



## CASE STUDY

# BUILT A MULTI-LINGUAL CARDIO RISK ASSESSMENT AWS-BASED APP FOR A GLOBAL PHARMA LEADER

Designed and developed a heart health risk calculator to present users with personalized results and encourage doctor consultation.

## Client Background

Our client is a global leader in pharmaceutical and life sciences. The company has a rich history of more than 150 years and primarily focusses on agriculture and healthcare. The client's key objective was to build a responsive web application that allows a user to assess heart attack and stroke risk and encourages the user to decide on seeing a doctor nearby. Xoriant was assigned to design and develop this application for users across various regions and deliver custom risk assessment results immediately based on WHO local health guidelines for each region. The engagement also included building UI screens for users to input values as per assessment parameters and view results.

## Xoriant Solution | Key Contributions

Xoriant designed a solution which calculates heart attack and heart stroke risk level based on WHO cardiovascular disease risk laboratory-based charts. Our team worked with the client's business and technology teams to build the application which could predict the Atherosclerotic cardiovascular disease (ASCVD) and heart health risk. The risk calculator functionality gathers inputs from the app user through pre-defined input parameters such as age, weight, height, etc. and analyzes the values entered by user to display assessment results.

## KEY BENEFITS

- Enabled app support for users across geographies with personalized risk assessment available in multiple languages like English, Spanish and Arabic.
- Delivered a unified user experience through consistent UI across platforms.
- Eliminated screen-switching wait time by collecting input data on a single screen and ensured faster availability of results for app users.
- Ensured quick app scalability by providing the ability to configure it for different regions.

Our key contributions included:

- Used statistical models and rules engine to calculate heart age and risk level as per the parameters entered by app users.
- Created a smart and rational architecture design using React Native Web, React, React Native, Expo and Babel Core.
- Built two app screens to enable quick assessment – Screen 1 to gather user inputs and Screen 2 to display personalized heart risk assessment results.
- Built responsive UI screens for seamless app access across laptops/ tablets/ mobile devices.
- Customized UI with local language support and adherence to protocols set by local authorities for target regions including Middle East, Colombia, Central America, Peru and Argentina.
- Hosted the application on respective regional websites of the client.
- Deployed a robust and scalable AWS-based solution that supports assessment requests through the app by a huge population across the globe.
- Implemented backend functionalities with Oracle database and JAVA Rest API web service implementation with Spring Boot and Hibernate.

## KEY BENEFITS

- Improved system response for processing a display request with scalable AWS.
- Allowed stakeholders to focus on area of concern during app usage by creating an intuitive dashboard.
- Enabled users to share the app link via Facebook, Twitter, Pinterest and Email with a social sharing button.
- Defined application usage by creating a Help section and Terms and Conditions section.
- Enabled the app user with options on the results page to set a reminder for doctor consultation, locate a nearby pharmacy or save the assessment report.

## Client Testimonial

“*Xoriant’s multi-channel and multi-lingual app design and development support enabled us to deliver a seamless global risk assessment app that benefits our existing customers and potential customers and elevates our brand value.*”

## Technology Stack

**Java REST API | AWS | Spring Boot | Hibernate | Oracle Database | React Native Web | React | React Native | Expo | Babel Core**



Xoriant is a product engineering, software development and technology services company, serving technology startups as well as mid-size to large corporations. We offer a flexible blend of onsite, offsite and offshore services from our 13 global offices with over 4000 software professionals. Xoriant has deep client relationships spanning over 30 years with various clients ranging from startups to Fortune 100 companies.