

Luwrain — OS for the blind or visually impaired

- ▶ *Luwrain* increases comfort and usability on Personal Computers (PCs) without a computer monitor. Our elegant system is simple to install, configure and navigate without any prior technical experience.
- ▶ *Luwrain* takes a completely unique approach to solve the blind accessibility problem. We research it because blind persons are not able to use mouse, which is the most effective way to interact with graphical environment they still have to work in.
- ▶ *Luwrain* is built on audible principles for the blind, as well as a companion text-only rendering with various font and size controls for the visually impaired. This is a significant departure from the traditional approach of adapting visual interfaces with accessibility add-ons.

The *Luwrain* code is published under *GPL V.3* license.

Potential Use Cases for *Luwrain* technology:

- ▶ OS for installation on existing mobile, desktop, and embedded devices
- ▶ *Luwrain* as a platform for applications built specifically for the blind and visually impaired

<http://luwrain.com/>

Technical Specifications

- ▶ *Linux* kernel
- ▶ Development platform:
Java SE.

Supported applications outside of *Luwrain* interface:

- ▶ *Chromium* or *Firefox* for web browsing
- ▶ Partial support of closed apps (e.g. *Skype*)

Luwrain provides the set of standard adapted applications: file browser, mail and news clients, calendar, address book, Word document support, media player, text editor and system control panel. *Latex* and *Lilypond* are available for installation separately. These applications are conceptually well suited for use by blind and visually impaired users within the context of *Luwrain*.

Luwrain is an extensible OS with a well structured Software Development Kit (SDK), making development on our platform a breeze.

The work is done approximately by 20% and could be completed by group of 2–3 developers in 2 years.