Research on Recommendations

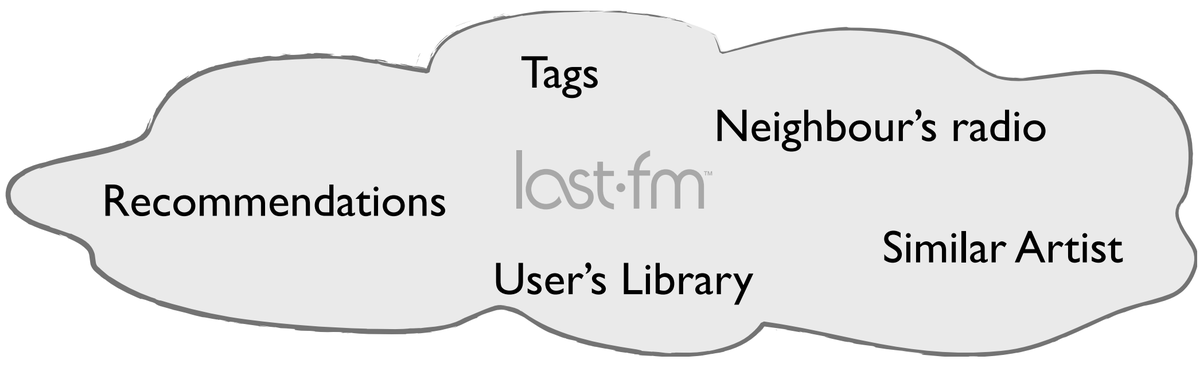
Music recommenders such as Pandora, Last.fm or MyStrands propose songs to users based on **explicit user feedback** (i.e. ratings). However, in order to reduce the cognitive load and required effort, it is possible to make decisions based on **implicit user actions**.

Implicit Interest Indicators

- past purchases
- repeated uses
- decisive actions
- time spent on items
- mouse movements
- skipping

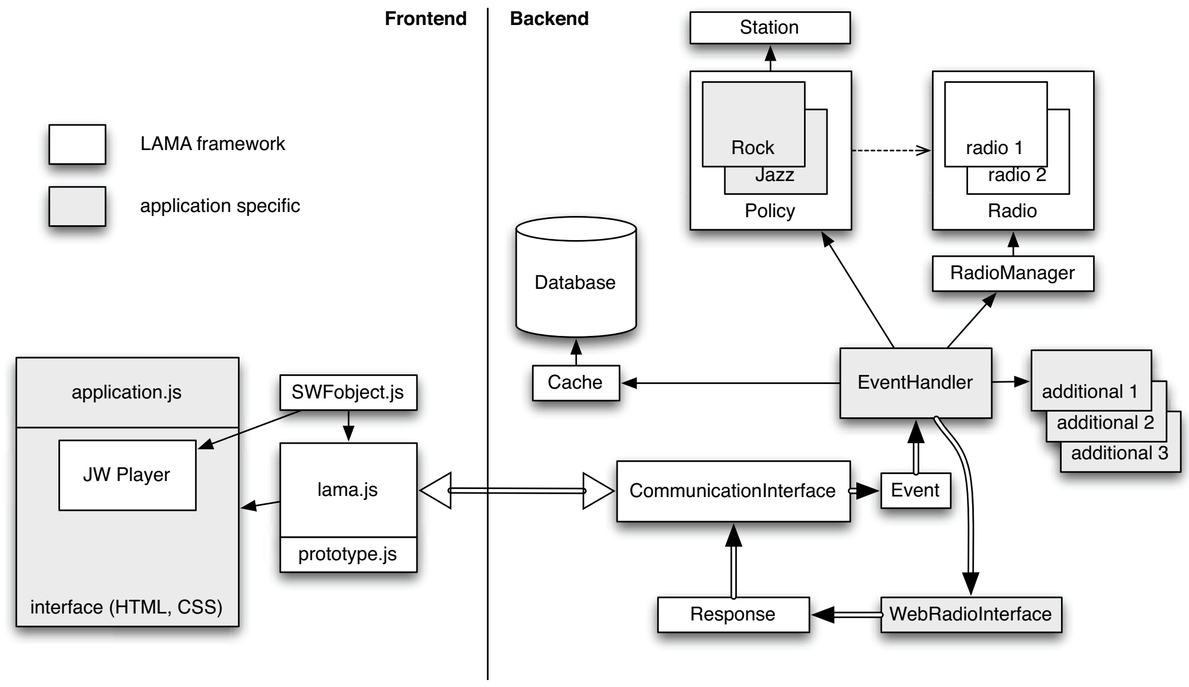
Available Radio Stations

In order to develop our novel interfaces, we rely upon five radio station available through Last.fm. By mixing these together we can define our own recommendations policies.



