Product Requirements Document (PRD v4.0)

Project: HRPro — AI-First HR Consultant in a Box

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1. Purpose

HRPro is a **local-first AI toolkit** that automates HR analysis and documentation for consultants, fractional HR leaders, startup founders, and in-house HR managers (<100 employees).

It is **not an ATS/HRIS replacement**. Instead, HRPro delivers **AI-powered HR workflows** that generate branded, client-ready outputs while running securely offline.

Goals:

- Replace reliance on ad-hoc spreadsheets/docs with structured workflows.

- Empower HR leaders with **AI-driven insights, dashboards, and documents**.

- Provide a **consistent, streamlined UI** across all modules.

- Act as both a **consulting accelerator** for FoundryHR and a standalone packaged product for clients.

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2. Scope

In-Scope (v4.0)

- **UI Framework & Navigation**

  1. Shared design system (typography, color palette, component library).

  2. Simplified navigation: **Landing → Advisor → Dashboards/Builders → Exports**.

3. Multi-client switcher in the top navigation bar.

4. **Side Panels** for contextual actions/filters.

5. **Tabs** as sanctioned pattern for subviews.

- **Modules (Pages)**

  1. **Landing Page**

     - "Ask your CPO" input.

     - Five color-coded module tiles:

       - Dashboard (**Red #FF4D4F**)

       - Engagement (**Orange #FA8C16**)

       - Performance (**Green #52C41A**)

       - PIP Builder (**Blue #1890FF**)

       - JD Builder (**Purple #722ED1**)

     - No redundant "Get Started" button.

  2. **Knowledge Advisor (Chat)**

     - Chat UI with persistent context.

     - Advisor persona with structured methodology.

     - Responses always include **sources + "Why this looks like this" tags**.

     - Suggested prompts always visible.

     - Typing indicators + loading skeletons.

  3. **Dashboards**

     - Dashboard: KPIs, charts with **title, legend, tooltip, and AI Insights section**.

- ■ Engagement: survey summaries, eNPS visualization, insights.

- ■ Performance: review cycle tracking, manager feedback, 9-box visualization.

- ■ Empty state: "Upload a CSV to see insights."

- ■ Upload/Export actions top-right.

4. **PIP Builder (Blue)**

- ■ Stepper flow: **Upload → Review Draft → Advisor Feedback → Export**.

- ■ Rich text draft editor with inline AI suggestions.

- ■ Advisor chat panel with quick actions (e.g., **Tighten, Measure**).

5. **JD Builder (Purple)**

- ■ Stepper flow: **Upload → Review Draft → Advisor Feedback → Export**.

- ■ Structured sections: Overview, Responsibilities, Requirements, Nice-to-Haves.

- ■ Advisor chat panel with quick actions (e.g., **Refine, Balance**).

Out of Scope (v4.0)

- ● Payroll, benefits, compliance.

- ● ATS/HRIS integrations.

- ● Cloud-hosted APIs (OpenAI, Anthropic).

- ● Handling of real employee data.

Future Versions

- ● Dark mode + SaaS theming tokens.

- ● v5 (2026+): Preloaded appliance, enterprise telemetry, agent monitoring.

3. Users & Personas

- **FoundryHR Consultant (Power User)**: Needs multi-client switching, branded exports, speed.

- **Startup Founder (No HR yet)**: Needs plug-and-play templates, automation, and confidence.

- **Fractional HR Leader**: Prioritizes repeatable workflows and sandbox mode.

- **In-House HR Manager (<100 employees)**: Needs augmentation, not replacement; prioritizes simplicity.

4. Functional Requirements

Navigation

- **Top Nav Bar**: HRPro logo, client switcher, quick access icons.

- **Breadcrumbs**: Used for multi-step flows (e.g., Home › PIP Builder › Review Draft).

- **Side Panels**: Collapsible filters and contextual actions.

- **Tabs**: For subviews inside dashboards/builders.

Advisor

- **Chat history preserved** (user right, advisor left).

- Responses include **sources + explainability tags**.

- **Typing indicators + loading skeletons**.

- **Failure states**: Retry banners for advisor errors.

Dashboards

- Input: CSV upload.

- Outputs: Charts with title, legend, tooltip, and AI Insights section.

- **Empty/error states** with suggested prompts.

- **Exports**: PDF/CSV/Excel, fully branded.

