APIs TO EXTRACT INFORMATION FROM AN EXISTING WEB RADIO APPLICATION

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ABSTRACT

Web radio is a broadcast of an audio stream over the internet. In this day of computerization, just digitizing a task is no longer enough as automation is the key principle currently required to effectively use any resource available. Most radio applications do not provide integration facilities for micro services such as SMS or Voice. This paper presents APIs that were developed to extract information from an existing web radio application, in order to allow any developer of micro services to have the possibility to easily use the Web Radio. The web radio management known as Airtime was chosen to provide such integration capabilities with the use of RESTful APIs. Airtime is an Open Source Application which allows the control of the Web Radio. By reverse engineering the PostgreSQL database that supports the Airtime application, suitable functions were designed and then developed to meet the objectives of extracting information. The API functions created were show/search, show/details, track/search, track/details, stats/server, stats/icecast, playlist/search and playlist/details. The APIs perform searching for specific shows based on information provided, search for media that is available on the media server (mostly interviews, and podcasts) and provide statistical information such as application status from the servers. With the assistance of the Restler (Luracast) framework, Object Oriented PHP code and SQL, scripts were successfully written and tested to provide the required functionalities.

KEYWORDS: Airtime, API, Open Source, PHP, Radio, Restler, SQL, Web Radio