**Project Proposal Template (12 pages)**

**Due: Jan 31, 2022**

**Total 10% of the entire mark**

Please maintain the formatting and font type and size of this template when submitting your report: single-spaced, font size: 12.

Project Title: RaiderMeet

Project Acronym/Mascot: AverageBros

Team Members: Junwoo Jang, Matthew Silva, Monica Romero, Younghoo Cho

1. **What will be produced by this project?** (1 page) [1 mark]

What software or other specific deliverables would be produced? Provide an overview of the function of the software or other items delivered.

Our team figured out that there are so many dating apps, but they are mostly focused on relationships only and not for friendships. We decided to make an app for any type of relationship. This app is called RaiderMeet and will be developed with Android Studio. RaiderMeet is for people who need friends in any situation, but only for Texas Tech Students. There are students who have a hard time finding friends not only during Covid-19, but also before Covid. Texas Tech students might have felt once that it is not easy to be in Lubbock without any friends. Based on information from Texas Tech students, including myself, there are not enough opportunities to make friends and talking to strangers first is not really easy in real life. When I transferred to Texas Tech, there was only one meeting called transfer connection which is meant for building connections. However, this meeting was not really focusing on helping people to be friends with each other. Therefore, based on all of this information that our team collected, we decided to help Texas Tech students to make friends through online. This app helps students to find friends for any situation when they actually need friends. If students want to play basketball with someone, students can turn this app on and easily find friends to play with. There is a category that you can view the people by the hobbies or interests you checked for, to help match people who have the same interests with each other. It also has a category by gender and majors that can be important parts for some users in 2022. Nevertheless, there will be people who still have a hard time talking to people first even using this app. Regarding this, our team developed this function to send random questions when the user wants to talk to a stranger first, but the user does not know what to say and it is little different from Bumble's function. To actually know how the users of existing dating apps think about the apps, our team downloaded existing dating apps to experiment and we found out that the apps make users only focus on appearance to meet someone because of the swipe function. We decided to not put a swipe function on RaiderMeet to care about our users. Even as an experimenter of the existing dating apps, I felt uncomfortable just to be one of those bunch of cards to someone. Another function from our app is RaiderMeet allows a user to view the people who live nearby and a user to talk to anyone first directly, without any matches or without any swiping cards. However, there is still a rule that a user can view another users’ hobbies and gender only, except pictures and names, until the user answers the chat to keep the privacy for some users who may feel uncomfortable. Another biggest issue we found out from existing dating apps was the easy sign up system. It was extremely easy to make an account and our team figured out that this was one of the reasons why rapes or sexual harrassments happened from the apps. As an experimenter, I was able to easily sign up and put fake information by putting fake age, work and even with fake pictures. There was a function that you can prove your identity, but it was only for the face and not for the other things. I also even got approved with the fake picture that was not me, but little look alike, even though I actually took the selfie as a requirement to prove that the profile picture is me. Unlike the existing dating apps, RaiderMeet is only for Texas Tech students and no strangers can use this app. Once a user turns this app on, it leads to the raiderlink page and the user is required to login. This is not only to prevent dangerous situations from happening, but also to help users have more commons and be actual friends with each other in the same area during the whole college life. With this system, if a user does something wrong to another user, it will not be hard to figure out the user’s information within Texas Tech University, if needed for some circumstances. Unlike other existing dating apps, RaiderMeet is not only for relationship purposes and it has a group chat function as well so that users can bring friends and make more friends with each other in one chat room. Our app ‘RaiderMeet’ will be the future of the dating apps that solves all combined issues from current dating apps to make any users feel comfortable and welcome to use. Our team cares about our users and has a mind to extend this app not only for Texas Tech students but also for the other colleges too. However, a decision will be made after the release of the first version.

1. **Who will use the results of the project?** (0.5 page) [0.5 mark]

Describe either the specific individual(s) or the general type of user for whom the project results are intended. Specify different user roles or types, if any.

