internet nor does it attempt to send or copy these log files in any way to any other computer.

## ***Known Issues***

When used with multiple mice, if KidPad loses focus (i.e. another window takes over mouse input), it will appear that KidPad has frozen, as none of the tools move when you switch back to KidPad. This problem is due to a documented focus bug in Java. To get around this problem, click on the gray area around the KidPad screen. This should give KidPad focus and reactivate control of the tools.



## ***KidPad key summary***

<b>Key</b>	<b>Function</b>
Home	Center all objects or go to a pre-defined view.
Shift + Home	Set the pre-defined view for the Home key.
Ctrl + Home	Reset the Home key so that it centers all objects.
F1 through F12	Go to a pre-defined view.
Shift + F1 through F12	Set the pre-defined view for a function key.
Ctrl + F1 through F12	Remove the association between a function key and a view.
Page Up	Zoom in.
Page Dn	Zoom out.
Cursor key left	Move image to the left.
Cursor key right	Move image to the right.
Cursor key up	Move image up.
Cursor key down	Move image down.
Ctrl + q	Quit KidPad (story is not saved to backup-files directory if modified).
Ctrl + 1	Toggle first toolbox.
Ctrl + 2	Toggle second toolbox.
Ctrl + 3	Toggle third toolbox.
Ctrl + c	Clear the screen and start a new story. No backup is saved.
Ctrl + f	Bring the selected items in front of other items
Ctrl + b	Push the selected items below other items
Ctrl + z	Make the selected items a little bigger
Ctrl + x	Make the selected items a little smaller
Ctrl + j	Import an image into KidPad (do not use when multiple mice are active). Previously to importing, put images in a parallel directory to the KidPad directory. A saved KidPad story only keeps references to the relative paths (locations) of image files.
Ctrl + h	Toggle showing hints of where hyperlinks are when hand is picked up. The new setting becomes effective the next time the hand is picked up.
Ctrl + w	Save current story to different filename.
Delete	Delete the selected items

## ***KidPad Conversion Tool***

KidPad text files saved in versions 0.8 and earlier are not compatible with version 1.0. In order to open these old KidPad text files in version 1.0, you need to convert them using the KidPad conversion tool. This tool will copy a converted version of old KidPad text files into a directory of your choice. The originals will not be modified.

If you are dealing with version 0.9 files, save them as text files by pressing down the Shift key as you save them, and copy them to version 1.0's saved-files directory, but do not run the conversion tool.

Before running the conversion tool, run the previous version of KidPad you want to convert stories from and save all the stories of interest in text format. You can do this by pressing the Shift key as you click the mouse button when you save a story. If you used the turn-alive tool on any of the shapes on your story, turn off the "wiggling" before you save your old story (this gets around a conversion bug).

The KidPad conversion tool may be started from the kidpad directory by running the fileconverter.jar file. Once the application starts, you need to specify the location of the saved-files directory under the version of KidPad you want to convert stories from. Do this by clicking on the "Select" button on the top part of the screen and select the appropriate directory in the dialogue that pops up. You should then click on the other "Select" button to specify the location of the KidPad 1.0 saved-files directory (make sure it's different from the previous version's saved-files directory).

Once both directories are specified, click on the "Proceed with conversion" button. When you see a message saying "All files processed, ? out of ? converted" at the bottom, then you'll know the conversion is done. You may then close the window. The numbers in the message will tell you how many files were converted.

