

# Digital Talking Book Player

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## 1 Principal

Skolelinux <sup>1</sup>. Contact: Herman Robak.

## 2 About "Fri Programvare i Skolen" and Skolelinux

"Fri Programvare i Skolen" is an ideal organization which seeks to arrange and inform about the use of free software in norwegian schools, colleges and universities.

Skolelinux (aka Debian-edu) is a Custom Debian Distribution that is customized for schools with focus on being easy to install and maintain. Skolelinux tries to give schools and students a good and free alternative to proprietary software.

## 3 About the project

A program that plays audio books in the "Digital Talking Book" format, Daisy. Daisy books are audio books with synchronized text which can be used by people that are blind or have difficulties seeing or reading.

## 4 Functionality

A engine that plays audio books and provides an API which can be used by GUI components.

An user interface based on the engine API.

## 5 Technologies

The evaluation and choice of technologies will be made in the pre-project. Basic requirements are that the technologies must be well supported by Skolelinux.

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<sup>1</sup><http://www.skolelinux.org/>

The application can be developed in C, C++, Python, Ruby or other programming languages. The project will try to use, modify or extend existing source code when possible. The project depends on the use of several software libraries which will be evaluated in the pre-project.

## 6 Relevant technologies

### GUI

- GTK+
- QT

### Audio

- Audio formats (mp3, mp4-aac, wav)
- Audio back ends (oss, arts, alsa)

### Graphics

- JPEG
- PNG
- SVG

### XML

- SMIL
- XHTML

### IPC

- DBUS
- Sockets
- Pipes

### Other

- Unicode

## 7 Guidelines

Use of existing source code should be used where it's appropriate. All sources should be documented with respect to the authors and the evaluation of this project.

The program is to be based on free software and distributed according to Debian Free Software Guidelines.

Documentation produced should be in English and the program should support internationalization to simplify translation.

The project will use Subversion to keep track of changes to the source code and documentation.

Versions should be frequently released. User input is vital to the success of the project.