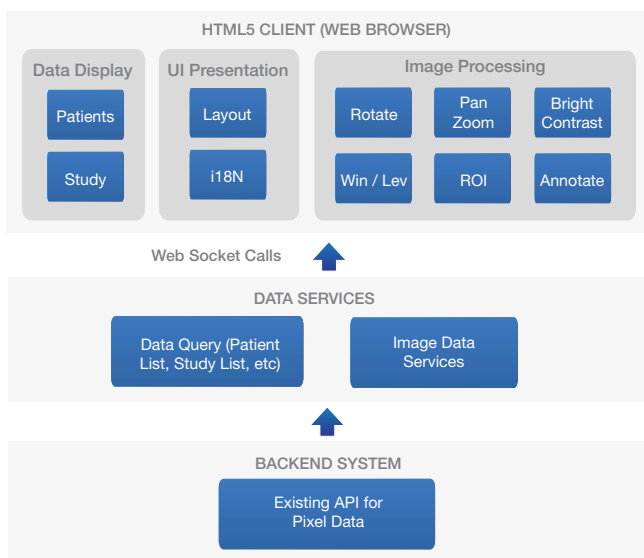


# Case Study: HTML5 Based Medical Imaging Viewer for Mobile Devices

## Client Requirements

Client is a leading provider of medical imaging and medical diagnostic systems. The client wanted to develop a next generation browser-based medical imaging viewer which was mobile enabled and cross browser compatible. To ensure consistency across platforms, the viewer needed to function as a stand-alone application, allowing a standardized view of medical images, irrespective of the operating system, browser or mobile device.

Citiustech was selected to develop the viewer, given its expertise across mobile technologies and platforms (including HTML5, iOS, Android), embedded development and interoperability.



Solution Schematic: HTML5 Based Medical Imaging Viewer

## Citiustech Solution

### Requirements Analysis

The Citiustech team conducted detailed analysis of graphic and data streaming requirements of the browser-based viewer application. Citiustech also assessed end-user (radiologists / physicians) requirements to identify key scenarios that would need to be incorporated in the final solution.

## Solution Design and Development

The solution was designed to achieve the following objectives:

- Cross-platform (iOS, Android) mobile access to medical images
- Reduction in image load time and improved client performance
- Ability to perform a wide range of imaging operations on mobile device

Citiustech assembled a strong engineering team with expertise in HTML5 and DICOM standards. The team developed the medical imaging viewer on HTML5, providing it with the capability to support rich media without using any custom component or plugins such as Flash or Silverlight.

The viewer consisted of a rich interface for multi-modality image display, allowing end-users to perform extensive imaging operations such as panning, zooming, flip, adjusting window level, window width etc. The application was designed to use the full set of HTML5 features, such as stacking vector layers, client rendering, on-demand data loading and bi-directional communication (WebSocket), when available on supported browsers.

Citiustech team was responsible for the end-to-end development, testing and delivery of the HTML5 medical imaging viewer application.

## Value Delivered

By partnering with Citiustech, the client was able to:

- Leverage Citiustech's mobile, medical imaging and HTML5 expertise - develop a custom solution to meet end-user requirements
- Address real-world mobile enablement challenges such as latency, client throughput and device compatibility
- Ensure rapid turnaround of application development and deployment, and significantly reduce time-to-market
- Lower development and implementation costs by more than 35% through Citiustech's global delivery model

## 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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