

**Title:** Totem Markers/Chapters Support Student: Alexander Saprykin Abstract: Support of chapters/markers of indexed media (annodex/ccml) in Totem movie player Content:

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My ultimate goal is to implement Totem chapters/markers support in indexed media files (i.e. annodex, ccml). Totem already can play such files via GStreamer, but it hasn't visual chapters support.

I want to implement it as a Totem plugin, which will display chapters (and their controls) at the Totem's side panel. So, it will consist of ccml/annodex chapters backend (will be implemented using libannodex/libccml, writing features may be implemented via GStreamer annodex encoder). GUI will be implemented as Totem's side panel widget with ability to see all chapters, add new and edit existing chapters. Also there will be an export feature, which can export only selected chapters into the single file. Maybe I'll implement ccml's xml export feature if it would be useful. All these components will be merged in Totem plugin.

I think, that GNOME community will have great benefits from this project, such as:

- GNOME Usability team can use it to facilitate the sharing of analysis done on usability sessions on video;
- Totem already supports indexed media files but it lacks of chapters support in them — I'm going to fix it;
- indexed media is a great way to explain somebody, especially via Internet, the things on video — so it can be done using Totem, i.e. screencasts or desktop recording.

I want to complete particular this project because I'm really excited on media — music, videos. Also I need sometimes this feature to explain something on desktop recorded files. Now I have a chance to do it and to help others.

### **Tentative timeline**

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**April — May 14th**

Read the more about annodex/ccml specs, read more about gobject, gstreamer internals, digg in Totem's sources, write lots of little code snippets to do specific things, so as to get a feel for

the system.

### **May 15th - June 7th**

Work on my first Totem plugin implementation. Integrate it into the Totem build system to make it easy for testing. Plugin should display chapters of indexed media file currently playing by Totem. Start of writing annodex/ccml backend for my plugin.

### **June 8th - June 30th**

Implementing writing support in backend. I not decided yet weather it will be done via annodex library or GStreamer annodex decoder, I gonna thouch both of them to make a better choice. At this time plugin must be capable to write xml spec file with chapters for target file. Later this xml file will be used to produce indexed file.

### **July 1st - July 14th**

Futher work on writing chapters support and annodex/ccml backend. At this time plugin must be capable to generate indexed files, edit already existing chapters, export xml spec file. Time of Mid-review.

### **July 15th - July end**

End of write chapters support. Work on chapter title overlay on playing video support. Fixing previously found bugs.

### **August**

Get the code in order, clean it up, take some notes, clear bug reports (if any :)) and get ready for the merge. Time of final testing.

I'm the best person to work on this project because... I have a great interest of doing it and... I'm really, really wanna to do it :) And I'm gonna finish this project anyway.

I havn't a great open source experience, but I'm using GNOME everyday for more then a year. I have only reported two typo bugs in bugzilla, I'm participating in GNOME Russian translation team (and translating Totem, too :) - so I wanna to make more useful things for GNOME community and try to make some code :) I wanna get closer to GNOME community.

### **About me**

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I am currently a student of Saint Petersburg Electrotechnical State University, department of computer science, fifth year of study. I'm 21 years old, bery quickly adopting to new things and technologies. Besides being familiar with C and C++, I have extensive experience with code reading and working with other people's code. And I'm interesting in improving GNOME because I use this DE every day at home, at work and I want to make it a bit better.