ABSTRACT

This paper presents a design prototype of an application to build comic storyboards that will aid comic artists/novelists build their initial storyboard prototypes which can be refined later to create their actual graphic novels. The interface is a mean to provide the artist/writers a tool to visualize the flow of information in their graphic novels.

KEYWORDS

User Interface, Comics, Storyboarding, Visual Flow

INTRODUCTION

Comics have always been a debatable form of art. One of the reasons for their immense popularity is the perfect blend of literature and graphics, which neither movies nor novels can provide. This blend is what makes comics unique; when words fail to create an impression the graphics put across the point of view.

Providing coherence between words and pictures is easier said than done. Scott Mccloud, the author of “Understanding Comics” defines six layers of understanding comics. These are Idea/Purpose, Form, Idiom, Structure, Craft and Surface. One looks at these layers and we can easily formulate numerous instances where the same layers can be applied to create user interfaces. An art form that can be possibly be built on such detailed templates, provides an ideal subject of research for the field of User Interface Design.

Comics undergo several iterations of planning and prototyping before the final version is created, hence it is really difficult to build an entire computer application that would allow the artist to create an entire comic from scratch to finish; besides that would also stifle the creative potential of the comic creator. The following paper presents some of the features of an application interface that would allow creators to layout the structure of their work and also help create an outline based on which the artistic dimension could be added to create a work of art. The interface strives to bridge the gap between the Idea/Purpose of the comic with the Craft/Surface. In essence the aim of the interface is provide the middle layers of comic creation essentially the Form and Structure. Comic creators traditionally call this layer as storyboarding, where they create numerous prototypes of their comic page on large paper layouts and rearrange their individual drawings and writings in frames. These frames are put together to form a comic page and the pages are laid out to create a graphic novel.

EXPERT SYSTEM

Since the interface caters to a very particular user group of comic creators, it is of utmost importance that the interface resembles the form and structure of objects used by comic creators if they weren’t using our interface. A single comic page can essentially be broken down into various components: series of Frames containing narration boxes, speech bubbles and characters. These components are features that every comic creator can identify with; therefore proposed interface makes sure that the same features are retained for creating an electronic version of the storyboard as well. To build a good expert system interface it is very important that the user is able to transfer the expert knowledge directly into the interface without a incurring a huge learning curve. The quicker a user is able to identify elements in the interface that correspond to their expert system framework the more efficient is the interface. In the case of the comic building interface it is important that the electronic version resemble the paper version as closely as possible since there is transfer between expert user skills from the paper to the interface only when these skills involve the same abstract knowledge elements. The intuitive instruction that an interface gives a user is improved by approaches that identify underlying knowledge elements, in this case it’s the typical elements of a comic page.[2]
LOOK AND FEEL

An interface could essentially cover everything a user wants, however it is extremely important that the look and feel of the interface corresponds to intuitive actions that the user may do in the real life.

Drag-Drop Feature

Storyboards typically have frames of information containing drawings, texts, notes which can be easily moved around to view the flow of the story. The interface maintains this flexibility by providing the user with all the components that may go into the storyboard by providing a palette of objects. The palette serves as a metaphor for the collection of objects. All a user has to do is click on a feature, drag and drop it on the page. There are certain features that can be clicked and pointed as well such as a zoom function. The drag and drop feature essentially maintains the structural relationship of a page. It is an immersive feature that allows the user to work inside the model of event. It helps the user keep focus on what layer of operation they are at and also helps for easier editing and addition of new elements. The comic layering is maintained by the drag-drop feature as it doesn’t allow any logical errors to occur, such as placing characters over a page without placing a frame before.

Frame Flexibility and Flow

Storyboarding is a stage of comic creation which requires a lot flexibility in terms of moving and changing frames on a page, because only if the frames can be moved around the user would be able to analyze the flow of the story properly. Frames of a comic page can be of different sizes depending on the scene they are depicting. The interface allows the user to resize and reshape various frames on a page according to their convenience to fit the storyline. Frames can also be at various stages of work, one could be a frame holding a completed scanned graphic image and the next could be simply a frame with some notes or just dialog bubbles. The ability to have frames on the same page at various stages helps the user create a frame of reference to build the story and helps them visualize the flow of the comic. There is also a feature of browsing through the comic as one would do while reading it. An open book two page layout of current page and the following page provides the user with a mode of navigation and at the same time also resembles a view from a comic book as one would read it.

Stick Figures

One of the most important decisions incorporated in the interface was the use of stick figures instead of allowing 3-D characters or similar features to be used. A user can scan completed graphics and place them in a frame however they cannot create scenes within the interface itself. One of the main purposes of the interface is to provide the underlying form and structure for building comics but at the same time also maintain the creative ability of the comic creator by limiting to how much the interface can aid them in character creation. It is difficult to relate to the structure of the comic without having any feature that could represent a comic character, hence it was decided that the interface would have simple stick figures which help the artist visualize the scene of a frame and fill the frame with necessary information for artwork to be added later.

The perception of motion is a fundamental property of the visual system. One of the most complex but also most familiar types of motion are the non-rigid movement patterns of living organisms. For humans motion patterns contain a wide variety of information. Correct interpretation of this information is an important human ability. Visualizing the position of the main joints of a walking person by bright dots is enough to convey a vivid impression of a human figure in motion [3]. A translation of these points through a sequence can easily depict the vivid motion of the object, it is for this reason that the use of stick figures is very important for the interface. The stick figures in various positions through a series of frames can give the user a fair idea of the sequence of events taking place. Combined with the feature of having notes for each frame and also speech bubbles, the interface can help a comic creator understand the flow of events in the story. Figure 1 illustrates how a combination of scanned images, notes, speech bubbles and stick figures provide coherence between the frames, hence promoting the flow of information from frame to frame.

CONCLUSION

Comics by themselves are a type of graphical user interface that convey a story in a series of frames filled with text and images. The task of building an interface to create another interface can be made very object oriented in nature, which is what the prototype seeks to do. Maintaining a firm entity relationship among the various underlying components helped in creating a structured and layered approach to the interface design. Comic creation usually has two elements, one is creating a story and the other is creating the graphics. The proposed interface doesn’t aid in the creation of either, but it performs an equally important task of combining the two elements and providing the user with a framework to unite both aspects. The broad categorization of the user of the interface can be called a comic creator, but the sub-category of users can be both comic writers and comic artists. The interface seeks to take advantage of the inherent ability that humans have in associating text and images; it builds upon this premise to carry the flow of information across each page and frame.

REFERENCES

A storyboard is a sequence of hand-drawn sketches or visual images that are supported by script notes or dialogue and placed in a sequence, for the viewer to visualise an animation before production. Each individual shot in a storyboard represents a type of camera shot, angle, action, or special effect, to effectively tell a story. 2. What Is the Purpose of a Storyboard? Why Learn How to Storyboard?

A story artist is like a mini-director - In control of creative content - Visualizing (and improving) the idea or script - Lots of responsibility, but lots of freedom. Storyboard artists are some of the highest paid artists in the industry - Why? Can you apply storyboarding and pitches to the story development process as animation has done? We think so. We would love to hear your feedback to make Storyboarder the best storyboarding tool possible. Fast and Simple. Storyboarder is designed to be simple. Design your own brilliant, custom storyboards for free with Canva's impressively easy to use online storyboard maker. Create a plan for your video next project. Canva's storyboard creator is free, and easy to use—perfect for collaborating and sharing with clients. Choose from our extensive image library or upload your own. Bring your scenes to life without spending hours hunting for the right image.