



CASE STUDY

PLATFORM REARCHITECTURE FOR AN FRO ORGANIZATION

Redesigned modular architecture results in less manual effort and better user experience.

Client Background

The client offers fellowship and research opportunities (FRO) services for several agencies of the US Federal Government, which provide guidelines, policies, and funding to the client which in turn administers their internship and fellowship programs, acting as a one-stop intermediary between the agencies and students.

The client's existing solution was built ad hoc as per the needs of different stakeholders, and hence was unable to scale up to meet higher requirements and standards. Further, the client's platform was not standardized, leading to significant duplication of efforts whenever even minor updates were required to the platform.

The client wanted to develop a standardized platform to overcome the limitations of the existing platform.

Xoriant Solution | Key Contributions

Xoriant's team evaluated the client's requirements and rebuilt the entire platform from the ground up using a different, modular architecture based on microservices. Our key contributions include the following:

- Designed and implemented a new modular architecture using Java, Spring Boot, and microservices-based architecture
- Standardized the product and removed inconsistencies in code using SonarQube and JUnit

KEY BENEFITS

- Increased platform compatibility with multiple agencies and helped the client push the platform to its customers as a service.
- Reduced the effort required to make minor changes in code and streamlined the platform into a single implementation, increasing its behavioral consistency and reliability.
- Created scope for the platform to interact with external applications, making it future-proof.



- Introduced consistency in the backend database to facilitate uniform storage, querying, and data extraction
- Increased security of the platform to exceed stringent government standards using Spring Security
- Automated workflows for reduced manual intervention

Client Testimonial



Our platform was built ad hoc as per stakeholder requirements. It lacked scalability and standards. Xoriant engineering team used modern development practices and rearchitected our platform, making it highly secure and standardized with better user experience.



Technology Stack

ReactJS | Java | Spring Boot | Spring Security | Microservices | PostgreSQL | Redux | Jasper Report | Crafter CMS | Jenkins | Zendesk Support | RabbitMQ | Git | Apache Maven | JUnit | SonarQube



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