PIP Builder

- Stepper: Upload → Review Draft → Advisor Feedback → Export.

- Rich text editor with inline Advisor suggestions.

- Advisor chat panel with contextual quick actions.

JD Builder

- Stepper: Upload → Review Draft → Advisor Feedback → Export.

- Structured sections with Advisor quick actions.

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5. Non-Functional Requirements

Ease of Use

- Non-technical users complete workflows unaided.

Offline-First

- No external API calls; local processing only.

Performance

- Dashboards render in <10s with 1k rows.

Security

- Per-company sandbox workspaces.

Accessibility (Enforceable)

- Contrast ratio ≥4.5:1.

- Predictable tab order; **Enter=submit**, **Esc=close**.

- ARIA roles: nav, main, form, button, alert.

- Focus ring: 2px Indigo-300.

Scalability

- Modular components, reusable layouts.

- Hooks for SaaS theming and enterprise telemetry.

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6. Design Tokens & Components

Typography

- **Font**: Inter (primary), Inter + Source Serif Pro for exports.

- **Hierarchy**: H1 28px Bold, H2 22px Semi-bold, H3 18px Medium, Body 16px, Small 14px, Caption 12px.

Color System

- **Modules**: Red (Dashboard), Orange (Engagement), Green (Performance), Blue (PIP), Purple (JD).

- **Neutrals**: Background #F5F5F5, Text Primary #262626, Secondary #595959, Borders #D9D9D9.

- **Semantic**: Success #16A34A, Warning #D97706, Danger #DC2626.

Components

- Buttons: Primary (solid), Secondary (outlined), Tertiary (text-only).

- Inputs: 6px radius, placeholder #8C8C8C, focus with module-color glow.

- Cards: 12px radius, shadow, padding 16–24px.

- Modals: Max-width 600px, elevation-2 shadow.

- Breadcrumbs, tabs, chips/tags, toasts included.

Interaction Patterns

- Hover elevation + shadow.

- Transitions: 200ms ease-in-out.

- Inline error handling + toast alerts.

- Skeleton loaders, shimmer text, retry banners.

Spacing & Grid

- 12-column grid, 4-pt scale (4–64).

- Section padding: 32px; card padding: 16–24px.

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7. Architecture & Tech Stack

- Language: Python 3.11.

- UI: Streamlit (modules).

- Advisor: FastAPI + Ollama + Chroma (RAG).

- Core Libraries: pandas, matplotlib/plotly, openpyxl, reportlab.

- Design System: **UI Framework v4.0 enforced**.

Enhancements:

- Unified insight pipeline (Advisor + Dashboards).

- Logging + eval harness for citations, hallucinations, latency.

- Performance safeguards (caching, retries).

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8. Prompt & Persona Layer

- Personas: Product Manager, UX Designer, Staff Engineer, Implementation Engineer, QA Reviewer.

- All Advisor outputs must include **transparency + sources**.

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9. Documentation & Ops

- Living spec log (`docs/spec_log.md`).

- Module guides (`docs/module_guides/`).

- ADR folder for architectural decisions.

- Design kit (typography, color, components).

- Install guide: one-click installer + setup docs.

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10. Risks & Mitigations

- **Complex dashboards** → Start with high-level KPIs, iterate.

- **Hallucinations** → Require citations + eval harness + fallback responses.

- **UI drift** → Enforce v4.0 framework as single source of truth.

- **Scope creep** → Limit to v4.0 MVP features, backlog future ideas.

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11. Success Metrics

- ≥80% of users complete tasks unaided.

- ≥70% of users rate Advisor "trust" ≥4/5.

- ≥95% of Advisor responses include ≥1 cited source.

- Dashboards render <10s with 1k rows.

- JD/PIP exports meet branding rules (logo, header, footer, watermark).

- Hallucination rate <15%.

- ≥60% of users report UI/navigation "very easy to use."

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12. Roadmap

Phase 1 (Weeks 1–2): Finalize v4.0 design tokens, implement landing + Advisor.
Phase 2 (Weeks 3–6): Build dashboards (Dashboard, Engagement, Performance).
Phase 3 (Weeks 7–10): Implement PIP + JD Builders.
Phase 4 (Weeks 11–12): Usability testing, export polish, branding review.
Future (2026+): Dark mode, SaaS theming, enterprise telemetry.