The application developed by our team is a communication or Dating application for college students called RaiderMeet. Conventionally, communication or dating applications have been operated with various target layers. However, our application can only be subscribed to and used by Texas tech university students and provides application designs and functions tailored to Texas tech students' trends. If application users are limited to college students, business feasibility may be questioned in operating the app. Of course, this application cannot secure users as much as other communication or Dating applications. However, it is predicted that there may be more advantages in terms of efficiency and net profit in operating the application.

According to education data, the number of college students in the United States as of 2019 was approximately 19.6 million. According to Global dating inside, about 91% of college students are not primarily using the apps for just dating. In the case of other dating apps that think of all age groups as customers, one of most age groups used is students. Based on these statistical data, our app decided to develop a communication app that can be a dating app and a friend for college students. In addition, it is easy to manage the application. For example, since apps can be provided in a trend suitable for college students, it is easier to maintain because apps are simpler, and the number of users is also efficient in terms of server management, resulting in cost reduction.

As a result, dating or communication apps for college students not only meet people's needs but can also maximize efficiency from a technical point of view and reduce costs.

1. **Describe the problems or difficulties currently experienced by the proposed user(s) which will be addressed by the proposed project.** (0.5 pages) [0.5 mark]

How is the user currently achieving the goals of the intended project results? Are there needs which are unmet or desired?

Although it is simpler than existing dating or communication apps, the functions required for the app are numerous. In the case of the app, not only information should be delivered to the user, but also data between the user and the other user should be delivered. In this process, there should be no problem implementing interactions for each app function because various functions existing in the app must be operated in combination. In addition, an important part of a dating or communication app is data storage and management. It is necessary to store and manage not only the information of each user but also the information between users. It is necessary to implement the function of the process of transmitting and receiving information obtained from each user's app, storing it on the server, and managing the server. In addition, when using a local server, it is necessary to build infrastructure facilities for the server. However, there is no immediate problem because it is a prototype development that does not require a large amount of data capacity, but in the long run, it is necessary to use a cloud server or build its local server in the future. In addition, in the test version stage with less than 100 people, if a separate server is needed, it is expected that cloud server data that is provided can be used to solve it.

1. **Describe the project results in more detail, including how they will be used.** (2 pages) [2 mark]

Describe in more detail the functions or components of the proposed project deliverables and how will they fit into the user's work activities?

