

Project: Tomahawk features in Amarok

Name: Igor Vileikis

Email: festys.rpo@gmail.com

Freenode IRC Nick: festys

Location: Petrozavodsk, Russia, GMT +3:00

Introduction:

Tomahawk is a cross platform, open source social media player that allows users to share music seamlessly and listen to it anytime, anywhere. Specifically, one of the key features of Tomahawk is the ability to connect to one's Google Talk buddies and share each other's music collections. Amarok already supports various music streaming services so this is a logical next step. The goal of this project is to implement the same features in Amarok and maintain compatibility with Tomahawk.

Project Goals:

The ultimate goal is to implement service in Amarok that allows users to share music and listen tracks of each other via stream. So during this GSoC season I would deliver:

- view friend's collection
- query collection
- stream tracks from friend's collection
- listen to something what user's friends do
- display only the selected friends with user's favourite playlists
- sharing tracks

Implementation:

To implement Tomahawk features with sharing music with friends is better to use Tomahawk's source code[5]. Tomahawk Community don't mind to use their code in the Amarok project. I have been researching their code and found there needed features. For jabber[6] it could be used their implementation with Jreen[7] library. In libtomahawk[8] there is an implementation of music streaming via network. Of course it needs deeper researching of code but the main features are figured.

On the other hand I need to research Amarok's code base. Especially Amarok's service framework part for good standard realisation. Music streaming won't be a problem because I worked with Phonon Framework a lot before.

And last part is the creation of user-friendly interface for query music and playlists.

TimeLine:

This summer I'm getting bachelor's degree, so my examinations are held in May and I advocating bachelor's degree in June. I plan to finish my undergraduate work by mid-April so I mostly free all summer. I'll develop architecture design before the official start to take some time off in May for exams. So there will be only researching Tomahawk's and Amarok's code bases and prototyping.

Tentative schedule:

Upto May 21

researching code base of Tomahawk and Amarok.

May 21 - June 11

integrate Tomahawk's code of work with jabber and music data exchange.

June 12 - June 15

test .

June 16 - June 20

In this days I'll have to advocate bachelor's degree so I'll need a little break.

June 21 - June 28

stream music from collections of user's friends.

June 29 - July 2

share tracks via messages and invitations.

July 3 - July 9

listen to something your friend is listening at the moment.

July 10 - July 20

query music from friends collection (by Artist, Album and etc).

After mid-July

Clean up- Working with optimisation, cleaning code, review comments, write some documentation. May be some tasks will be solved quickly and I'll have more time for improvement other more complex tasks.

About Me:

I'm a fourth year student of Petrozavodsk State University in specialty of Information Systems and Technologies. On my second year I've started to learn Qt and have began participating in different projects. As a musician I was interested in working with multimedia and network was

my second passion. My last year coursework was about making emulator of vinyl with Phonon, but because Phonon is young framework there wasn't needed opportunities for realising that idea. Then I started to studying GStreamer to realise it. Last summer I was participating in FRUCT[9] contest[10][11][12](unfortunately links are in russian) and I made an application which provides a view of programs of Russian TV channels[13]. But a week before the announcement of the results, FRUCT referral decided to cancel the event due to the small number of participants. Cause of it I went back to work with multimedia. And at the moment I working on creating Qt multimedia-network applications for mobile phones for example MIDI controller via bluetooth or wi-fi with different features.

Useful Links:

- [1] <http://www.google.com/talk/>
- [2] <https://developers.google.com/talk/?hl=en>
- [3] <http://www.ietf.org/rfc/rfc3921.txt>
- [4] <http://xmpp.org/extensions/xep-0166.html>
- [5] <https://github.com/tomahawk-player/tomahawk>
- [6] <https://github.com/tomahawk-player/tomahawk/tree/master/src/accounts/xmpp>
- [7] <https://github.com/euroelessar/jreen>
- [8] <https://github.com/tomahawk-player/tomahawk/tree/master/src/libtomahawk/network>
- [9] <http://fruct.org/>
- [10] <http://forum.fruct.org/forum/23>
- [11] <http://forum.fruct.org/forum/24>
- [12] <http://forum.fruct.org/forum/22>
- [13] <https://gitorious.org/vochmee>