

# Solar CRM

Comprehensive Solar Management Solution for Arise Solar, Australia

## Project Summary

Arise Solar, a leading solar energy provider in Australia, required a complete end-to-end solution encompassing pre-sales, order management, project management, invoicing, and after-sales support. The solution included a web application and mobile apps for sales and installers to facilitate various tasks efficiently.

## Application Details and Features

The solution for Arise Solar was divided into two main applications: Solar Application and Warehouse Application.

### Solar Application:

#### Leads:

- Manage Leads
- Import Leads

#### Customers:

- Manage customer information and interactions.

#### Installer:

- Manage installer details and assignments

#### Contacts:

- Manage contacts associated with leads and customers.

#### Projects:

- Oversee project details from initiation to completion.

#### Installation:

- Track installation schedules and progress.

#### Invoice:

- Installer Invoice (Pending and Paid)
- Sales Invoice (Pending and Paid)

#### STC:

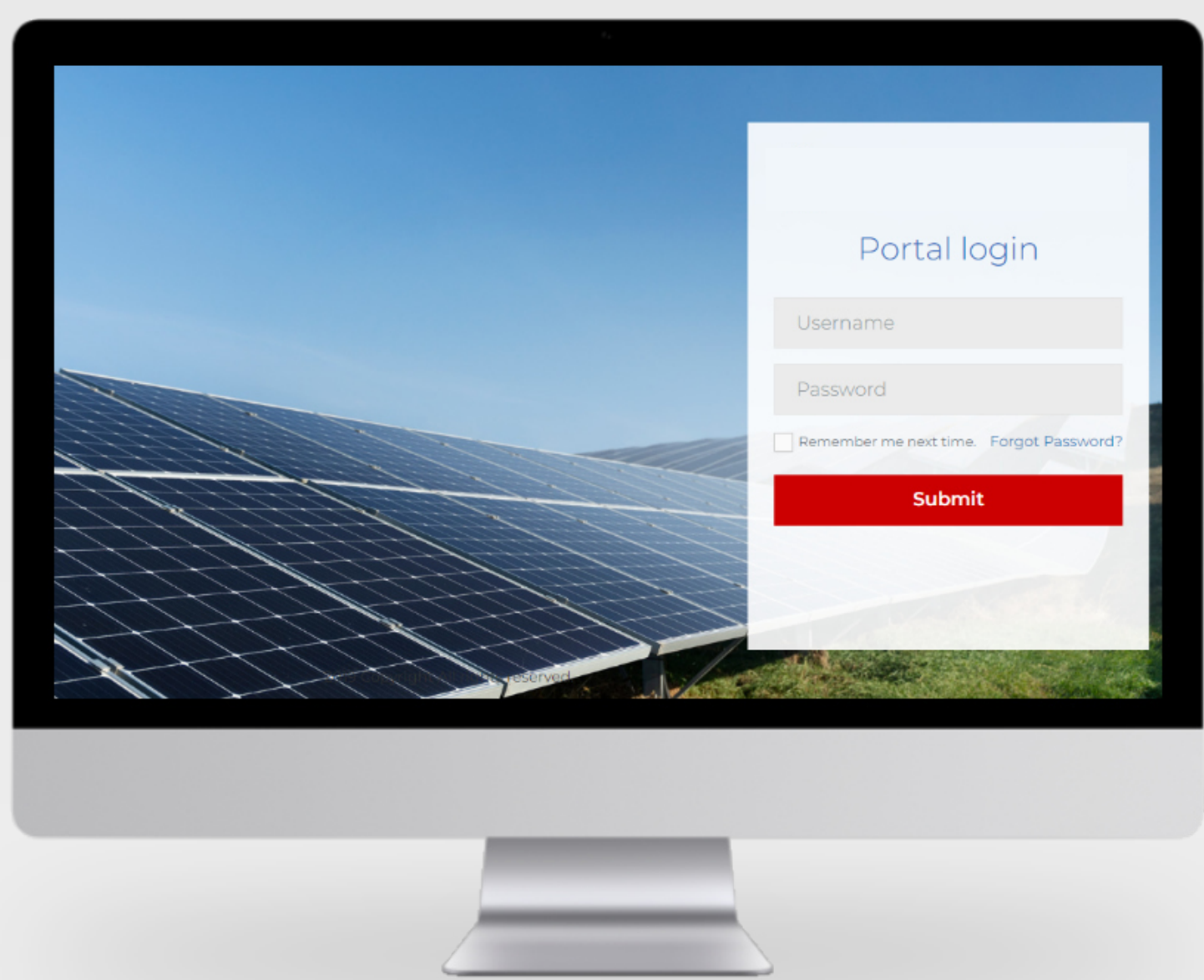
- Manage Small-scale Technology Certificates (STCs).

#### Reports:

- Invoice Report
- Active Sales Report
- Outstanding Report

#### Tracker:

- Lead Tracker
- Installation Booking Tracker
- Grid Connection Tracker
- Refund Tracker
- Promo Tracker
- Payway Payment Tracker
- Promotion Tracker



### Warehouse Application (Portal + Mobile App):

#### Manage Warehouse:

- Location-wise warehouse management.

