# Secure Collaboration Tool
## theChatTool

## CLIENT



### INDUSTRY
Information Technology

### BACKGROUND
Client is an IT company developing and providing secure collaboration tools. One of the tools is a chat tool that allows users to securely transmit messages within the intranet that contains special data in HTML and XML format.

### CHALLENGE
The client wanted to redesign and develop an HTML 5 and SignalR based Chat Tool as a modern web application supporting cross platform browsers. The application backend was developed using .NET and SQL.

### WHY TELERIK
Telerik's Kendo UI is a set of HTML 5 controls that supports data binding with SignalR technology. The Kendo tools also support adaptive rendering for mobile devices.

## CHALLENGES AND OBJECTIVES

The client needed a chat application that operated quickly, as users expect messaging applications to provide messages in real time. Web based chat applications often struggle to achieve performance comparable to windows / native applications, even using techniques such as polling or Asynchronous JavaScript and XML (AJAX).

Modern web chat applications require a variety of other considerations, as users expect high performance and assured message delivery, even when accessing the application on 3G/4G mobile data connections.

The client wanted the application to look modern without sacrificing performance or losing features such as drag and drop functionality, rich text editing, and keyword clouds.

## THE SOLUTION

The client insisted on using Telerik's Kendo UI with SignalR for the project. SignalR was the most appropriate technology, as the server can initiate the communication and deliver messages to client in real time. SignalR avoids the need for constant polling, which would adversely affect the network bandwidth.

Additionally, Kendo UI is one of the best control sets that fully support SignalR data binding, reducing the necessary development work. The application uses Bootstrap for adaptive rendering using Kendo's Bootstrap styles.

Upon starting the application, it opens to a dashboard view. Each available chatroom is displayed as a tile. Each chatroom can be expanded to a window or a new tab. The chatroom windows allow users to view all the messages, a tag cloud, and other current users in the chatroom. Kendo's SignalR databinding is used to seamlessly display messages and show users joining/leaving the rooms.
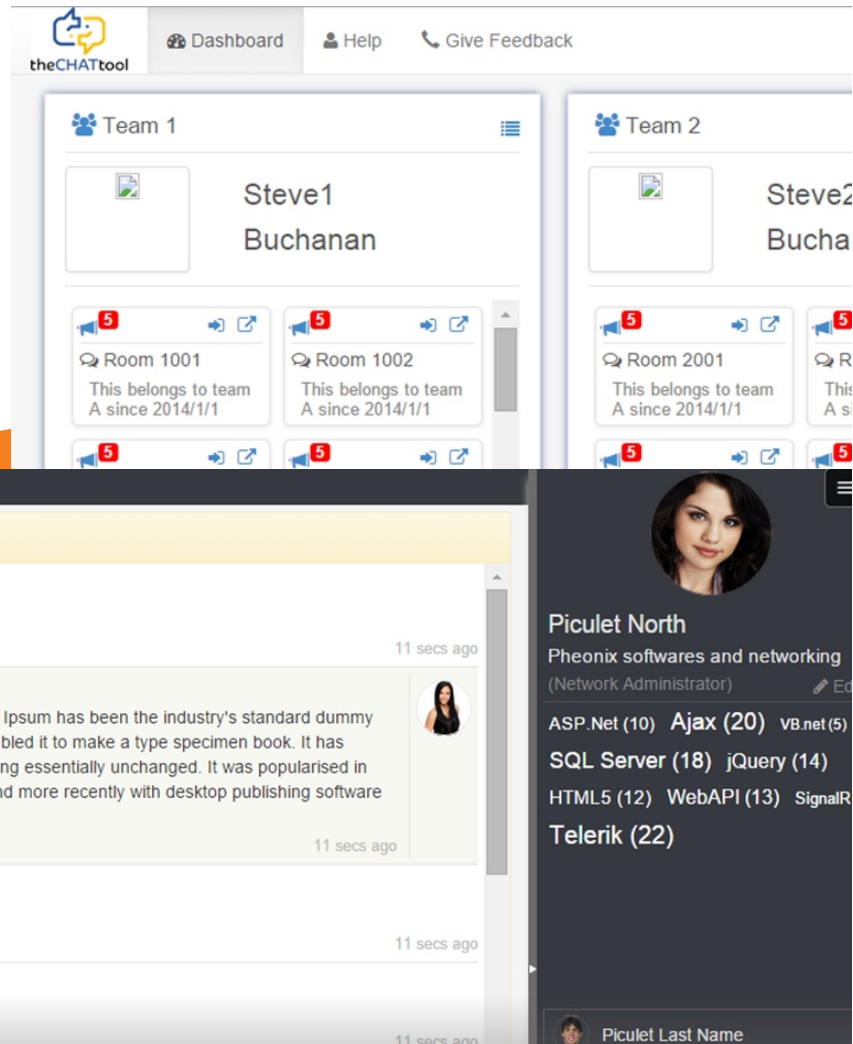
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## THE RESULTS

The result was a modern HTML 5 web application loaded with user friendly features, which were developed using Bootstrap, Kendo, and custom jQuery plug-ins.

The project was developed and deployed within a 12 week timeline. While this product is not available to the public, it has been implemented within a number of Fortune 500 companies. The responsive design of the tool appeals to the customer base, as users can enjoy the application whether they are in a meeting or out to lunch.

### TECHNICAL DETAILS

Please include information about the following, where applicable

- Operating System : **Windows Server 2012**

- Database Platform : **Microsoft SQL Server**

- Number of Developers : **3**

- Development Time : **12 Weeks**

### RESULTS

Because we used Kendo UI, we successfully implemented a highly interactive SignalR based chat application. It would not be possible to support multiple cross platform browsers without using a solid library like Kendo. The intuitiveness of Telerik saved us a great deal of development effort.