PSL

Reimagining Data Visualization, API Efficiency and UI for One of the Biggest Companies in the Mapping Industry.

THE CHALLENGE

The mapping industry is dominated by the biggest names in innovation, so for any newcomer, their mapping data has to be top notch to gain traction. With millions of data points entering the system daily and updates being pushed directly to users, the company needed software that would:

- Clearly illustrate the bottlenecks in the pipeline and strengthen the infrastructure of the program
- Allow all users to collect data, and send updates back to the repository
- Automatically push upgrades to users
- Construct visual data representations complete with all features collected by the users, resulting in a highly complex UI.

Case Study

PSL SKILLS

- Front-end
- Back-end
- Refactoring
- e2e Testing
- Data visualization
- Machine learning

TECHNOLOGIES

THE SOLUTION

The PSL team split into three units to more effectively manage different components of the engagement and to maximize developer expertise.

Maintaining and Improving API Efficiency

One team is currently improving and maintaining the efficiency of APIs within the system to ensure accurate location systems for users and provide predictive analytics for capability, and route and coverage planning. Machine learning models are used to provide guidance on the best way to integrate the data and provide a reality index which can scale and effectively handle the huge amounts of data within the system.

Pipeline Visualization Dashboard

PSL developers also built a comprehensive dashboard from scratch to provide an accurate, real-time visualization of pipeline components and working interactions. This resulted in a scaled, multi-layer architecture featuring concurrent live edit mode and batch enrichments, automated built-in notifications for health, cloud storage with real-time change processing and propagation.

Mapping Data Components

Another PSL team is constructing complex maps featuring 3D imaging. The maps must correctly translate the consumed data into designed features, and update and query the system more efficiently. The complexity of the project requires PSL to conduct additional training for teams to ensure a global definition of process and results.

PSL

Case Study

THE RESULTS

- Refactored, robust code base

- Data-quality gate development

- Pluggable rules for compliance

- Change-driven mechanism with downstream notification

- Centralized data warehouse: Content, Quality and Task Metrics

- Comprehensive back-end refactoring

- Continuous Integration implementation

Want to achieve more with your software development?
Contact PSL at contact@pslcorp.com to start a conversation.
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