

# prd04 iphone app

## PRD 04 — iPhone Application (JPE Studio Mobile)

### 1. Product Vision

JPE Studio Mobile is a native iOS app that enables users to review, edit, and manage JPE and JPE-XML mod definitions on the go. It relies on the same engine logic (locally or via cloud) and focuses on reading, editing, diagnostics, and project health rather than raw file system operations.

### 2. Target Users

- Mod authors who want to sketch ideas or fix small issues away from their desktop.
- Users who want to read explanations of mods on their phone.

### 3. Core Features

#### 3.1 Project Dashboard

- R1.1: Show a list of projects synced from desktop or cloud.
- R1.2: Indicate project health using colors or icons (healthy, warnings, errors).
- R1.3: Provide quick access to the most recently edited files.

#### 3.2 JPE Viewer and Editor

- R2.1: Display JPE files with monospaced font, line numbers, and syntax highlighting.
- R2.2: Allow basic editing: insert, delete, copy, paste, undo, and redo.
- R2.3: Show inline markers for diagnostics, with a tap to view full details.

#### 3.3 Mod Explanations

- R3.1: Local or remote access to readable explanations of interactions, buffs, traits, and other resources.
- R3.2: Allow users to navigate by resource type and name.
- R3.3: Provide summaries of what a mod changes or adds.

#### 3.4 Sync and Offline Support

- R4.1: Sync JPE and JPE-XML documents via cloud or other configured backend.
- R4.2: Operate offline with local copies of documents and queue changes for later sync.
- R4.3: Handle sync conflicts by comparing versions and allowing the user to choose or merge.

#### 3.5 Build Requests and Diagnostics

- R5.1: Allow users to request builds from the app.
- R5.2: If build is performed in the cloud, provide build status and error summary.
- R5.3: If build requires desktop, queue the request and display status once desktop completes it.
- R5.4: Show project-wide and file-specific error lists, with navigation to the relevant JPE lines.

### 4. Non-Functional Requirements

- Native iOS implementation using Swift and SwiftUI.
- Simple, touch-friendly interface optimized for small screens.
- Data encryption at rest for any synced project data.
- Respect battery and data usage constraints.