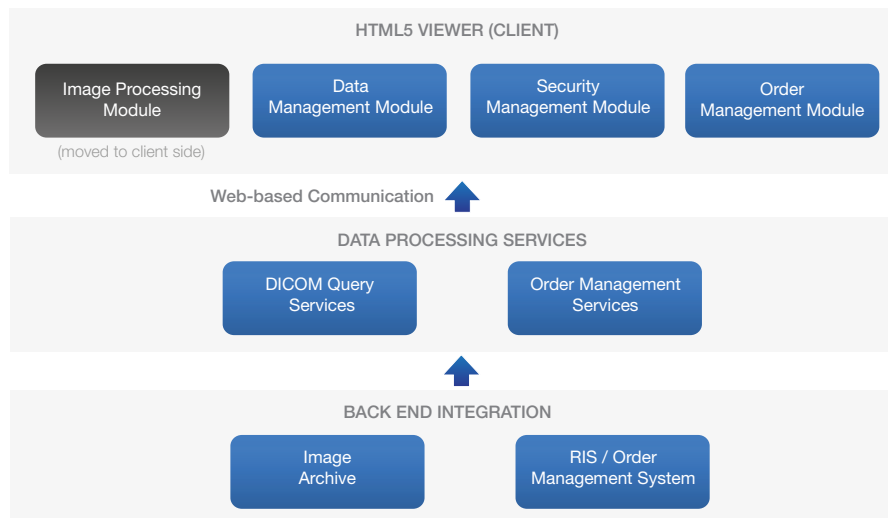# Case Study: Enhancing Mobile Image Viewer Application Using HTML5

Client Requirements

The client is one of the largest providers of imaging workstations and archival solutions. The client wanted to enhance an existing browser-based viewer to support image processing operations on the client side. The enhanced viewer needed to be compatible with major browsers running on personal computers as well as mobile devices. CitiusTech was selected to implement the enhancements, given its expertise in the medical imaging domain and web technologies (including HTML5, iOS, Android).

- Support multiple browsers (Chrome, Firefox, IE)
- Use HTML5 for advanced image processing operations
- Enhance the existing look and feel of the application
- Implement user authentication protocols for ensuring data security

The team enhanced the application using HTML5's capabilities of stacking vector layers, bi-directional communication and on-demand data loading. Most image processing operations (zoom, pan, rotation etc.) were moved from the server to the client, resulting in significant performance improvements and overall user experience.

Solution Schematic: Development of Mobile Image Viewer Using HTML5

CitiusTech Solution

Requirements Analysis

CitiusTech team assessed the set of functionalities that was supported by the existing application. CitiusTech also focussed on identifying the critical areas for enhancements which included:

- Implementing HTML 5 components to enable client side processing
- Introducing a reliable and secure caching mechanism
- Enhancing the security features to ensure that confidential patient data could not be accessed by external applications

Solution Design and Development

The solution was designed to achieve the following objectives:

The team also extended the existing functionality of the browser by introducing collaborative environments which allowed users to share specific data with other authorized users. CitiusTech was responsible for the end-to-end development, testing and delivery of the enhancements.

Value Delivered

By partnering with CitiusTech, the client was able to:

- Leverage CitiusTech's mobile, medical imaging and HTML5 expertise
- Achieve significant improvements in the performance and functionality of the existing application while retaining existing functionality
- Allow seamless deployment at existing customer sites, with minimal need for additional training
- Lower development and implementation costs by more than 40%

About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations. CitiusTech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, BI/analytics, consumer engagement, care coordination and population health management.

CitiusTech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.

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