**Product Requirements Document (PRD)**

**Project Title:** Karisma 5S Audit Web App (Internal Use Only)

**Purpose:**  
To build a secure, web-based 5S audit platform for internal use by Karisma Grating Sdn Bhd. The system will digitize 5S audit operations—including checklists, scheduling, team delegation, and reporting—across all factory and office zones. Designed to replace paper-based processes, the system ensures compliance, traceability, and real-time operational insight.

**1. Target Users**

* Internal auditors (assigned by zone)
* Zone team leaders and supervisors
* Admin officers responsible for scheduling
* Senior management (analytics and reporting)

**2. Platform Scope**

* **Web Application Only**
  + Responsive design (desktop + tablet use)
  + Hosted via Replit using internal Replit database (not Supabase)

**3. Core Features**

**3.1 UI/UX Design Principles**

* Dashboard-focused layout (Today’s Plan, Action Items, Audit Status)
* Top or side navigation bar: Dashboard, Audits, Schedules, Actions, Reports
* Minimal onboarding; intuitive layout
* Responsive layout for tablet or office kiosk use

**3.2 5S-Specific Digital Checklists**

Each checklist is digitized with structured input per item:

* Response: **Yes / No / N/A**
* Optional: **Photo upload**
* Optional: **Comment field**

**3.2.1 5S Audit Questionnaire Items**

**1S – Sort**【23†source】

1. Only required materials, WIP, and stock are present in the work area
2. Only required tools and equipment are present
3. Only necessary paperwork (e.g., signage) is present
4. Only required items (furniture, rails) are in place
5. All required items are unobstructed and accessible

**2S – Set in Order**【24†source】

1. Locations for materials, WIP, stock, scrap are visible and accessible
2. Locations for equipment/tools (incl. bins, spill kits) are clearly marked
3. Paperwork storage is labeled and visible
4. Areas for personal belongings are defined
5. Walkways and work area boundaries are clearly marked
6. Items follow proper color-coding standards (paint/markings not faded)

**3S – Shine**【25†source】

1. Cleaning procedures and time allocations are defined and communicated
2. Machines (fans, extractors) are free of dust/oil leaks
3. Tools are cleaned after use
4. Paperwork and work surfaces are clean and damage-free
5. Personal item areas are clean and damage-free
6. Walls, stairs, walkways are clean, uncluttered, and undamaged
7. Hard-to-reach areas are cleaned per schedule

**4S – Standardize**【26†source】

1. Material/WIP/scrap storage locations are standardized and known
2. Equipment operation/cleaning SOPs are standardized and visible
3. Tools are stored properly, undamaged, and not modified
4. Paperwork and 6S boards are clearly labeled
5. Personal belonging areas are labeled and standardized

**5S – Sustain**【27†source】

1. All materials/WIP/stock are stored correctly and checked regularly
2. Equipment is operated and cleaned as per SOPs and audited regularly
3. Tools and labels are maintained and reviewed periodically
4. Audit results are visible and shared with both floor and management
5. Recognition is given to teams practicing 5S
6. Cleaning routines comply with the schedule and allocated time

* Sort (1S): Verify presence of required items only【23†source】
* Set in Order (2S): Confirm visual management, access paths【24†source】
* Shine (3S): Cleanliness of tools, surfaces, hard-to-reach areas【25†source】
* Standardize (4S): Labeling, procedural adherence【26†source】
* Sustain (5S): Maintenance, visibility, recognition system【27†source】
* Each checklist item: binary response (Yes/No/N/A), photo upload, comments

**3.3 Audit Execution Module**

* Audit creation from schedule or ad-hoc
* Real-time input of answers, photos, and comments
* Save draft, finalize audit, or continue later
* Timestamp logging (IP-based zone mapping optional)

**3.4 Action Plan System**

* Raise non-compliance or improvement as action items
* Assign to users (with zone/team filter)
* Set due dates, priority, comments, and required photo proof
* Status tracking: Open, In Progress, Closed

**3.5 Scheduling Interface**

* Admins define weekly/monthly recurring audits by zone
* Assign audits to teams or individuals
* View Today’s Plan per user on dashboard
* Email reminders (optional)

**3.6 Zone Mapping and Delegation【28†source】**

* Predefined zones include:
  + Office Ground Floor (Reception, Meeting Room, Surau)
  + Factory Zone 1 & 2
  + First Floor (Sales 1, Sales 2, Pantry, Meeting Room)
  + Second Floor (Admin, Filing Room, Accounts)
* Teams A–I mapped to specific zones with responsibilities per 5S step

**3.7 Reports and Analytics**

* Generate PDF report per audit (timestamped, branded)
* Trend charts (per S-category, zone, and timeframe)
* 5S maturity level tracking (Level I–V)
* Management dashboard: high-level overview and export options

**3.8 Security & Roles**

* Role-based access: Admin, Auditor, Supervisor, Viewer
* Audit trails for all actions (audit creation, edits, status changes)
* Password-authenticated access using Replit Auth system or basic hashed login store

**3.9 Implementation Tracking【28†source】**

* 6-month 5S rollout:
  + Month 1: Setup team and checklists
  + Month 2–3: Red tag & layout optimization
  + Month 4–5: Daily cleaning standards + visual labeling
  + Month 6: Performance tracking + recognition system

**4. Technical Stack**

* **Frontend:** React (Next.js or Vite preferred)
* **Backend:** Replit native web backend using @replit/database
* **Database:** Replit internal key-value store (JSON-based)
* **PDF:** react-pdf or Puppeteer-based server render
* **Hosting:** Replit (dev + prod)
* **Styling:** TailwindCSS or shadcn/ui

**5. Constraints**

* Internal-only web app (no mobile app)
* Designed for factory-floor compatibility (run on tablets)
* Offline mode not required
* All 5S zones and teams must be preloaded into Replit DB

**6. Acceptance Criteria**

* User can complete a 5S audit and submit a report via browser
* All audit data is persisted securely in Replit DB
* Corrective actions are assignable with attachments
* Schedules and team assignments are functional
* Reports exportable and dashboard shows compliance metrics
* All zones and teams mapped in system

**Author:** Finalized by Azril (based on GoAudits benchmark + Karisma's implementation files)  
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**Deployment Target:** Internal Karisma 5S Audit Web App (Replit-hosted)