Pilot Training Platform

Overview:

The client for this project specializes in the field of pilot-training. Their customers are aviation companies who use their services for training their pilots and for the renewal of their licenses. At the time of approaching Mindfire Solutions, the client was facing a serious challenge. Their existing platform was failing to keep up with the evolving expectations of the aviation companies. There was a serious threat of depletion of their existing client base, forget about acquiring new ones. The need of the hour was to modernize the training platform in terms of the adding new features and overhauling the underlying technologies that powered it. Only then was there a chance for the client to give their business that missing edge.

The platform comprises of 3 Modules:

- Super Admin Module: used by our client's people to drive the platform

- Company Admin Module and

- Company User Module: used by the Aviation companies who are the customers of our client

Client details:

Name: Confidential | **Industry** : ELearning | **Location**: USA

Technologies:

Web/UI: Angular (Angular Material + Fuse Theme), HTML5, SCSS, TypeScript

Backend: ColdFusion with ColdBox framework API

Database: MS SQL Server + MySQL

Reporting: SSRS reporting

3rd-party Integration: Tumult Hype for video and interaction player + Other Angular plugis

Cloud: Azure

Cloud Database Services: Azure SQL Managed Instance

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Project Description:

Super Admin is the primary driver and in charge of creating and deleting the Company Accounts for the Aviation companies, and allocating corresponding Admin-logins to them. To be able to use this platform, an Aviation company first needs to buy subjects, tutorials, lessons, exams for their pilots from super admin. The super admin assigns the same to the account. There is provision for customizations to be done on the training-content based on need. The Super-Admin can generate various types of reports as well.

The admin of an Aviation company logs into the account and creates user-accounts for the pilots of the company. After doing that, he assigns to them the trainings they have been identified to undergo. Certificates of completion for users, overall organization-wide completion reports are generated by the Admin.
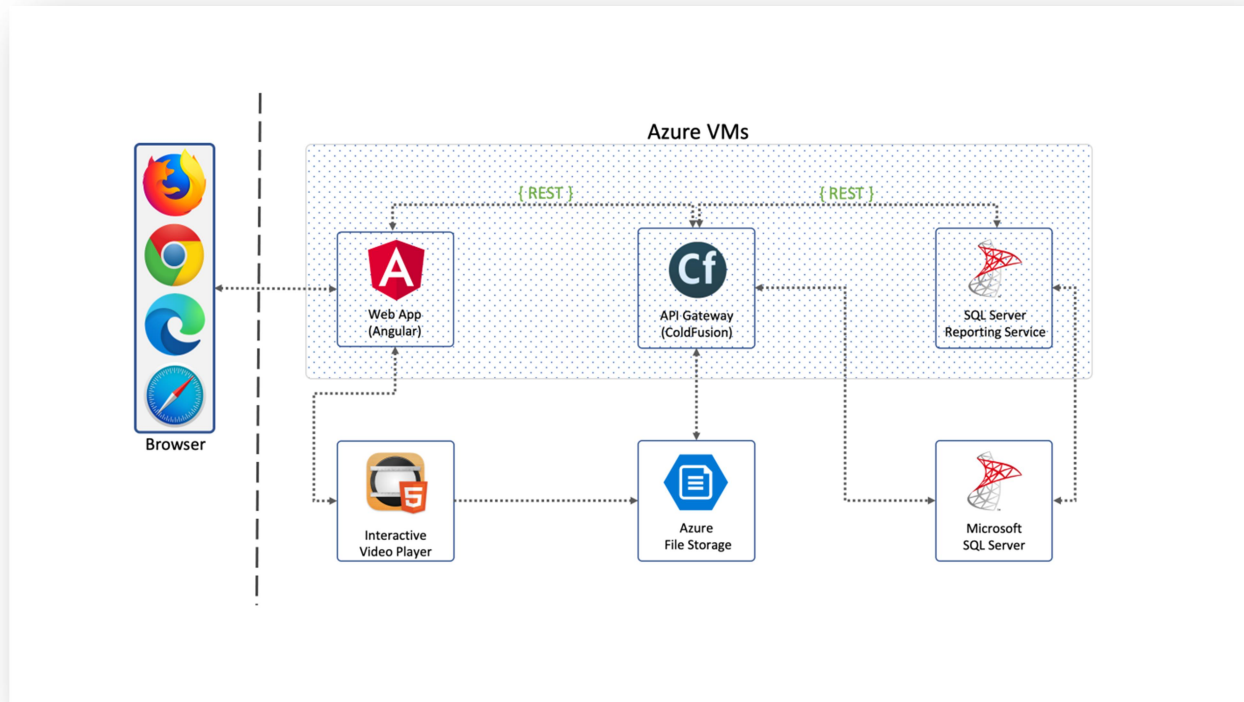
Users log in and check the list of pending trainings, tutorials assigned to them. On successfully completion, they undergo scheduled evaluations. There is provision for them to share their feedback on the content of the trainings, their overall experience, and suggestions for improvements with the super Admin etc.

