

## Overview

As part of this assessment, you will build a **Mini AI-HRMS (Human Resource Management System)**, a minimal full-stack workforce management platform enhanced with:

- Organization onboarding and employee management
- Task and workforce activity tracking
- AI-powered workforce intelligence (performance scoring, workload insights)
- Web3 wallet connection and **on-chain workforce activity/payroll logging (optional)**

This assignment is your opportunity to demonstrate **full-stack engineering, AI integration, Web3 capability, architecture thinking, and product execution skills** required for the **RizeOS Core Team Internship**.

## Tech Stack

Layer	Options
Frontend	React.js, Tailwind CSS
Backend	Golang / Node.js
Database	MongoDB or PostgreSQL
Blockchain	<input checked="" type="checkbox"/> Choose One: Solana / Ethereum / Polygon
Wallet	<input checked="" type="checkbox"/> Choose One: Phantom / MetaMask
Smart Contracts	(Optional) Rust / Solidity
AI / ML	Workforce scoring, skill analysis, workload prediction logic

You are encouraged to choose the stack that best demonstrates **clean architecture, scalability thinking, and product usability**.

## Tasks

### Task 1 — Full-Stack AI-HRMS Development

#### Module 1: Organization & Employee Management

- Organization registration / login (JWT/session)
- Admin can add / manage employees

- Employee profile includes:
  - Role, department
  - Skills (manual or AI-extracted)
  - Wallet address (optional)

## Module 2: Workforce Task Management

- Admin assigns tasks to employees
- Employees update task status:
  - Assigned
  - In Progress
  - Completed
- Secure backend storage and tracking

## Module 3: Workforce Dashboard

Dashboard must display:

- Total employees
- Active employees
- Assigned tasks
- Completed tasks
- Productivity indicators

## Module 4: Web3 Workforce Logging (Optional but Preferred)

- Wallet connection (MetaMask / Phantom)
- Log workforce events (task completion / payroll proof / activity hash) on-chain
- Optional smart contract to record task completion events

## Module 5: AI Workforce Intelligence (Mandatory — Pick Any)

Feature	Description
Productivity Score	Generate an employee productivity score based on task completion
Skill Gap Detection	Suggest missing skills based on role requirements
Smart Task Assignment	Recommend the best employee for a task
Performance Trend Prediction	Predict performance changes using simple scoring logic

## Task 2 — GTM & Monetization Strategy

Prepare a short GTM plan including:

- Target company size / HR personas
- 3-month roadmap to onboard first **50-100 companies**
- ₹5,000 experimental marketing plan
- Minimum **2 revenue streams** (HR SaaS subscription, analytics modules, AI insights add-ons)

### Demo Video Deliverable (Mandatory — 15-20 min)

- Introduction & approach
- Tech walkthrough (frontend, backend, database, **AI + Web3 integration**)
- AI feature demonstration
- Web3 workforce logging demonstration (if implemented)
- UI/UX workflow explanation
- Scalability thinking (100K employees / 1M task logs)
- GTM & monetization thinking
- Roadmap (optional)

### Final Deliverables

Item	Description
Deployed App	Hosted frontend/backend
GitHub Repo	Clean code with README
AI Logic	Model/scoring logic explanation
Wallet Integration	Verified testnet interaction (if implemented)
Demo Video link	15-20 min walkthrough
(Optional) Smart Contract	Source + deployed address

### Evaluation Criteria

Category	Weight
HRMS System Design Thinking	25%

Backend + Data Architecture	25%
AI Integration	20%
Web3 Integration	10%
UI/UX	10%
Documentation & Demo	10%

## Timeline

**Total Duration:** 3 Days from the day you receive the assignment

## Final Notes

This assignment reflects **real-world RizeOS workforce intelligence architecture thinking**. Strong candidates will demonstrate:

- Clean architecture & modular backend design
- Practical AI integration thinking
- Web3 readiness for workforce verification/payroll logic
- Product-level scalability awareness
- Ownership-driven execution mindset

**We're excited to see what you build.**