E-Forms in Angular
EMR Web Service

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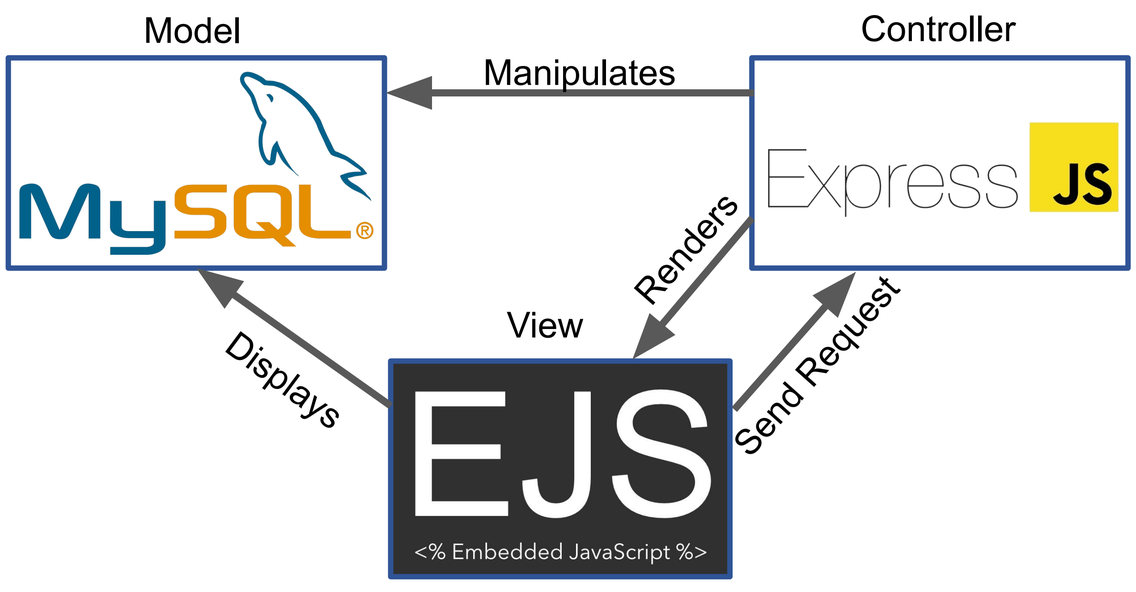
eMDs

Abstract

Generating medical assessment forms is a core aspect of eMDs business. eMDs current method of generating medical assessment forms has become outdated due to general business adoption, eMDs client's adoption, and widespread integration of modern web technologies. In order to assist eMDs in keeping on track with its clients' needs, it is a business benefit to transition eMDs current method of generating medical assessment forms to web-based forms. Our team was tasked to build a web application with a Node.js backend, MySQL database, and an Angular 7 front end.

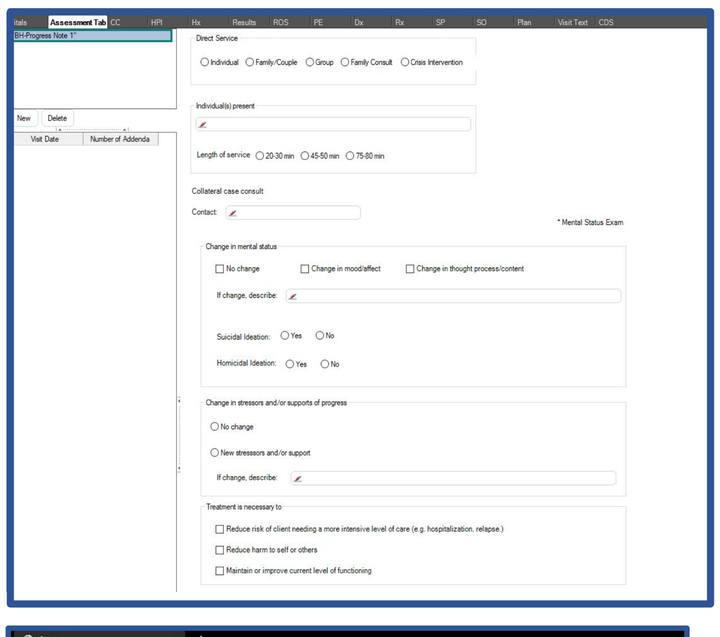
Keywords: Medical, Web App, Node.js, MySQL

Architecture

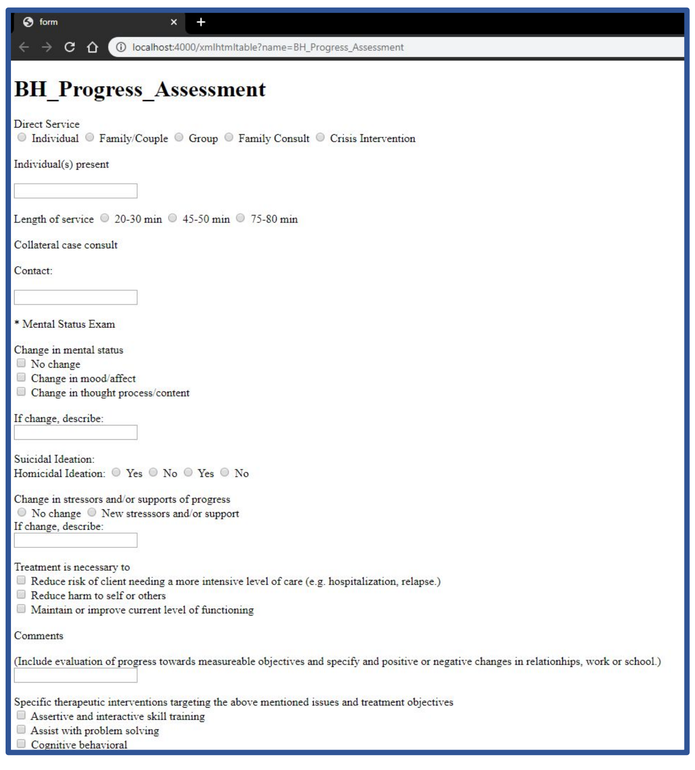


Results

Before:



After:



Impact

By creating a new method to generate e-forms, eMDs will no longer have the need to use third-party software to generate e-forms, which would provide more flexibility for users by giving them more options and tools to create the e-forms they need. Furthermore, by utilizing this newer technology, eMDs will be able to support mobile and web platforms.

Performance

- Overall, our company sponsor was pleased with the project's performance
- Team reached around 90% completion of overall tasks - implementing a functional solution
- Team stayed on schedule and reached an MVP prior to project deadline

Summary

- Created a web service endpoint that allowed our app to call and parse XML data through dynamic routing.
- Enabled dynamic methods to read in XML data translating this data to JSON for feasible parsing
- Enabled modularized parsing of data. Allowing for forms with different content to be parsed by our application.
- Developed full stack web application to call, parse, and display data. Going from XML to JSON using SQL for data storage, Node.js as server side logic and ejs templating on the server side to populate frontend components.
- Provided business value through taking aspects of current eMDs product and integrating modern web technologies to product.