Solar Application

- 1. Executive Summary
- 2. <u>User Roles</u>
- 3. System Requirements
- 4. Technical Architecture
- 5. Lead Management
- 6. Customer Details Section
- 7. Project Information Section
- 8. Installation Status Section
- 9. Financial Section

1. Executive Summary

1.1 Project Overview:

This website digitizes solar project management, making every phase from site measurement to quotation and installation—fully digital. It helps site engineers and project managers track project details and documents efficiently. Website replaces manual paperwork, reducing errors and saving time. Users can manage leads, schedule site visits, track procurement, and update installation status all in one place. This centralized system improves project accuracy, collaboration, and timely completion.

2. User Roles:

- 1. Organization Administrators: Complete platform access and configuration
- 2. Candidates: Platform wide management

3. System Requirements:

3.1 Supported Browsers:

1. Google Chrome, Mozilla Firefox, Microsoft Edge, Safari

3.2 Operating System:

- 1. Windows, macOS, Linux distributions
- 2. Android or iOS for mobile device

3.3 Internet Connectivity

1. Stable internet connection

4. Technical Architecture:

1. Fronted Framework: React

2. Backend Framework: .Net Core

3. Database System: SQL server

5. Lead Management

5.1 Lead Information

The following fields are shown in the Lead Information section:

1. Lead ID:

A unique identifier number is assigned to each lead.

2. Lead Name:

Name of the person or company interested in your service.

3. Phone Number:

Contact phone number of the lead.

4. Email:

Email address for communication.

5. Lead Source:

The origin or channel through which the lead came (e.g., website, referral, advertisement).

6. Address:

Physical address of the lead, proper for site visits or mailings.

7. Lead Status:

Current progress or state of the lead (e.g., new, contacted, qualified, converted)

8. Follow-Up Date:

The next scheduled date to contact or follow up with the lead.

5.2 Site Visit Section

5.2.1 Description:

The Site Visit section allows users to schedule and manage site visits related to a lead. It helps record essential details and status about the site visit process.

5.2.2 Fields:

1. Site Visit Schedule:

The date and time for the site visit have been scheduled. This can be selected using a date-time picker control.

2. Site Visit Remarks:

Notes or comments about the site visit. Users can enter observations, instructions, or feedback related to the visit.

3. Site Visit Photos:

This feature allows users to upload one or more photos taken during or related to the site visit. These photos provide visual documentation.

4. Site Visit Status:

The current status of the site visit. Common statuses include "Scheduled," "Completed," "Cancelled," or "Pending". This helps track the progress of the visit.

5.3 Quotation Details Section

5.3.1 Description:

The Quotation Details section is used to manage quotations related to a lead. It holds essential information about the quotation document, status, approvals, and notes.

5.3.2 Fields:

1. Quotation Document:

This is the official quotation file (document) associated with the lead. It can be uploaded and downloaded for reference.

2. Quotation Status:

Current status of the quotation is Draft, Sent, Approved, Rejected, or Pending. This helps track the progress of the quotation.

3. Lead Approval Date:

Date when the lead officially approved the quotation. This date is essential to track the sales cycle and follow-ups.

4. Notes:

Additional comments or remarks related to the quotation. This can be used to capture special conditions, reminders, or communication history.

5.4 Lead List and Actions

5.4.1 Description:

This section lists all leads with essential contact and status details, allowing users to view, search, and manage them quickly.

5.4.2 Fields:

1. Lead Name:

The name of the lead contact person or company.

2. Phone Number:

Contact phone number of the lead for quick calling or messaging.

3. Email-ID:

Email address for easy communication.

4. Lead Source:

Origin of the lead, such as website, referral, advertisement, etc.

5. Lead Status:

Current state of the lead, like New, Contacted, Qualified, Converted, or Closed.

6. Site Visit Date:

Scheduled date of any site visit related to this lead.

6. Customer Details Section

6.1 Description:

The Customer Details section displays and manages customer information. It helps verify identity, contact details, and address for effective communication and compliance.

6.1.2 Fields:

1. Name:

Full name of the customer or contact person.

2. Phone Number:

Primary phone number to reach the customer.

3. Email-ID:

Valid email address for electronic communication.

4. Address:

Complete physical address, including street, city, state, and postal code.

