

Spectrum Health Team Description

Summary of Technical Strengths:

Rosa: Rosa is majoring in Biomedical Sciences and Computer Science and is graduating at the end of this semester. She has accepted a full time offer for after graduation with Amway and will be working on their analytics team. Through her coursework and internships she has worked with Java, SQL, Python, C++, HTML, and Javascript. She has worked mostly with databases and is most proficient in SQL and Java.

Mason: Mason is computer science major here at Grand Valley. He is going to be accepting a full time position with Deloitte in their Global Technology services division where he will be servicing Salesforce applications when he graduates. His interests in business technology developed during his internship this summer at Deloitte and in turn is where he wants to direct his career towards. Through mason's course work he has had exposure to various languages and those include Java, C, C++, SQL, Python, and Swift. Of those languages Mason is most proficient in Java. He has also taken the mobile application elective at Grand Valley which informed him about Android Studio and Xcode that will help in the development of his capstone project.

Aaron: Aaron is computer science major at computer science who has had exposure to Java, C, C++, SQL, HTML, CSS, Javascript, and PHP. Out of all the languages Aaron knows Java is Aaron's strongest skill. He completed an internship at School Zone Publishing, he ported several games to Javascript and the Phaser Engine. Aaron has a background in Desktop and Web Development and is currently taking the System Security course at GVSU.

Anticipation of Growth Areas:

Rosa: I have no experience with any mobile app development or many of the tools and languages our project uses but am looking forward to learning. I am also currently in the Mobile App Development elective at GVSU and hope to use what I am learning in that class to help me with this project. In addition I am hoping to learn more about working in an agile environment.

Mason: I have a background with mobile app development from previous semesters but would like to strengthen my knowledge in both iOS and Android. I also have no background in .NET core, SignalR, Identity Server, and Azure on the backend so I plan on becoming more familiar with all of those frameworks. I also have no experience with web development in terms of HTML or CSS so I plan on learning those languages as well as the semester progresses.

Aaron: I do have an interest in Mobile Development and I hope to learn about Mobile Development through this project. I've also wanted to learn C# and ASP.NET and I hope to gain these the skill while developing this project.

Project Description

Background:

The Spectrum Health Web/Mobile Development team is proposing mobile applications which will allow our doctors in the Transplant Surgery team to communicate with doctors outside of the organization. Oftentimes, doctors outside of Spectrum Health will reach out to Transplant doctors for status updates on patients, referral questions, or for professional advice. We would like a convenient place for doctors outside of Spectrum Health to be able to register an account, communicate with our internal doctors, and be notified upon response. This will allow Spectrum to not only care for transplant patients, but also to foster a community of experts in the field of transplant medicine. The way we see this project is basically an app to help out physicians send out referrals to other physicians.

Description of Intended Features/Backlogs:

- Referral system to connect physicians outside of Spectrum Health's network with Spectrum Health physicians for seconds opinions or advice to allow patients to stay home as long as possible throughout their care
- Intake Request form for physician information
- Easy way to connect busy physicians with senior staff or a larger network for a greater wealth of knowledge within the community
- Permission sets for different users such as super users, transplant staff members, physicians reaching out for information, and administration
- Administrator portal web page to keep track of referrals

Anticipated Platform/Tooling:

- Xcode
- Android Studio
- .NET Core

- Azure
- Microsoft SQL Server
- SignalR
- Identity Server
- Visual Studio

Relevant Ethical Principles:

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

1.6 Respect privacy.

1.7 Honor confidentiality.

2.1 Strive to achieve high quality in both the processes and products of professional work.

2.2 Maintain high standards of professional competence, conduct, and ethical practice

2.3 Know and respect existing rules pertaining to professional work.

3.1 Ensure that the public good is the central concern during all professional computing work.

3.5 Create opportunities for members of the organization or group to grow as professionals.