ONLINE SELF-HELP AUDIO PORTAL

CLIENT OVERVIEW

Our client is a US based software vendor focused on building an online portal for self- help audio contents. Our client's success hinges on its ability to market audio solutions as the best means of self-help information exchange over web, mobile and podcast channels. Our client harnesses the power of technology to bring these services to the end users 24*7 over a variety of delivery platforms making it easy to access and enjoy their library.

KEY REQUIREMENTS

- Support for multiple channels such as web, phone and iPod to listen to audio

- Achieving performance benchmarks - Supporting 500 concurrent users with the total user base of 20000 in 8 months

- On the fly conversion of audio file formats like MP3, WAV

- Serving the audio content to phones with automated and dynamic voice menu and to iPod

- Adding bookmark on audio content on pause which allows the user to listen to a title from where he had stopped previously

- Integration with the payment gateway

- Handling and managing sensitive data such as credit card information

- Allow streaming of content data so that the user cannot download or re-distribute the titles to others for free

- Multi-part audio content with dynamic switching across web/mobile channels allowing the user to listen to the various titles from different channels, even when the user has listened to first part on web and wants to continue the remaining part over phone channel or vice versa

- Build administrative reports that can send out payments to authors based on various categories like

  - Category of title

  - Number of users listening to the author's titles

  - Number of titles listened for an author.

  - Payment cycle for the authors (1 or 3 months)

- Allow user to listen to titles based on the plans chosen and encourage him to buy premium plans

- Provide cross selling & up selling of various titles by putting in advertisements within the title being heard

- Build plans based on various categories of titles
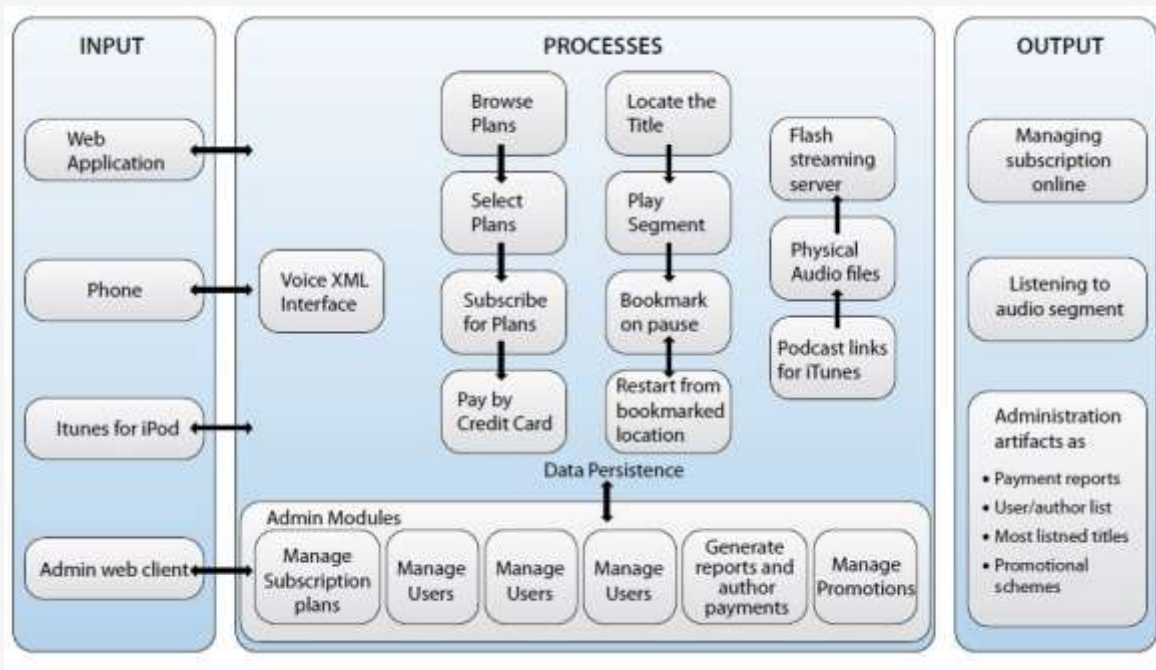
KEY CONTRIBUTIONS

- An end-to-end solution in open source technologies that would work best for
  its implementation and provide short release times & faster time-to-market

- Suggested a Test Driven Approach (TDD) due to which the entire development process was done at a quicker pace

- A performance criterion of a max of 4 seconds for any page to load was achieved

KEY BENEFITS

- 20% cost savings in the development process due to designing of core components in the 1st iteration of an engagement with 3 iterations (ROI)

- Due to the iterative model, client started getting revenues after the first iteration. Addition of new functionalities/features helped in providing seamless customer experience and increasing customer base in terms of both new authors/titles & users

- Xoriant provided simple and highly cost effective solution to our client by incorporating open-source technologies Xoriant provided a robust, highly scalable solution which can supporting 500 concurrent users. Xoriant provided a highly secure solution to the client by the use of Flash media server to stream the audio on web in an encrypted format

- Implemented digital certificate for secure transactions
- Provided a streaming solution for audio files via the web channel using flash streaming server
- Provided real time conversion of MP3 to WAV file using ffmpeg tool. For streaming on phone, voiceXML was used to produce the dynamic voice menu and stream the audio segment to phone accordingly
- Report creation for compensation to authors depending on complex ratios of audio content listened by the users
- Created full-fledged audio player using Flash with all the properties of audio player built in it including book marking of audio titles
- Quality control and quality assurance were handled by experienced members from Xoriant's centre of excellence for quality, thereby reducing the testing cycle

HIGH LEVEL ARCHITECTURE

TECHNOLOGY STACK

- Java JDK v1.5, JUnit
- Apache Web server v2.2
- Apache Tomcat v5.5
- Axis v1.4
- MySQL Server v5.0