

User Manual – Universal File Converter

1. Overview

Universal File Converter is a cross-platform desktop application built with Java and JavaFX. It enables users to convert files between popular formats including images, text documents, audio, and video. The application features a graphical user interface, drag-and-drop support, batch conversion, and automatic logging of conversion history in an SQLite database.

2. Installation

Requirements:

- Java 17 or higher
- FFmpeg (for audio and video conversion)

Steps:

1. Download the latest release from the GitHub repository.
2. Make sure `ffmpeg` is accessible (either in the project folder or in your system PATH).
3. Run the JAR file:

```
java -jar UniversalFileConverter.jar
```

3. Interface Overview

Upon launching the application, you will see a tabbed interface with four main sections:

- Images: Convert between PNG, JPG, WEBP, TIFF
- Text: Convert CSV and TXT to XLSX, or PDF to PNG
- Audio: Convert audio files to MP3
- Video: Convert video files between MP4, AVI, MKV, MOV, WEBM

In the top-right corner, you will also find a History button which opens the conversion history tab.

4. Converting Files

General Steps (all tabs):

1. Drag and drop one or more files into the drop zone.
2. Choose the desired output format.
3. (Optional) Adjust quality or delimiter settings if available.
4. Click Convert.
5. The converted files are saved in the same folder as the originals.
6. Conversion history is saved automatically and can be reviewed at any time.

5. Specific Features

Images:

- Supports PNG \rightleftharpoons JPG, TIFF \rightarrow PNG/JPG, WEBP, and PNG/JPG \rightarrow PDF (with compression and rotation options).
- Format-specific icons are displayed upon file drop.

Text:

- TXT \rightarrow XLSX supports custom delimiter selection (comma, semicolon, tab, or custom).
- PDF \rightarrow PNG splits the document into separate images by page.

Audio/Video:

- Uses FFmpeg for conversion.
- Supports batch processing.
- Converts to MP3 for audio and to various formats for video.

6. History and Logs

- Every conversion is logged with the file name, source and target formats, status, and timestamp.
- You can clear the history via the History tab.
- Technical logs are saved to `logs/log.txt` for troubleshooting.

7. Troubleshooting

- Unsupported format: Ensure the input file is one of the supported types.
- FFmpeg errors: Check that FFmpeg is installed and accessible via PATH.
- UI not responding: Restart the application; conversions run in separate threads but could block on large files.

8. License and Credits

This application is licensed under the MIT License. Created by Ekaterina Lazovsky, with contributions from Elena Prokofyeva.

9. Contact

For support or questions, open an issue in the GitHub repository:

https://github.com/katherinero1/Universal_File_Converter