Thin Client Architecture

LAMA was designed to allow to listen to a radio channel whilst proposing alternative songs, selected through pre-defined policies. The client part of LAMA is implemented as a thin client. As web programming can be tedious, and since LAMA is designed in a generic manner, a thin client architecture was the most suitable. The client performs as few tasks as possible, leaving everything to the server. It only detects events in the interface, and informs the server about these. It also deals with server responses, and updates the interface content accordingly.



LAst.fm Musical Amplifier

Demos available on http://www.whizz.ch/

What is LAMA?

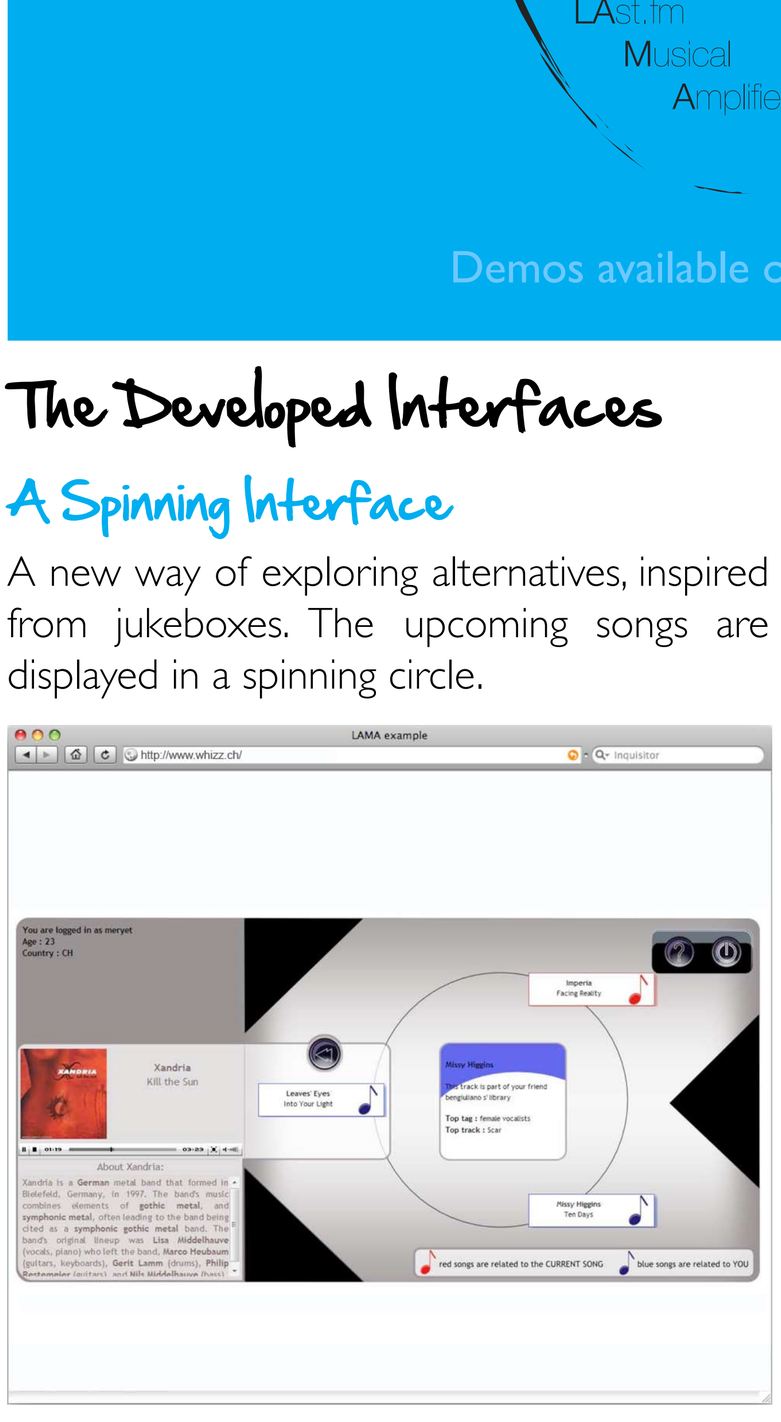
LAMA is a framework that gives you the ability to quickly write new interfaces for music recommender systems.