After following our basic plan for developing RaiderMeet, we expect to have a fully functioning prototype application for users to meet new people and find friends. Once the prototype is released, it will require a small number of users to test the product to ensure it is functioning properly. With this sample of tests, we can get a better idea of what needs to be improved in order for us to implement the actual application. The tests will utilize all the functions developed within to make sure each of them work. There will be multiple functions within where some feed off of the rest to operate correctly. One of the functions included in RaiderMeet is the updating profile/profile picture. This function will allow the user to update their profiles with any information they wish to provide and show to others. Within this function, there will also be child functions such as adding major/minor, hobbies, age, gender, classification, and more. Each individual function will serve its own purpose as far as what they are named, but they will each be an extension of the updating profile function. The child functions will utilize some sort of database to store the users account info upon signing up. The database will also consist of a security system to ensure the personal information provided is safe and secure. It will keep any irrelevant data hidden to the user while showing the information the user wishes to display such as their majors, hobbies, etc. Any information updated at any point while using the application will be updated within the system to keep their accounts consistently up to date. The RaiderMeet application will also contain a function for direct messaging students rather than using a swipe function to find matches. Since this is an application for meeting new people, we are not basing it off of one's appearance, but rather what they are studying and activities they enjoy doing in their free time. This function will contain multiple child functions as well to ensure a more user friendly experience. The parent function will consist of the actual messaging system that allows users to interact with other students on the application. Extending from this function will be a child function to handle push notifications when a user receives a message from another user. The user will be able to decide whether or not they would like to have this push notification on or simply check the application themselves to see if any messages were received. Furthermore, another function extending from the parent will include the option to send pictures and small compressed files. This will provide users with a better communication experience to share photos of their choosing to either provide information of some sort or simply use them for conversation. As far as sending small files, this function could be utilized when users need to provide specific word documents, pdfs, and even notes containing information for studying purposes needed to be shared with another individual. The variety of options will ensure that users are able to use many forms of communication all within a single application instead of leaving to send an email or text message that has functions the app might not contain. In addition to providing users with an efficient communication experience, there will be a function focused on reacting to messages being sent between individuals. This is a small component, yet widely used within other applications as a form of responding to an individual. In the event that you are not sure how to respond with words, the user will be able to utilize this function to respond with an emoji similar to their initial reaction. Lastly, the messaging system will contain a child function for adding more than one person to a conversation. This will be useful in the event that a user meets multiple friends with common interests. If these individuals are looking to create a friend group designated to hanging out or studying for classes, it will be a more efficient way of forming groups for these specific activities. Along with the ability to create group conversations for messaging, there will be small functions focused on editing the group information. These functions will consist of adding a picture to the conversation and even naming it so the user is more aware of the different conversations they might have within the application. It also gives the user the option to personally customize conversations to their liking so that the application is a more enjoyable experience to them. A couple of other small child functions included in the messaging system will handle muting conversations, leaving group conversations, and also the ability to see any pictures sent within these conversations. These small components will mainly be implemented for more efficiency within the application. However, most people do utilize these components in other applications when they would rather not receive the notifications or simply not receive them for a certain time period. Allowing the user to mute the conversation makes this process simple and easy. As far as leaving group conversations, users might often not want to be in the group that was formed anymore for a variety of reasons. Providing them with the option to leave at any point ensures that they are not stuck in a conversation they prefer not to be in. Moreover, the option to view pictures sent within a conversation allows users to refer back to previous photos that were sent if a similar topic of conversation were to arise. Moving on from the messaging system of the application, it will include a function for finding friends. This function will also have another extension from it that consists of reducing the search to different categories. For the parent function, the user will utilize it for general searching purposes and finding other users with similar interests or just finding users they would like to meet. Its child function will handle the more complex aspect of it that allows the user to reduce search time by filtering the search options to respective categories. These categories will be created based on the customization of the user's profile. This is to ensure that whoever is using it can attract other students of their choosing. The categories will contain information such as different majors, hobbies, age groups, genders, and classifications. As mentioned above, based on the way the user customizes their profile, the respective categories will pop up upon searching for friends. This allows users to select the categories they are looking to meet new people in and reduce the time it takes to search greatly rather than having to search through many individual profiles for a specific match. Reducing search time and tailoring the searches to the specific individual will provide a user-friendly experience. One of the last functions to be included within RaiderMeet will be the TTU verification system. Upon signing up, users will be directed to the verification system and prompted to enter their TTU login credentials. This verification will ensure that only TTU students are able to access RaiderMeet and provide the safety of knowing you are interacting with other students rather than someone completely outside of your age group. Creating an application that not only provides safety but also looks to meet a consumer's every need is important in terms of getting it to be successful in comparison to existing meeting applications. It is also important to research these existing applications to find where they found success so that you are aware of what will make your users satisfied.

1. **Review existing software and literature relevant to the proposed project.** (2 pages) [1 mark]

Review existing software and its suitability for the user. Discuss trade and research literature describing functions of features of relevant existing or proposed software. How will your project extend, enhance, or improve on existing products or practice?

