

Convertre Plugin — Full Specification Document

Overview

Convertre is a WordPress plugin that provides a shortcode-driven frontend workflow for converting image and document files. Users upload files, select from available conversion options, and download the converted files — with smooth GSAP-powered animated transitions between each step.

Features

- Drag & drop file upload or file picker
- File type detection with format-specific conversion options
- Interactive and non-interactive conversion option buttons per file
- API-based conversion integration
- Token usage validation via API before conversion
- Token balance check via API
- Resulting file delivery with download links
- GSAP-animated transitions between workflow views
- Shortcode-based frontend embedding

Shortcode

[convertre_converter] — Renders the plugin's 3-step workflow interface.

Workflow Views

File Select View

- Drag & drop area and file picker button
- Display of uploaded files as a list
- Each file displays: Filename and detected file type

- A row of conversion option buttons: Active buttons for supported conversions, Disabled (non-interactive) buttons for unsupported conversions

- Button: Convert Files

File Conversion View

- Loading spinner/animation while files are processed
- Displays real-time conversion progress/status
- On completion, transitions to File Delivery View

File Delivery View

- List of converted files with download links
- Button: Convert More Files (returns to File Select view)

API Endpoints

- Token Balance Check: /api/check-balance
- File Conversion: /api/convert-file
- Reward Ad Trigger: (handled by mobile app wrapper / external mechanism)

Supported File Formats and Conversion Options

HEIC -> JPG, PNG, PDF
JPG -> PNG, WEBP, PDF
PNG -> JPG, WEBP, PDF
WEBP -> JPG, PNG, PDF
GIF -> JPG, PNG, PDF
BMP -> JPG, PNG, PDF
TIFF -> JPG, PNG, PDF
SVG -> JPG, PNG, PDF
PDF -> JPG, PNG, WEBP
DOC -> PDF
DOCX -> PDF
ODT -> PDF
XLSX -> PDF
PPTX -> PDF
EPUB -> PDF
RTF -> PDF
TXT -> PDF

Frontend Animations — GSAP Integration

Library: GSAP (GreenSock Animation Platform)

Source: CDN via <https://cdnjs.cloudflare.com/ajax/libs/gsap/3.12.5/gsap.min.js>

Project Deliverables

- convertre.php (main plugin file)
- /assets/js/convertre-frontend.js (GSAP animations, file detection, conversion options display, and AJAX handlers)
- /assets/css/convertre-frontend.css (for basic styling)
- Plugin admin settings page for API keys and endpoint configuration (optional Phase 2)
- Documentation/README detailing installation, usage, and supported conversions

Development Standards

- WordPress PHP coding standards
- Use `wp_enqueue_script` and `wp_localize_script` for AJAX
- Escape output and sanitize inputs
- Modular, well-documented JavaScript and PHP
- Accessible and responsive frontend interface
- Animation fallback for `prefers-reduced-motion`

Summary

This detailed specification formalizes the Convertre plugin's full feature set, including precise supported file format conversions, frontend workflow, API integrations, and GSAP-driven screen animations for a polished user experience.