Its philosophy lets you focus on the recommender's interface and front-end intelligence, letting LAMA do the "dirty" work of finding songs, playing them, and reacting to users' actions. LAMA stands for LAst.fm Musical Amplifier, as it currently uses Last.fm's radio broadcast capabilities. However it was designed to be adaptable to any other music recommender. The frontend part is HTML with flash, and communication with the backend is done using AJAX. The backend is written with PHP, and uses MySQL as database.

The Developed Interfaces

A Spinning Interface

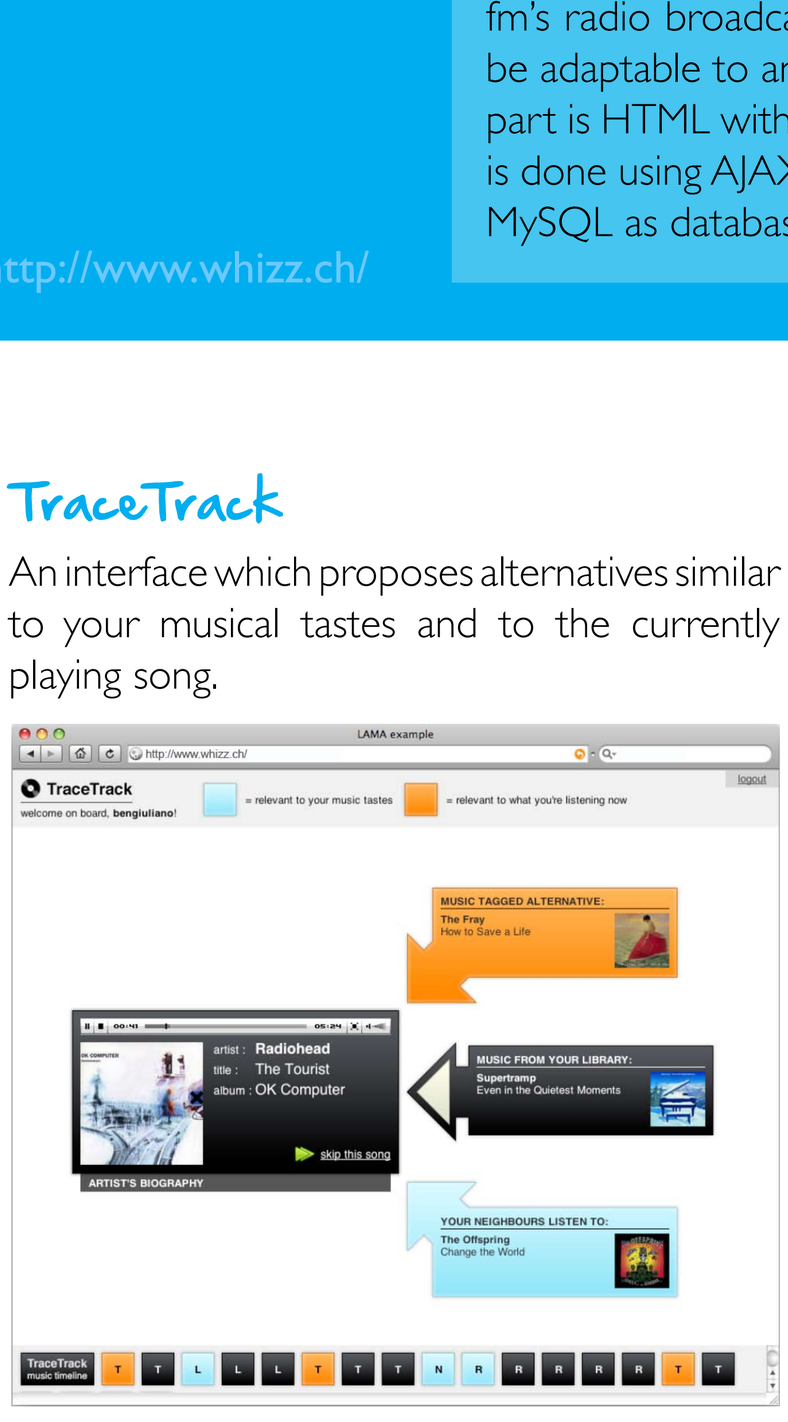
A new way of exploring alternatives, inspired from jukeboxes. The upcoming songs are displayed in a spinning circle.