Our team actually downloaded existing dating apps to experiment and tried to find out what can be better from those apps. We found out very first that the dating apps are mostly focusing on relationships only and it is not really useful to make actual friends when a user wants friends, but not relationships. For the experiment, we decided to do it with the two most popular dating apps called ‘Tinder’ and ‘Bumble’. We were wondering how all those systems work in those apps and the reason why it is still so popular, even though we can obviously find out some issues of the apps. There were some parts that we think the two apps did well, but the issues were more serious. On Tinder, a user can see how many likes the user got from the other users, but the pictures of the cards are not visible and are blurred out, unless the user purchases the premium membership. Based on the research, most users on Tinder are mostly college students and the price was not reasonable for college students to afford the membership. On the other hand, any functions of RaiderMeet will be completely free and there will be no money playing with our users just in helping them to know more new people and find friends. Tinder has this algorithm that intentionally makes users not to match with each other well if they are not premium members, who liked each other, to make users purchase the membership. There is also discrimiation between men and women users. Only men users have a ‘top 10 picks’ function, which is meant for showing guys the top ten most good looking girls in the same area. Tinder choose these girls by the appearance only and intentionally put their most sexual pictures on the very first picture. In this function, men can choose a girl and can send them only ‘superlike’ to one girl every 24 hours only, unless he purchases the membership. However, based on our research, those girls who are on ’top 10 picks’ do not even know that they are on there and their pictures are used like that. ‘Superlike’ function is different from normal ‘like’ function and it is given once a day to both men and women users, unless the user purchases the membership. Once the user superliked someone, the user’s card will be shown to another user pretty easily. These kinds of functions give Tinder more hookup app image rather than a dating app, but there are users who genuinely want to date people, but cannot find other than just sexual relationships on Tinder. Additionally, there will be couples who genuinely met through Tinder, but they get judged by people who possibly think those couples are sex relationships. There are some parts that I personally think that ‘Tinder’ did well as well. A user cannot tell if another user reads the user’s message or not. I personally think this can be comfortable for the users not to feel pressure to reply all the time and they can reply whenever they want to. Another thing is surprisingly, there is a hobby category on Tinder. After the user signs up, the user can choose hobbies and can see the other users’ hobbies as well. However, I figured out that this function is just for decoration and is not doing much after our experiment, even though the app says that it is going to show cards by the same hobbies first. However, the cards were being shown depending on how good you look and how much like you got by the other users. This is not fair because some people can just look good or bad in pictures, and human’s attractiveness including personality and vibes of the person cannot be included in that one card. Additionally, the beauty standard is not something fixed and can be unfair for some people in certain areas, especially in the United States regarding the users’ race. There is also a block and location range function that I think ‘Tinder’ did pretty well. If you do not like some users, you can block them. You can see the cards by the range of the distance between the users so that you can make friends not only in your area, but also from other areas and even from other countries. Sometimes, a user can just pass the person by mistake, even though the user liked the person, so there is this function that you can withdraw the action, but there should be payment for this function. Unlike Tinder, Bumble has a mode to find friends and even work friends. Unlike Tinder, there are also some random question functions that a user can send, if the user feels shy talking to someone first, and the users can put funny things on their bios by answering random questions on Bumble. A user gets matched with another user who liked the user pretty easily, unlike the Tinder algorithm, even though a user does not purchase Bumble's premium membership that helps a user to get more matches easier. Bumble also has a function that shows the number of likes that a user got, but unlike Tinder, the picture of the card is not very blurry, so that you can kinda see how the person looks like and you can like the card that look alike with the blurred out picture, while swiping, to get matched. There are some defects that I can see from Bumble as well. Bumble can look like the copied version of Tinder and there are unuseful functions that just makes the app more complicated to use. There are also some issues in swiping cards and a runtime error occurs on this app sometimes. For example, the same cards keep showing up multiple times. Another weakness is, unlike Tinder, a user can also send the pictures directly to another user without any agreement and this can lead to sexual harrasement to someone. Bumble got popular first because it seems like that this app cares about men users from Tinder to solve an issue of the Tinder, which is environmentally makes guys talk to girls first and girls get a lot more messages, because of unequal gender ratio where a lot more guy users are than women. Bumble made only girls can talk to guys first, when the match happens. Given in 24 hours, if the girl does not talk to the guy first, the match will disappear, unless the guy pays for the membership to extend the time. However, Bumble is still not as popular as Tinder for reasons and there are not many users. As an experimenter, I can see that this function still does not really do anything much because this was not the only issue of Tinder. While experimenting and actually using Tinder and Bumble, the first biggest issue that needs to be fixed was that both apps are very appearance based. A user can find matches most likely only when he or she has a good appearance and good profile pictures. Appearance can be important, but these two apps made users only focus on appearance most based on the little bit of pictures and the short self-introduction, by swiping cards. The cards here are the users who are also using those apps with their profile pictures. Our team figured out that this can be an issue to make users judge appearance only and for some users, it would not feel nice just to be one of those bunch of cards on someone’s phone. Regarding this issue, we decided to get rid of the swipe function and we made a user can talk to anyone first, no matter how the user looks or even though the user does not have any matches. Rather than just swiping cards, the user can see other users who live nearby and the user can talk with each other without a match. However, there will be some users who can feel uncomfortable with this rule, so we are going to make only hobbies and the gender to be shown without showing pictures or names, until the user, that another user talked to first, answers his or her chat. Second biggest issue was Tinder and Bumble both are very easy to sign up for anyone to use and based on the research, there were some rapes or sexual harrassment happened on Tinder. It was even hard to catch those rapists because they put fake information on the app. However, RaiderMeet cares about our users and to prevent bad situations from happening, we decided to let only Texas Tech students use this app. It has a student verification function through the raiderlink login page, when a user turns this app on. RaiderMeet is not only to make friends in college in the same area, but also to prevent some dangerous situations from random strangers. While using existing dating apps, our team figured out that the users can easily lie with their work, age, and even with pictures. Tinder has an identity proof function, but it is only to prove the user is actually using his own face for the profile, but not for other things and the user can easily prove that, even though the user does not really look like the profile pictures. RaiderMeet users will feel more comfortable and feel safe to meet with each other, and they will be more careful with each other. If something happened between the users, it will not be hard to track the student information of the user.

