**Evan -** I would say I have much more experience with back end development than front end. With that said I want to gain more experience with front end development if possible. I’m currently in a database management class, so I’m gaining experience with SQL and working with databases. I work as an engineer on a small team for a small company and have played sports and competitive team games for most of my life. In that time I think I’ve developed strong leadership skills as well if we need someone to play the role of project manager. I’m quite familiar with Java (though it’s been a couple years since I’ve used it), C, and some C++ however I’m more than willing to learn any language that we see fit. I’ve also taken some networking classes however I don’t know that those will be very applicable here.

**Ryan -** I also have more backend development experience, I am currently working as a Software Development Intern at an insurance company in Madison here we use C# for our development (very very similar to Java), but also have experience with Java, Python, and C, but am open to learning whatever we need to be successful. Like Evan said, I am also in database management, so getting more in tune with SQL and how that works. Before my before current internship, I worked as an IT Infrastructure Engineering Intern, which is about building/configuring the environment in which you will be hosting your application, so when it comes to setting that up I hope I can provide some insight there. I will be honest and say that team leadership is one of my weaker areas, so I am fine with taking more of a developer role on the team, but that being said. I think it's important that we all get on the same track with our vision of how we want to complete and partition out work for the team.

**Azzed -** I have limited experience with software development but in the team projects where we did develop I worked all round on all aspects including project management. That being said I would like to further harness my skills in front-end, back-end and quality assurance testing. I am adept in Java, C, Javascript, HTML and familiar with python.

**Harrison -** I have more front-end development experience. I enjoy front end work. I would like to get a healthy balance between front and back end in this project. As far as programming goes. I would say I have a lot of experience with Java, Python, C++, Javascript and HTML. I also have a lot of experience with testing. My internships have consisted of UI design and debugging/testing. I would like to steer into debugging and testing. Those are strange areas that I enjoy and will be doing a lot of this summer, so I would like to get a lot of experience there. I also have some small experience designing android apps though they have all been small text based ones.

**Edwin -** I am interested in back-end development. I have experience programming embedded systems in C and developed a small game device with various inputs(GPIO, ADC, Accelerometer, other sensors) and developing the hardware drivers and game logic to display on an LCD screen. I also have experience with Java in developing programs in introductory programming and data structures courses. I have limited experience in C# developing scripts for a video editing software for the company I previously worked for. I have some pretty thorough knowledge developing test software for manufacturing applications in LabVIEW, a graphical programming language, through my work during my co-op this past semester. This semester, I have been beginning to learn some C++ and python but still have much to learn. I would be interested in creating all the necessary object classes for the application such as tutors, calendars, students, etc. as well as in helping in organizing the project into appropriate milestones and objectives.

| Phase:  Requirements & Specifications | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Ryan | Research on services similar to ours, document how we plan to deliver | Begin to understand schema and ways in which we will store data |
| Product Owner/Developer | Edwin | Reach out to client to confirm software specifications and establish vision of the project | Explore existing UHS TBR website and identify essential development tasks |
| UI | Evan | Create frames of layout. Start developing GUI for Android app. | Figure out how to tie the backend to the frontend. |
| Developer | Azzed | Finding and understanding the software required for creating the application | Understanding the language used and how it can be used to implement the requirements |
| QA/Test development | Harrison | Ensure that all ideas in this initial stage meet a certain standard. | Begin thinking of test cases and a suitable test environment |

| Phase:  Design & Planning;  Project Kick-off Presentation | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Ryan | Make sure that kick-off is going alright amongst all roles | Begin setting up the database with our design |
| Product Owner/Developer | Edwin | Communicate with team to establish consensus on project design and goals | Finalize requirements and specifications based on client input and discuss with team |
| UI | Evan | Begin to implement design interface | Make sure interface design is ok with client |
| Developer | Azzed | Beginning to Create a foundational basis of code to start working on | Look over design implementations made by the UI and keep it in tandem with the developed work |
| QA/Test development | Harrison | Create working tests with Developer to begin development process | Start recording all debugging and testing. Provide appropriate feedback in a timely manner! |

| Phase:  Iteration 1 &  Document Update | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Evan | Keep the team on point and looking pretty. | Further develop database implementation and tie into software. |
| Product Owner/Developer | Edwin | Plan and develop software objects and logic. | Communicate with Ryan on front end back end connection |
| UI | Harrison | Develop the basic structure of the UI | Receive feedback from team members and clients |
| Developer | Ryan | Work with front end to begin to connect the backend with the front end | Make sure data is getting added correctly to our database |
| QA/Test development | Azzed | Write black-box and unit tests for the code | Ensuring all testing is functional and tests what it should test |

| Phase:  Iteration 2;  Code Coverage | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Edwin | Implement database features for project (tutor profiles, scheduled sessions, etc.) | Communicate with team on project code development progress and with team on bugs on tests. |
| Product Owner/Developer | Harrison | Ensure the team is on track. Finalize the development of the application | Communicate with team to ensure any final problems are fixed |
| UI | Azzed | Improve on the previously developed UI with user feedback | Acquire user feedback on the changes made |
| Developer | Evan | Make sure code passes all tests. | Add extra features if time allots. |
| QA/Test development | Ryan | Testing the backend logic to make sure our functionality is correct | Communicating with other teammates to understand what we need to prioritize for testing |

| Phase:  Testing | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Harrison | Make sure that the database selected is performing. Fix bugs | Keep all database documentation up to date. Confirm everything with clients |
| Product Owner/Developer | Azzed | Relay communications and concerns regarding the product between the client and team members | Oversee any changes required to meet the clients approval while making sure it does not create additional problems |
| UI | Ryan | Verify that UI is working the way it should be | Document any problems that arise from testing. |
| Developer | Edwin | Ensure code is finalized and ready for Final Demo | Run tests and fix bugs and errors in failing tests. Communicate with Evan with QA |
| QA/Test development | Evan | Ensure that fringe cases are accounted for. | Debug code as needed. |

| Phase:  Project Outcomes & Lessons Learned;  Final Demo | Role | Team Member | Responsibilities | |
| --- | --- | --- | --- | --- |
| Primary | Secondary |
| Scrum Master/Database Admin | Azzed | Create the presentation and help lead its introduction | Engage the client in discussions about the project |
| Product Owner/Developer | Ryan | Present project that the team delivered | Help team with finishing up their responsibilities |
| UI | Evan | Make sure UI is polished and intuitive with no bugs. | Make sure UI is tied into back end. |
| Developer | Edwin | Explain the program and how it works and the steps involved in obtaining output | Demonstrate what inputs lead to different program outputs |
| QA/Test development | Harrison | Describe the testing and test environment. Describe how these test changed the program | Describe how the clients input changed the project |