5. ID Proofs:

Official identity documents provided by the customer:

- a. Aadhaar card (unique ID for Indian residents)
- b. PAN card (Permanent Account Number for tax and identity verification)

7. Project Information Section

7.1 Description:

The Project Information section captures key details about a solar project and organizes them efficiently. It also includes radio buttons to navigate between sub-sections related to project components and procurement.

7.1.2 Fields:

1. Project Number:

Unique identifier number for the project.

2. Project Name (Customer Name):

Name of the project, often the same as or including the customer's name.

3. Service Number:

Service contract or reference number related to the project.

4. Category:

Type or category of the project (e.g., Residential, Commercial).

5. Site Location:

Physical address or location where the solar installation will take place.

6. Site Measurement:

Measurements or area details of the project site.

7. Sketch-Up:

Preliminary design sketch or 3D model of the project.

8. Drawing Approval:

Status or documentation approval of the project drawings.

7.2 Items Info Fields

7.2.1 Fields:

1. Load in kW (File)

Document or file specifying the electrical load for the project in kilowatts.

2. Net Meter Reg. No

Registration number of the net meter installed or to be installed.

3. CEIG Approval

Approval status or document from the Chief Electrical Inspectorate General

4. TGSPDCL/TGNPDCL Approval

Approvals from the Telangana/SPDCL or Telangana/NPDCL electricity boards.

7.3 Procurement Section

7.3.1 Description:

This section tracks procurement details of various components required for the solar project.

7 3 2 Fields:

1. Module:

Details about the solar modules ordered or procured.

2. Structure:

Details of the mounting structure procured for panels.

3. Hardware:

Procurement status of hardware components needed for installation.

4. Inverter:

Details of inverters procured for the system.

5. Electrical Material:

Electrical wiring, switches, and other related materials were purchased.

6. ACDB and DCDB:

Status of AC Distribution Board (ACDB) and DC Distribution Board (DCDB) procurements.

7.4 Panel Details Section

7.4.1 Description:

This section records detailed information about the solar panels used in the project.

7.4.2 Fields:

1. Make (Brand):

Brand or manufacturer of the solar panel.

2. SL.NO:

Serial number of the panel for identification and warranty tracking.

3. Type of Module:

Type/category of the panel (e.g., mono-crystalline, poly-crystalline).

4. Capacity of Each Module:

The power rating of each panel/module (in watts or kilowatts).

5. Total Capacity:

Total combined capacity of all the panels installed.

6. Test Report Docs:

Test report documents verifying panel quality and compliance.

7.5 Inverter Details Section

7.5.1 Description

This section provides details about inverters used in the solar project.

3.5.2 Fields:

1. Make (Brand):

Manufacturer or brand of the inverter.

2. SL.NO:

Serial number for identification and warranty.

3. Capacity:

Power capacity rating of the inverter (in kW).

4. Test Report Docs:

Test documentation for the inverter's specifications and compliance.

8. Installation Status Section

8.1 Description:

The Installation Status section tracks the progress and completion status of various installation activities on the solar project site. This helps to ensure all components are installed correctly and on time.

8.1.2 Fields

1. Structure Mounting:

Indicates whether the mounting structure has been installed.

2. Panel Fixing:

Status of solar panel installation on the mounting structure.

3. Inverter Mounting:

Confirmation of whether the inverter has been mounted.

4. ACDB and DCDB:

Status of installation for the AC Distribution Board (ACDB) and DC Distribution Board (DCDB).

5. Earthing:

Status of the grounding/earthing system for safety compliance.

6. AC Cable:

Status of AC electrical cable installation.

7. DC Cable:

Confirmation on the installation of DC electrical cables.

8. Civil Works:

Status of any civil construction work related to the installation.

9. LA (Light Arrester):

Installation status of the lightning arrestor for protection against surges.

10. Net Meter:

Indicates if the net meter has been installed on site.

9. Financial Tracking Section

9.1 Description:

The Financial Tracking section manages and monitors the budget, payment processes, and invoicing related to a solar project. It provides an overview of financial health and approval status.

9.1.2 Fields:

1. Budget:

The total budget allocated to the project or to specific phases within it.

2. Payment Approvals:

Records of approvals needed or granted to release payments for project expenses.

3. Payment Acceptance:

Confirmation that vendors or contractors have accepted payments.

4. Payment:

Details of actual payments made, including amounts and dates.

5. Payment Record:

Historical log of all payments associated with the project, with relevant details.