1. **Describe the benefits and advantages which the user could expect as a result of the project.** (1 pages) [1 mark]

When developing an app for people to meet friends, it is quite difficult to ensure the application does not have a high amount of similar functions compared to existing meetup apps. Otherwise, it will not have much success as the users would much rather use the current applications that have been out. When coming up with a design for RaiderMeet, we listed the benefits and advantages that users could expect compared to similar apps like Meetup or Bumble. One of the many benefits of RaiderMeet is that it is strictly for Texas Tech students. This information will be verified using the students TTU login, and users without the required credentials will not be allowed to sign up for the app. From this comes many other advantages such as convenience, creating a safer environment which provides users with a wider sense of comfort, finding friends within a nearby location, and also meeting students that have similar majors or interests. To elaborate, the safety of the application is definitely a priority so that students are encouraged to download the app without worrying about any major risk factors. Although users will still be interacting with strangers, the sense of comfort comes from knowing the other individuals are also students attending the same university as you. In comparison with apps like Meetup or Bumble where you can meet people from all over the world, RaiderMeet provides the convenience of meeting students that are within the same location as you. This ensures that the user could actually meet up with another student nearby rather than making plans to travel elsewhere where they might not be as comfortable. Eliminating the traveling aspect of it will also keep users from being discouraged about utilizing the application in general. Moreover, since users will be attending the same university, they will be more likely to find students with similar majors. This is one of the main benefits as it provides users with networking opportunities and also allows them to ask questions that others might have the answer to. For example, if a user meets someone with the same major but they also happen to have a higher classification, they could ask questions about the field and the experience they have gained up to this point. It will also allow them to consider whether this is the right major for them before going any further within it. Furthermore, RaiderMeet will contain a function to narrow down your search options. This will benefit the user by reducing search time, making the app more efficient rather than searching through each individual profile to find students with a match. Also, it will allow the user to filter specific interests based on the way they customized their profile which will encourage greater usage overall. Your own personal customizations will allow you to choose who you attract and also who you do not. Lastly, the application will be free to use. There is no cost required to implement or develop RaiderMeet and therefore, it will not require a cost for students to sign up and use. The application is meant to encourage students to find friends and meet new people, and requiring the user to also pay some sort of subscription will only discourage them from participating. Overall, we wish to provide a quick and easy way for individuals to network amongst themselves while eliminating most if not all risk factors. RaiderMeet will strictly focus on meeting consumers' needs and look to provide continuous updates if those needs are not being met. It is important to us that our audience is being heard, understood, and also safe while utilizing our app.

