

# **Business Requirement Document (BRD)**

## **Project Name:**

Field Technicians Mobile Interface for Asset Audits

## **Prepared for:**

Infonech Software Pvt. Ltd.

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### **1. Current Business Problem**

Field technicians in Region A are scheduled to perform audits on various sites, but they currently lack a mobile interface to efficiently manage this process. The current challenges include:

- **Access to Schedule:** Technicians have difficulty viewing scheduled audit dates and site details, leading to possible scheduling inefficiencies and missed audits.
- **Asset Data Management:** Technicians need to view, update or add asset data on-site. The current manual system is inefficient and prone to errors, which can lead to inaccurate asset tracking and increased operational costs.
- **Volume of Data:** Each site may contain hundreds of assets (200-500), making manual data entry labour-intensive and time-consuming.

These limitations impact data accuracy, increase operational overhead and reduce productivity for field technicians, all of which contribute to increased business costs.

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### **2. Proposed Solution**

Infonech Software proposes a **Mobile Interface for Field Technicians** that will enable technicians to:

- View scheduled audits and easily locate site details through a calendar view.
- Access, manage and update asset data on-site, including marking assets as missing and adding new assets.
- Efficiently handle large volumes of data through QR scanning, image/document uploads and an intuitive interface, allowing technicians to perform audits more accurately and efficiently.

This mobile solution aims to streamline field operations, improve data accuracy and enhance overall productivity.

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### **3. System(s) Impacted**

The implementation of this solution will impact:

- **Mobile Application:** A new mobile interface for field technicians to manage audit tasks.
- **Backend Database:** Storage and retrieval of all asset-related data, schedules and user inputs.

- **Asset Management System:** Integration with the asset management system to update asset records and reflect audit results.
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#### 4. Assumptions/Dependencies

- Technicians have access to compatible mobile devices.
  - Data synchronization will occur over a stable internet connection.
  - Integration with existing asset management systems and data infrastructure.
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#### 5. Business Requirements

##### 5.1 User Authentication and Access

###### 5.1.1 Ability to Login

- Technicians can securely log into the app using their username and password to access the app's features.

###### 5.1.2 Ability to Register New User

- New technicians can register by creating an account with their username, password, employee ID and official phone number. The system will send an OTP to verify the user before allowing account access.

###### 5.1.3 Ability to Retrieve Forgotten Password

- Technicians who forget their password can initiate a password reset by entering their official email ID or phone number. The system will send an OTP to the email or SMS and upon successful verification, allow the technician to set a new password.

##### 5.2 Schedule Management

###### 5.2.1 Ability to View Calendar Schedule

- Technicians can access a calendar view within the app to check scheduled audit dates and site details.

##### 5.3 Asset Management

###### 5.3.1 Ability to View Existing Assets

- Technicians can view a list of existing assets upon arrival at the site.

###### 5.3.2 Ability to Update Asset Data

- Technicians can update information on existing assets as needed.

###### 5.3.3 Ability to Mark Assets as Missing

- Technicians can mark an asset as missing if it's recorded in the system but not found on-site.

###### 5.3.4 Ability to Add New Assets

- Technicians can add new assets on-site by:
  - Scanning the QR Code of the asset.
  - Entering asset details such as:
    - **Manufacturer** (dropdown)
    - **Model** (dropdown)
    - **Capacity** (number)
    - **Serial Number** (text)

- **Type** (dropdown)
- **UPL Code** (text)
- **MIC Code** (text)

- Uploading images, videos, and documents associated with the asset.
- Adding Child/Sub-Child Assets, following the same data fields as parent assets.

#### **5.3.5 Volume Handling**

- Technicians should be able to manage up to 500 assets on a single site visit.

### **5.4 Data Management**

#### **5.4.1 Ability to Save and Resume Data Collection**

- Technicians should be able to save their progress and resume the data collection process later time or date, ensuring flexibility in handling audits.

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## **6. Functional Requirements**

### **6.1 QR Code Scanning**

- Enables technicians to quickly register assets by scanning QR codes.

### **6.2 Media Capture Capability**

- Supports image, video, and document uploads associated with each asset for comprehensive record-keeping.

### **6.3 Offline Data Storage**

- Allows data to be saved offline, with synchronization occurring when an internet connection is available.

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## **7. Non-Functional Requirements**

- **Performance:** The app should handle up to 500 assets per audit session without performance lag.
- **Usability:** Intuitive and user-friendly interface for minimal training and maximum efficiency.
- **Security:** Data encryption for sensitive asset information; secure login and authentication.
- **Compatibility:** Compatible with mobile operating systems commonly used by field technicians, especially Android.