



Client

Andrew McClellan, Applications Developer

Company Background

Aventura was born in a Denver hospital IT department that completed a desktop virtualization project.

We are a rowdy bunch of technology enthusiasts who love what we do. If you've seen HBO's Silicon Valley, then you're aware of the fast-paced, fun-loving nature of a small startup company. If you're a work hard, play hard type of person that wants to learn something new every day, then you're going to fit right in here.

Our software delivers a personalized desktop to our users quickly and securely. We are deployed to hospitals nationwide. One of our major goals is to allow clinicians to spend more time with the patients rather than logging in and out of their computers and launching their applications. Our product works via the user tapping an ID card at the computer which quickly logs them in and auto-launches the applications they need based on who they are and where they are.

Project Overview:

The healthcare industry is being required to adopt a standard interface (called HL7) for data exchange, integration, and retrieval of electronic health information. With this new standard, a RESTful service is also being created (called FHIR) which allows 3rd party applications to access that health information. This project's first goal is to create a small web application (much like a mobile app) that utilizes FHIR for data retrieval. Second, the project will require the implementation of an application hosting platform that allows simple uploading of additional FHIR applications. This project would be among the first applications built on this emerging technology in the Health Care industry.

Project Goals

Students will be required to develop a FHIR application hosting platform as well as a simple FHIR application.

- Complete any necessary research as to how to complete the objective
- Prototype a simple web application that uses FHIR.
- Prototype an easy to use platform that hosts the FHIR application and allows the adding of more FHIR applications.
- Create and document the tools to manage this feature.

Skills Required

- Software Development, .NET (C#) is a plus.
- Basic JavaScript skills are a must have.

- Knowledge of REST services as well Ember.js is recommended.
- Eagerness to learn and adapt.

Student Benefits

This project will give the students experience and knowledge with:

- Architecting and building a software component
- Agile methodologies such as KanBan and Scrum
- Learning how to integrate complex software
- Practical .NET experience
- Experience with mobile platforms
- Interfacing with third party software APIs
- Real world project that can be completed in 6 weeks

Team Size

This project would be suited for a team of 2-3 people.

Location

Students will be expected to spend most of their time at the Aventura office which is in downtown Denver.

Contact

Please contact Andrew McClellan (Andrew.McClellan@aventurahq.com; 303-217-8018) with any questions you have regarding this project.