Icreon Communications

Case Study

Icreon

A software tool to create audio/video content

Our client wanted a software tool that would help them to capitalize on the demand for content generation tools arising out of the growing popularity of Internet broadcasting. The solution was to provide users with the ability to create audio/videos clips and distribute them online as video blogs, podcasts etc. Icreon delivered to a desktop based audio/video manipulation software developed using VC++. With simple and user friendly interfaces the solution enable users to create high quality audio/video content.

Business Requirements

Our client wanted a user friendly software tool that could be used by amateurs, having limited or no technical knowledge, to create high quality audio and video content. Audio and video inputs were to be taken from the microphone and web camera installed on the user's machine. Means to edit the clip such as sequencing, adding effects, images etc was required to be built into the solution. The clips produced through the tool were required to be distributed online to various websites in the form of RSS feeds, video blogs etc. The tool was required to be compatible with various platforms and was required to be scalable to cater to possible future enhancements.

An audio/video manipulation tool developed using VC++

The desktop based software too developed by Icreon enables users to create short-duration audio and video content clips that can be shared over the Internet in the form of video blogs, video RSS feeds, podcasts etc.

To create an audio or video clip, users need to select and configure the hardware (i.e. speakers, microphones and web cameras) available on their system. The hardware configuration will help in determining the quality of the clip. Once the hardware has been configured, they can proceed to create the content/material that is to be used in the clip.

The content can include text as well as other multimedia elements such as images, videos etc. Users can browse their local system can locate media files (such as images, videos, animations etc) that are to be added in the media library.

The script for the clip can be created using the text editor provided. The script will be used as a teleprompter. The scroll speed of the teleprompter can be set by the users according to the speed at which they read. Specific portions of the text can be synchronized with various multimedia elements.

The content (i.e. text and multimedia elements added to the clip) will determine the length/duration of the clip. Once the clip material has been created, users can proceed to the recording process. The video is shot via the web-camera while the script is displayed on the tele-prompter. During recording the web camera images along with the audio spoken by the user will be recorded.

On successful completion of the recording, the clip can be previewed and parameters such as the name of the clip, title, the format in which the clip is to be saved, the resolution and quality at which

the clip is to be saved, folder etc can be defined. Options to publish clips to various websites have been provided.

Icreon has developed the desktop application using C++ and VC++. In order to make the application compatible with multiple platforms such as Windows, Linux, UNIX, Mac OSX, BSD etc GCC and wxWidegets were used. GCC or GNU Compiler Collection is a set of programming language compilers that compiles C++ code for multiple operating systems. wxWidgets is a widgets toolkit that enables the building of GUIs that can be compiled and run on multiple platforms. We have used wxWidgets to ensure that the user interface of the software tool is compatible with all operating systems.

Technologies used in developing this application are: