

Audio mixer application

Customer

A company, that provides various Internet services.

Business sphere: Multimedia.

Aims

The main aim is to create an iPhone application that will assist users, employing various sound effects, to mix in real time audio stream received from Internet Radio stations. The application consists of two principal screens: horizontal and vertical interfaces of the mixer, as well as the screen of radio stations selection.

Basic Functions and Effects

1. Radio station selection
2. Rewind of triggers (pre-installed sounds)
3. Settings saving
4. Mix some channels into one
5. Fader effect
6. Delay effect
7. Reverberation effect
8. Wave effect (Sine, Square, Saw-shaped)

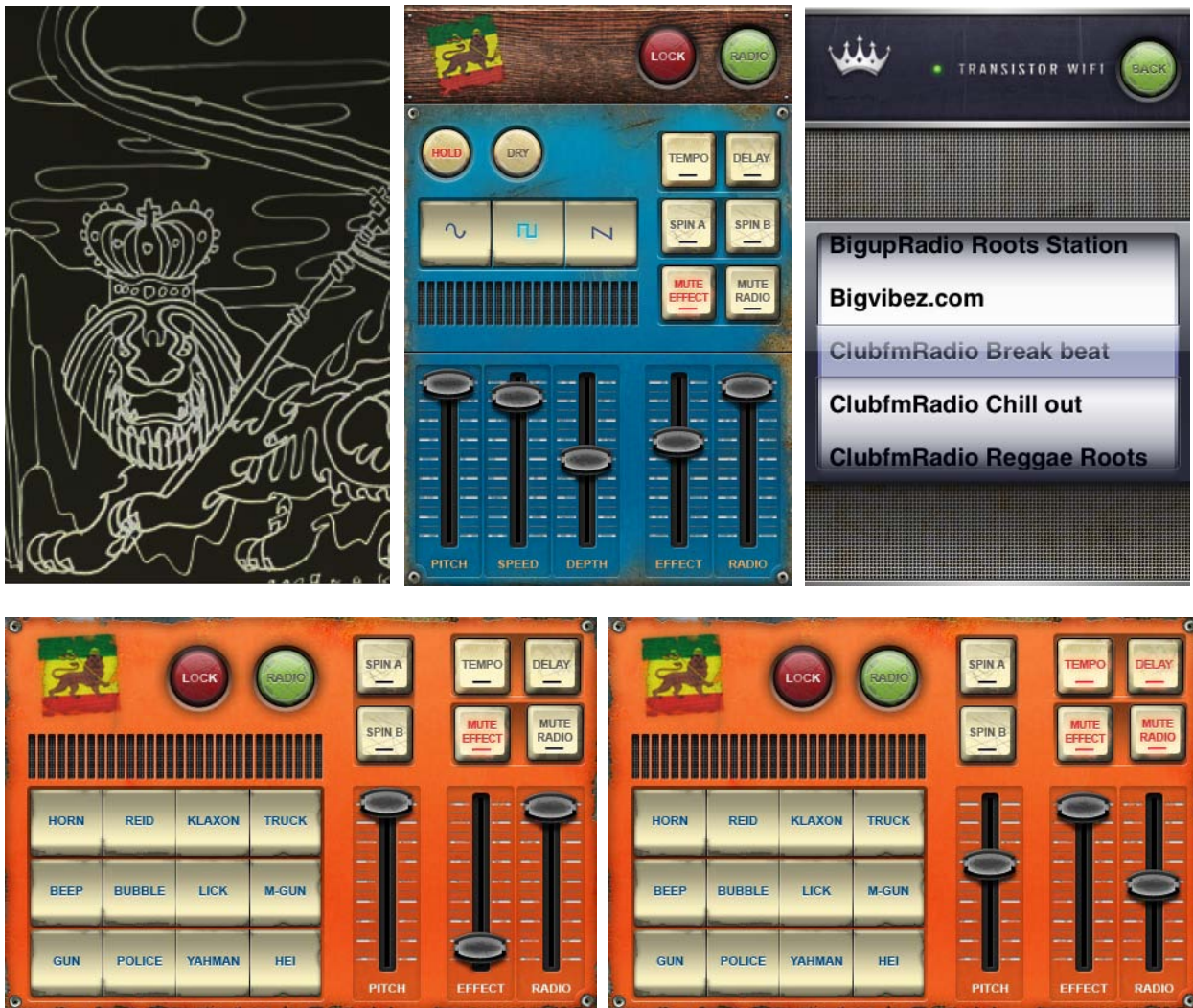
Solutions

The customer has provided all the necessary graphic material for the work.

All the manipulations with the audio layers were realized with the help of an audio engine that was developed by our engineers. The main list of audio mixer modules comprises:

- a. module of .WAV audio files data reading from (supports direct and reverse playbacks, and playback on any frequency)
- b. data reading module of MP3 audio files (for MP3 format decoding LibMad library was used)
- c. module of the second-level filter that can serve both as a lowpass- and highpass-filter depending on fixed settings
- d. delay effect module (a delay extent, an attenuation level for the feedback, lowpass- and highpass-filter feedback characteristics can be specified)
- e. module that allows to mix a few channels into one flow
- f. audio-slider is meant for mono signals.

Screenshots



Technologies

MacOS 10.5.4, XCode, iPhone SDK, objective C

Software product

The real product name is under the NDA

Project capacity

6 person-weeks