DeclicPro – Internal Web Application Requirements Document

Prepared for: DeclicNet
Date: June 2025

Executive Summary

DeclicNet, a leading professional cleaning company based in Paris, seeks to develop a custom internal web application — **DeclicPro** — to streamline operations, manage clients and jobs, and improve internal communication, scheduling, and quality control.

This document outlines the full technical requirements for development.

1. Frontend Requirements

Technology: React.js with Tailwind CSS
Pages & Components:

- Dashboard with KPIs
- Client management (Add/Edit/View)
- Job scheduling (calendar-based)
- Staff profiles and availability
- Invoicing and quote generation
- Quality control and inspection forms
- Internal announcements
- Mobile-friendly interface for agents
- Role-based dashboards (Admin, Sales, Field Ops)

Security & Auth:

- Email-based login
- Role-based access
- 2FA (optional)

2. Backend Requirements

Technology: Node.js with Express or Django (Python)
Architecture: REST API (or GraphQL)
Key Features:

- CRUD for all business entities
- Job scheduler
- PDF generation (quotes/invoices)
- Notifications (email/SMS)
- File upload (images, documents)
- Logging and audit trail

Security:

- JWT authentication
- Role-based access
- GDPR compliance

3. Database Requirements

Database: PostgreSQL
Cache: Redis (for real-time scheduling, notifications)

Tables:

- Users
- Clients
- Jobs
- Contracts
- Invoices
- Schedules
- Inspections
- Feedback
- Notifications

4. AI Integration (Optional)

Use Cases:

- Smart quote generator based on job specs
- Image analysis for cleaning quality
- Internal chatbot for staff FAQ support

Tools:

- OpenAI API
- AWS Rekognition (for photo analysis)
- TensorFlow.js (for browser-side AI)

5. Crypto Integration (Optional)

> For future consideration

Use Cases:

- Accepting crypto payments
- Blockchain-based contract validation

Tools:

- MetaMask / Coinbase Commerce
- Ethereum smart contracts

6. Timeline Estimate

Phase	Duration	Deliverables
Planning & Design	2 weeks	Wireframes, tech stack, data schema
Frontend Development	3–4 weeks	UI/UX, responsive components
Backend API & Auth	3–4 weeks	API endpoints, security, auth
Database Integration	1–2 weeks	PostgreSQL schema, migrations
Mobile Interface	3 weeks	Agent mobile portal (React Native)
AI Integration	2–3 weeks	Quote estimator, image analysis
QA & Testing	2 weeks	Manual + automated test suite
Deployment & Training	1–2 weeks	Server setup, CI/CD, documentation

Total Duration: 12–16 weeks

7. Team Roles & Responsibilities

Role	Responsibility
Project Manager	Timeline, coordination, client liaison
Frontend Developer	UI/UX, web pages, user experience
Backend Developer	API logic, authentication, business rules
Database Admin	Data modeling, performance, backups
Mobile Developer	Agent app (React Native)

Role	Responsibility
AI Specialist	Quote engine, photo analysis
QA Tester	Testing, usability, reliability checks
DevOps Engineer	Deployment, CI/CD, server maintenance

Final Notes & Recommendations

- DeclicPro will centralize and modernize DeclicNet's operations
- It will improve client satisfaction through transparency and responsiveness
- It lays the foundation for scalable growth and ESG-focused reporting
- Future modules may include IoT integration, client portals, or multilingual support