Alternatives are presented on the right side, until selected as current song.

TraceTrack

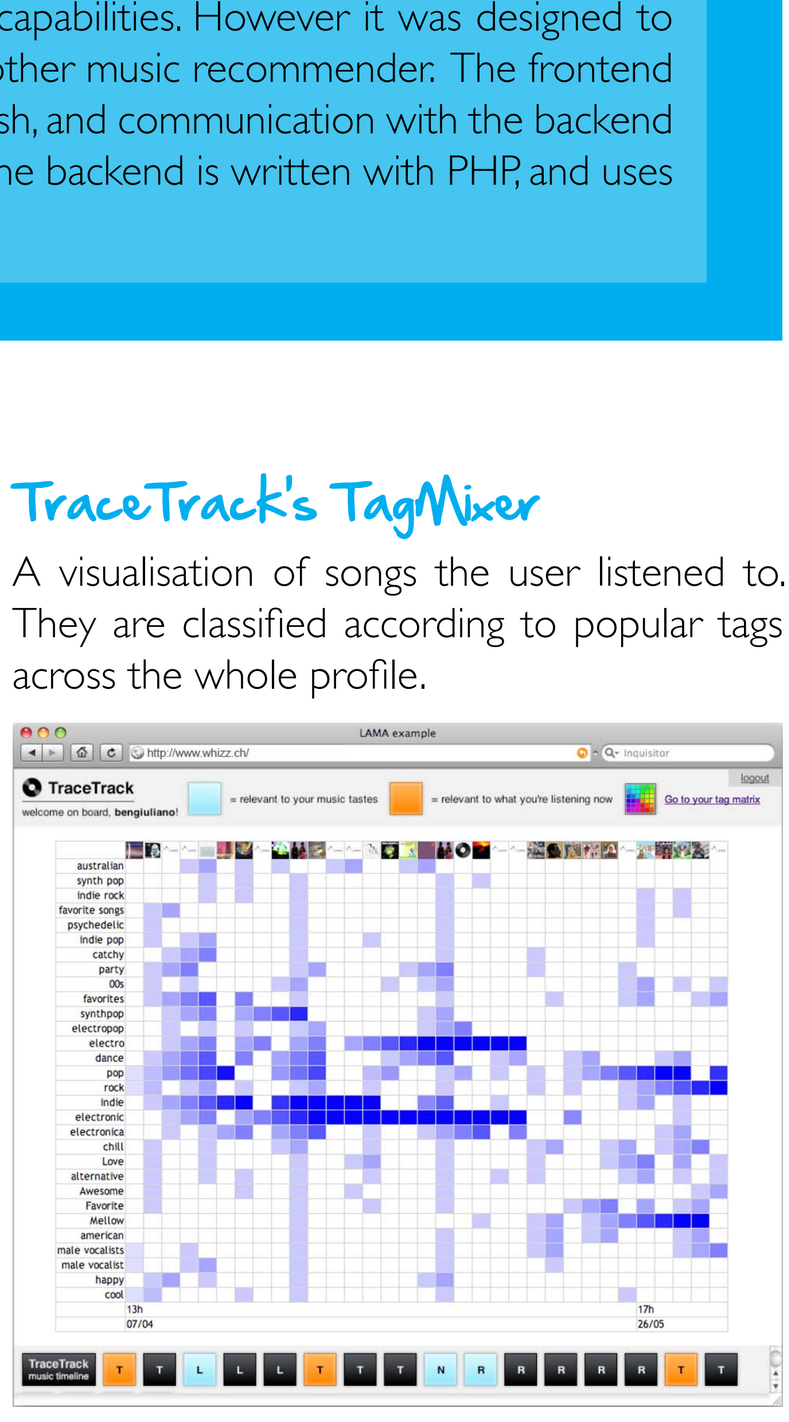
An interface which proposes alternatives similar to your musical tastes and to the currently playing song.



A music timeline that hints at a profile visualisation.

TraceTrack's TagMixer

A visualisation of songs the user listened to. They are classified according to popular tags across the whole profile.



Songs are coloured by the tag's repetition frequency.

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