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# Developing software based on the FSDL software library

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# Why create software based on the FSDL software library?

- Not an obligation because hand coding is powerful
- Once familiar with the format, developers need to automate tasks and increase their productivity
- An authoring tool does not need to include all FSDL features
- Designing vs. Coding: let the site creator decide

# The FSDL software library: for precision rendering

- Frogans Player rendering engine
  - Displays blocks of international text
  - Combines layers
  - Performs graphical transformations
- Accurate down to the last pixel!

# Download, use and redistribute the FSDL software library

- <https://www.frogans.org/en/resources/fsdl/access.html>
- Ready to use
- Free of charge
- Available for all
- For all kinds of software

# What is the FSDL software library?

- The reference implementation of the FSDL technical specification
- One of the software libraries included in Frogans Player
- The Frogans Player rendering engine: performs graphical rendering of Frogans slides in memory

# X-languages library thanks to wrappers

- Developed in C : cross-platform, powerful, can be used directly in C, C++, and Objective C
- For other languages: non-opinionated wrappers
- Today: Java (Jython, Clojure, Groovy, Scala, JRuby) and PHP (versions 5.4, 5.5, 5.6, and 7.0)
- Coming very soon: .NET (C#, VB.NET, etc.), Python, Pascal
- Future languages: just ask (priorities set by user request)
- Contributions welcome!

# UPIP: an OP3FT creation to industrialize wrapper development

- UPIP – Uniform Portable Interface Language
  1. XML-based interface description language
  2. Wrapper generation system

# What can developers create with the FSDL software library?

- Web applications
- Desktop applications
- Mobile applications



# What does the FSDL software library do?

- Validates an FSDL document
- Performs graphical rendering using various modes:
  1. One prepared resource \*
  2. One layer only \*
  3. Slide only
  4. Slide without rendering constraints
  5. All (prepared resources, layers, and the slide)
  6. All without rendering constraints

\* Not yet available

# Steps for developing your own software with the FSDL software library

1. Integrate the library in your software development environment
2. Use the library's API (interface)
3. Distribute your software