The process of modernization involved migration from a Monolithic architecture, in which CF was used in the UI along with the backend, to a multi-layer architecture. SSRS is leveraged for generating server-based reports in the form of pdfs that are sent to the browser for display.
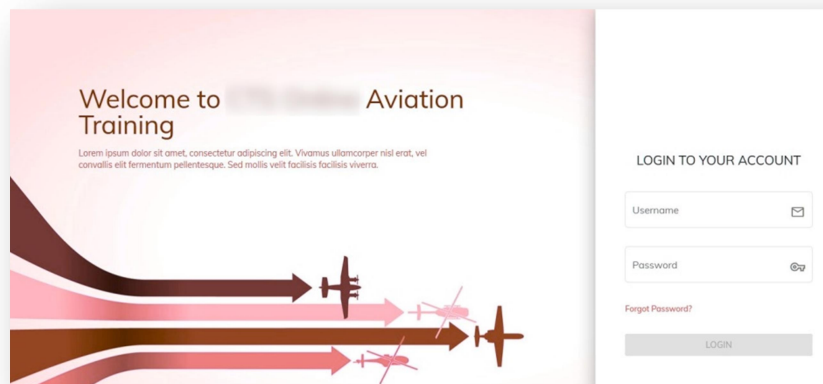
Overall, the client was able to realize a new UI & UX, with a complete distinction between the front-end and back-end. This was done in accordance with the latest multi-tier architecture. All this translated into the end users noticing a completely revamped look and experiencing significantly higher levels on efficiency and ease in traversing through the application.
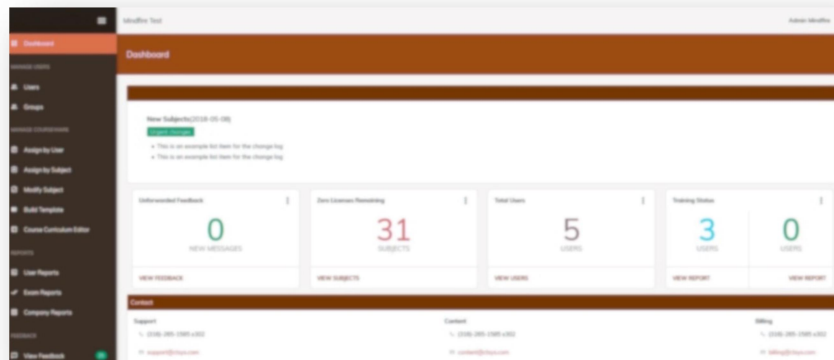
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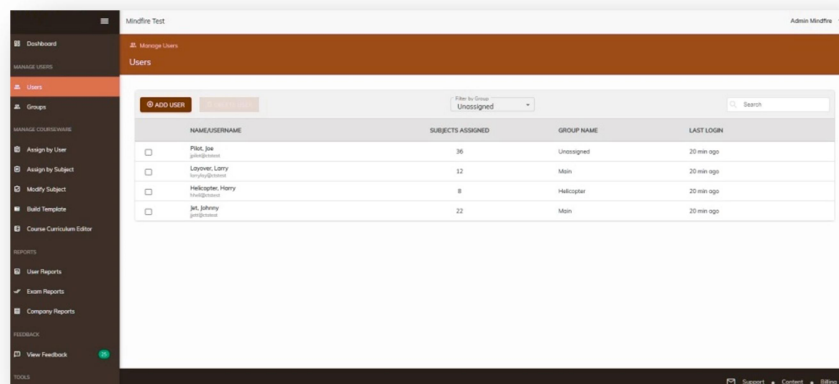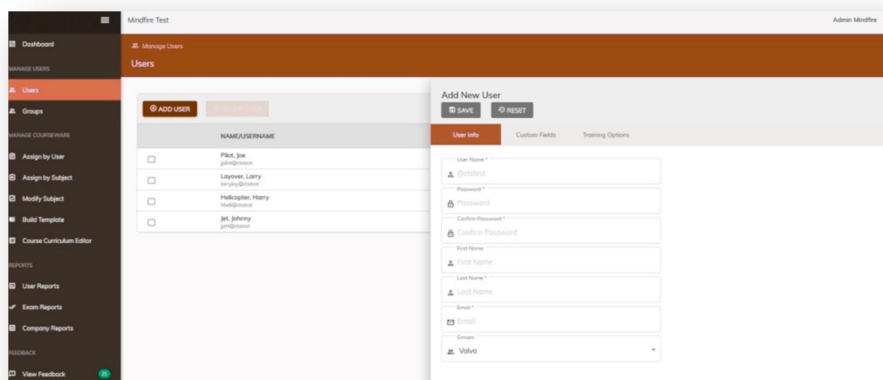## Architecture:

Screenshots:

Screens 1:

Screen 2:

Screen 3:

Screen 4: