Energy & Utilities
Case Study

Full Stack Development of Dynamic Form Builder in the Utilities Domain

Client Overview

The client is a pioneer in providing technology related services and consulting to the power and utility industry

Business Requirements

- Build a dynamic form builder portal that meets the client's requirements
- Incorporate some built-in feature like, Monitoring the day-to-day task, Feeding transmission line details, Generation of automated workflow etc.
- Minimize the time consumption for generating a form
- Build a highly responsive and automated web portal that could maintain large volumes of data

Indium Solution

- An interactive multi-sided web portal developed using open source technologies
- Sisense JS dashboards embedded in UWP, using iFrame
- Single sign-on authentication using Auth0
- Creation of responsive forms with drag and drop options and archival functionalities
- Java Spring Boot framework for the backend and Angular 8 for the frontend UI for high flexibility and efficiency
- Capability for Admin users to view APIs and audit logs.
- Creation of email templates with tokens for each form and creation and trigger of workflows (assign, email notifications etc.) dynamically for each form
- Upload of any type of media files to S3 bucket, via the application

Business Impact

- Time consumption for form creation reduced by 70%
- The system is 85% automated covering functionalities like data retrieval, QA report generation, data processing etc.
- By leveraging Auth0 the security was enhanced by 80%, along with SSO authentication
- The real-time dashboard in a unified web portal elevated the customer satisfaction and improved the user experience
- The availability of custom forms for various requirements substantially increased the flexibility of the system

Tools

Angular · Java · spring boot · REST API · mongoDB · Auth0