#### Stock Item:

- Manage stock items.

#### Stock Order:

- Create and track orders.
- Payment Tracker

#### Stock Transfer:

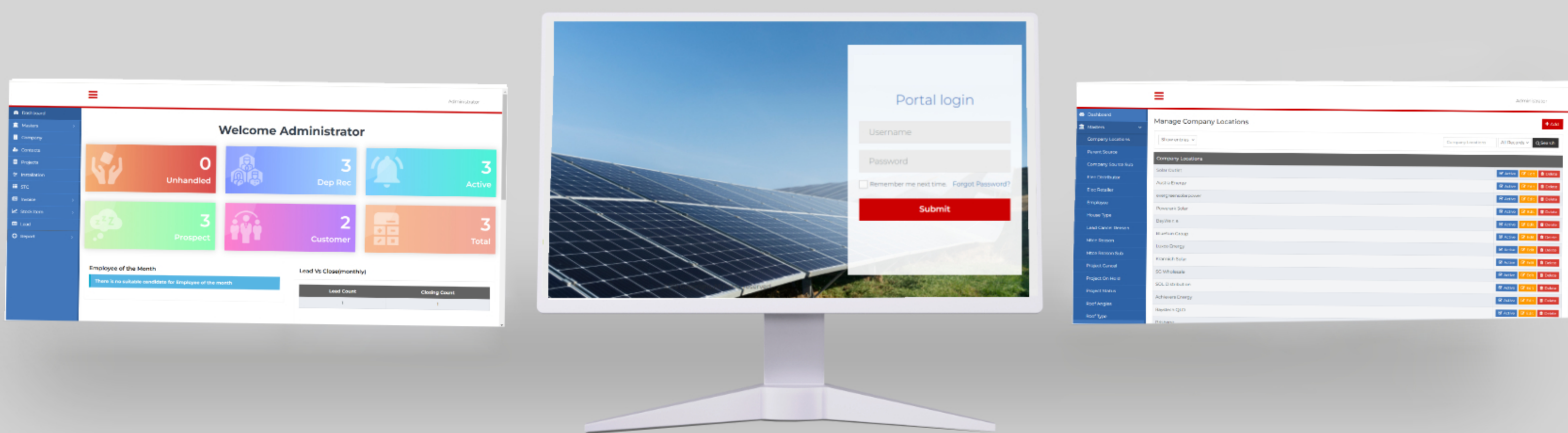
- Manage stock transfers between locations.

#### Wholesaler Order:

- Manage wholesalers and their orders.
- Order Tracker

#### Reports:

- Stock Deducted Report
- Stock Received Report
- Broken Serial Number Report
- Stock Prediction (Based on Solar Application jobs, Wholesaler Order, and Stock Order)
- Pending Scan Jobs (Solar Application Jobs)
- Pending Scan Stock Order
- Pending Scan Wholesaler Order
- Serial Number Wise Report
- Reconciliation Report



## Challenges

- **Requirement Understanding:** Understanding the comprehensive needs of a complete end-to-end solar management solution, including integrating various third-party APIs and frameworks.
- **Role-Based Access:** Implementing a robust role-based system for managing permissions and privileges for different users.
- **Real-Time Data Management:** Ensuring real-time updates and seamless data flow between web and mobile applications.
- **Integration with External Systems:** Efficient integration with third-party APIs like Twilio, SendGrid, Google Map API, Xero Accounting, etc.

## Solution

- **Custom Workflow Implementation:** Developed custom workflows for managing leads, projects, installations, and invoicing to cater to Arise Solar's specific requirements.
- **Mobile App Development:** Created mobile apps for sales and installers to facilitate on-the-go access and task management.
- **Third-Party Integrations:** Seamlessly integrated with various third-party APIs and frameworks to enhance functionality and user experience.
- **Comprehensive Reporting:** Implemented detailed reporting features to provide insights into sales, installations, stock management, and financials.

## Summary

The comprehensive solution developed for Arise Solar has streamlined their operations from pre-sales to after-sales support. The web application and mobile apps have enabled efficient lead management, project tracking, installation scheduling, invoicing, and stock management. The integration with third-party APIs and robust reporting features have further enhanced the operational efficiency and decision-making capabilities of Arise Solar.

## Technology Used

- **Backend:** ASP.NET WebForms, ASP.NET Core 3.x
- **Frontend:** Angular 9.x, jQuery, Xamarin Forms, IOS (SWIFT), Android (Java), React Native
- **Database:** SQL Server 2008 – 2012 R2
- **Third-Party Frameworks:** ASPNETZERO (multi-tenancy based ASP.NET MVC framework), Telerik Reporting, Scandit Barcode Scanner (Native, Xamarin, and React Native SDK)
- **Third-Party API Integration:** – Twilio (SMS/Programmable SMS) – SendGrid – Google Map API V2 – Xero Accounting – FormBay – GreenBot – Payment Gateway – NearMap