



Transforming a Healthcare App through Automation and Accelerated Development

Challenge

A company that provides dietary services for healthcare systems nationwide had an application used to order meals for patients. The app included special features for healthcare providers such as the ability to restrict diets and monitor nutrients for patients with certain medical needs. Patients could choose meals via the app using their phones or tablets, making the process more accessible and their stay more comfortable. It was meant to provide convenience to both patients and healthcare facilities, but the company had experienced a series of problems. Throughout the course of working with their vendor, the partnership began to falter for several reasons:

- Tasks assigned to the app development vendor were **taking far too long**.

- The output **quality was poor** and **error prone**.
- The app was described by users as **clunky and unreliable**.
- There were **stability issues** and other **bugs**.
- It was **difficult to navigate** and **not user-friendly**.

Patients, providers, and other users were frustrated by the issues with the app and the client's reputation with their customers suffered as a result. Dissatisfied with their vendor, they turned to a trusted partner for assistance.

Solution

INSPIR Solutions was ready to deliver improvements to the app according to the client's standards within the necessary timeframe through a managed services application project. Our Practice Lead partnered with the client's technical leadership

A large portion of the project was developed by SDET experts who automated the testing process, improving the stability of the code.

to understand their technical requirements and deliver the best solutions. As part of this process, our application development experts determined the client's long-term needs and suggested ways to improve the system architecture to accelerate the development process.

INSPIR Solutions deployed a blended team of global resources led by U.S. experts, allowing development to take place across time zones and driving faster execution to accommodate urgent feature requests. We provided expertise in architecture, back-end development, API development, native iOS and Android development, and SDET. Our specialists ensured that each part of the process and additional feature requests would be handled quickly, efficiently, and maintain high quality standards.

Our solutions included:

- Creating a **global team** that could **follow the sun**.
- Enhancing the system architecture to **accelerate development** and **stability**.
- Implementing **quality standards** to ensure excellent results.
- Expediting the **testing process** through strategic use of **automation**.
- Preparing the app for **future enhancements** and **new features**.

Outcome

For the dietary app initiative, INSPIR Solutions created an end-to-end, full stack native platform from idea to inception. A large portion of the project was developed by SDET experts who automated the testing process, improving the stability of the code.

This decreased the time needed to run regression testing from a few days to just a few hours.

The dietary app now boasts a large array of features including ordering options for patients, tools to configure daily menus and update items, the ability to apply constraints on orders for dietary or nutritional needs, options to provide detailed nutritional and caloric data, and the capacity to perform other administrative tasks. The app has a wide reach as it is used by patients, doctors, nurses, dieticians, and other providers involved in patient dietary care.

The team established for the client's application development needs continues to deliver further updates to the dietary app as well as performing work on new apps while maintaining the same velocity and quality standards. Because of the global nature of the team, the company can quickly and continuously test and deliver complex, high-quality applications to the healthcare systems they serve.

The initiative resulted in the following:

- The client now has a global development team, **significantly reducing development time** as they work around the clock.
- The dietary app is **stable, performant, HIPAA-compliant**, and the team continues to add new features.
- The introduction of **automated testing** by SDET experts **significantly reduced testing and production time**, so the team can update and produce apps much faster than before.
- The client can deliver a more **secure, high-quality product** to

customers and **support future updates** more quickly than they could in the past.

Client Profile

The client provides dietary services and facilities management to healthcare systems nationwide. It is always the company's goal to make each guest's stay more comfortable through the use of innovative technology and excellent customer service and to provide healthcare industry customers with the tools they need to serve their patients.

Technologies Supported

Front-end:

- React
- Redux Saga
- Storybook
- Styled Components
- GitHub

Back-end:

- AWS
- Java
- JUnit
- Liquibase
- Mockito
- Springboot

iOS:

- Swift

Android:

- Kotlin

About INSPIR Solutions

Technology is our focus and quality is our commitment. As a national expert in delivering flexible technology and talent solutions, we strategically align industry and technical expertise with our clients' business objectives and cultural needs. Our solutions are tailored to each client and include a wide variety of professional services, project, and talent solutions. By always striving for excellence and focusing on the human aspect of our business, we work seamlessly with our talent and clients to match the right solutions to the right opportunities. Learn more about us at inspysolutions.com.