Functional Requirements Document (FRD)

Payroll Management System

Version: 0.2

Date: July 15, 2025

# 1. Introduction

## 1.1 Purpose

This Functional Requirements Document (FRD) defines the features and behavior of the Payroll Management System (PMS). The system processes employee and independent contractor compensation, tax withholdings (where applicable), employer taxes, stores regulatory forms and worker documents. The FRD serves as the contractual baseline between Business Stakeholders and the Development Team.

## 1.2 Scope

The initial release (v1) will support

* Hourly employees paid on a bi-weekly schedule, with ad-hoc payroll runs as required.
* Independent contractors (1099‑NEC) paid on demand or scheduled cycles.
* Secure electronic storage and lifecycle management of worker documents (W‑4, W‑9, I‑9, professional certificates, employment authorization, etc.).

Monthly‑salaried employees and direct‑deposit remain noted for future enhancement.

## 1.3 Intended Audience

* Business Owner / Employer
* HR & Payroll Administrators
* Software Development & QA Teams
* Regulatory Compliance Officers

## 1.4 Definitions, Acronyms, Abbreviations

|  |  |
| --- | --- |
| Term | Definition |
| W‑4 | IRS form used by employees to determine federal income‑tax withholding |
| SS | Social Security tax (employee & employer portions) |
| 1099‑NEC | Annual form reporting non‑employee compensation paid to independent contractors |
| I‑9 | USCIS Employment Eligibility Verification form for employees |
| Contractor | A worker classified as an independent contractor under IRS rules (non‑employee) |
| Medicare | Medicare tax (employee & employer portions) |
| 941 | Quarterly Federal Tax Return (Employer’s Quarterly Federal Tax Form) |
| 940 | Annual Federal Unemployment (FUTA) Tax Return |
| 943 | Employer’s Annual Federal Tax Return for Agricultural Employees |
| YTD | Year‑to‑Date totals |
| PMS | Payroll Management System |

# 2. Overall Description

## 2.1 Product Perspective

The PMS is a standalone web application that allows HR to manually enter worked hours from Clinical Management Software (CMS) and stores worker master data and documents. It produces paychecks, contractor payment statements, pay stubs, 1099‑NEC, 941, 940, and 943 forms.

## 2.2 Product Functions (High‑Level)

* Maintain worker master data (employees & contractors) — demographics, tax forms (W‑4 / W‑9), state of residence, hourly/contract rate, document set.
* Manually Enter/Import worked hours (employees) or payable amounts (contractors).
* Calculate gross pay, deductions, taxes, employer taxes, and net pay (employees).
* Calculate contractor payment (gross = net, no employer taxes withheld).
* Run scheduled and ad‑hoc payroll/payment cycles.
* Generate paychecks, contractor payment statements, pay stubs.
* Generate statutory reports: deposit schedules, Forms 941, 940, 943, 1099‑NEC.
* Store and manage worker documents with versioning, retention, and secure access.

## 2.3 User Classes & Characteristics

• Payroll Admin/Owner — processes payroll and contractor payments (Intermediate)  
• HR Manager/Owner — maintains worker data and documents (Intermediate)  
• Document Clerk/Owner — scans/uploads worker documents (Basic)  
• Employer/Owner — reviews summaries & liabilities (Basic)

## 2.4 Operating Environment

• Web application (Edge, Chrome, Safari, Firefox)  
• Server: Windows 11, PostgreSQL 14+, Python 3.11 (Django)  
• File storage encrypted at rest (AES‑256); object storage or database blob store

## 2.5 Design & Implementation Constraints

• Monetary calculations must use fixed‑point decimal arithmetic.  
• IRS, state tax tables, and document retention policies must be updateable without code changes.  
• Worker documents must be encrypted at rest, versioned, and deleted per retention schedule.

# 3. Functional Requirements

**FR‑01:** The system shall allow HR to create, read, update, and deactivate employee records, including legal name, address, SSN, state, hourly rate, and W‑4 details.

**FR‑01C:** The system shall allow HR to create, read, update, and deactivate independent contractor records, including legal name, address, taxpayer identification number (TIN), contract rate, and W‑9 details.

**FR‑02:** The system shall allow manual entrance/import worked hours per employee and validate totals.

**FR‑02C:** The system shall allow manual entrance/import payable hours or fixed amounts for each contractor.

**FR‑03:** The system shall calculate employee Gross Pay as worked hours × hourly rate.

**FR‑03C:** The system shall calculate contractor Payment as payable hours × contract rate; Payment equals Net Pay (no taxes withheld).

**FR‑04:** The system shall calculate employee federal income‑tax withholding using current IRS tables and W‑4 data.

**FR‑05:** The system shall calculate employee Social Security and Medicare taxes.

**FR‑06:** The system shall calculate state income‑tax withholding for employees.

**FR‑07:** The system shall calculate employer Social Security and Medicare contributions (employees only).

**FR‑08:** The system shall support scheduled payroll/payment runs and ad‑hoc runs.

**FR‑09:** The system shall generate Payroll Registers and Contractor Payment Registers summarizing amounts.

**FR‑10:** The system shall generate printable Paychecks, Pay Stubs, and Contractor Payment Statements.

**FR‑11:** The system shall export deposit reports for employee taxes (federal/state).

**FR‑11C:** Contractor payments shall be excluded from tax deposit reports.

**FR‑12:** The system shall accumulate YTD balances for each tax category.

**FR‑13:** The system shall generate IRS Forms 941 (quarterly), 940 (annual), and 943 (annual).

**FR‑13C:** The system shall generate IRS Form 1099‑NEC annually for each contractor receiving ≥ $600.

**FR‑14:** The system shall maintain an Audit Log of all runs and configuration changes.

**FR‑15:** The system shall allow reversal/adjustment of processed runs with audit trail.

**FR‑16:** The system shall allow upload, storage, versioning, and secure retrieval of worker documents (W‑4, W‑9, I‑9, certificates, employment authorization, etc.).

**FR‑17:** The system shall tag each document with metadata (worker, doc type, issue/expiry dates) and enforce retention/disposal policies.

**FR-18**: The system shall provide report of related payroll items for individual employees and all employees, over specified period of time.

# 4. Non‑Functional Requirements

**NF‑01**: Accuracy: All monetary calculations must be accurate to the cent; automated unit tests must cover 100% of tax‑calculation logic.

**NF‑02**: Performance: The system shall process a payroll run of up to 1,00 employees in < 60 seconds on baseline hardware.

**NF‑03**: Security: Data must be encrypted at rest (AES‑256) and in transit (TLS 1.3);

**NF‑04**: Usability: Key payroll workflows (run, review, approve, print) should complete in ≤ 6 clicks.

**NF‑05**: Maintainability: Tax table updates must be achievable via UI upload without downtime.

**NF‑06:** Security: Worker documents shall be stored encrypted (AES‑256) with per‑document access control.

**NF‑07:** Retention: Documents shall follow configurable retention rules (e.g., I‑9 = 3 years post‑hire or 1 year post‑termination, whichever is later).

**NF‑08:** Performance: Uploading or downloading a document ≤ 5 MB shall complete in < 3 seconds on baseline network.

# 5. Reporting & Compliance

* Form 1099‑NEC generation (PDF and/or e‑file XML) for independent contractors.
* Worker Document Audit Report (upload, access, deletion events).
* Updated Regulatory References: IRS Pub 15, Pub 15‑A, Pub 15‑B, Pub 1779, and USCIS I‑9 Handbook for Employers (M‑274).

# 6. Assumptions & Constraints

* All worker classifications (employee vs contractor) are determined by HR per IRS guidelines.
* Overtime rules will be handled externally by CMS and reflected in the imported hours.
* Direct‑Deposit (ACH) will be implemented in v2.
* Document storage complies with HIPAA and IRS Publication 1075.

# 7. Appendices

Appendix A – Future Enhancements  
• Monthly‑salary employee support  
• ACH Direct Deposit  
• Self‑service worker portal (W‑2, pay‑stub download)  
• Multi‑company support