1. **Describe the requirements(operational requirements), costs and commitments for the user as a result of this project.** (requirements: 1 page, costs: 1 page, commitment: 0.5 page: total 2.5 pages) [2.5 marks]

What additional user costs or work will be necessary to implement this project? What hardware and software will be needed? Are they available currently or planned? Are there any special start-up requirements or training?

**Requirements:**

The purpose for the RaiderMeet app is to allow Texas Tech students to find friends in other Tech students. The intended audience for this app is, of course, Texas Tech students specifically in the Lubbock campus and over eighteen years of age. RaiderMeet’s intended use is to facilitate the friend making process. It is often that new and even returning students have a hard time meeting new people and in addition to that, like minded people who are interested in the same activities, or major as you. The benefits in this is that the student will have a safe and free environment to socialize. RaiderMeet will use the student’s Raider Number to log in. This will ensure that any type of assault or violence to another Raider will not go unnoticed and everyone will have to take responsibility for their actions. The use of the Raider number by the app guarantees that we have information on each Red Raider that uses the app if any authorities need it. Although apps exist to meet new people such as MeetUp, none of them have the degree of accountability or the amount of information for every RaiderMeet user. Since the RaiderMeet app uses a Raider number as a log in, the app will have all the information needed in order to hold any user accountable for any misconduct. With the use of a Raider number, we can gain access to their full name, address, and other personal information needed to hand to the proper authorities. Another benefit for a RaiderMeet user is that a student will not have to join a club or pay any fees to meet or hang out with any other student. Many clubs, organizations, fraternities, and sororities have weekly meetings and fees that need to be paid. RaiderMeet completely gets rid of that.

In terms of the application itself. The RaiderMeet app will have a direct message feature that allows students to communicate with each other. In order to fulfill the proper privacy and consent levels that this team is trying to achieve, the only way a Red Raider can directly message another Red Raider is if they are mutual friends. This means that both parties will need to accept each other's friend request before they can communicate through the Raider Meet app. This will prevent any form of harassment or unwanted communication with another Red Raider. Everything on this application is meant to be consensual and friendly. Anything that does not match those qualifications is likely to be removed or fixed from the RaiderMeet app.

Students who use the RaiderMeet app will also have their own profile that shows their details. Details include major, interests, hobbies, etc. This is where the user can update their preferences on interests and what kinds of friends send requests. The bottom handle will contain an option menu for the Red Raider to navigate between direct messages, profile, and the search for friend tab.

**Costs:**

One of the first costs that need to be addressed when it comes to this project is the amount of effort that the whole process will take. In order to do that we first need to scope the project. As mentioned above, the RaiderMeet app will contain the needed tools for a fellow Red Raider to meet current students through common interests. This means that the app will need to keep track of every user and their information. A user will be able to have multiple interests, hobbies, and even majors. This will take a good deal of effort to incorporate into the mix and matching aspect of the app. The goal is to have a fully functioning Android app that will successfully include these features. As we have four team members, there will be plenty of brain power to allow this project and its plan to flow properly. All efforts to complete the app will be done by the team entirely. As a result the cost of completing this project will also be completely free. In addition, there might be some individual training needed to complete this app. A couple of team members have never built an app before. These members will have to work on getting familiar with the process and what is needed to complete this project successfully. Several resources have been sent out by the team members who are familiar with the app building process to guide the rest of the team throughout the process. Another kind of training that will be needed is a thorough understanding of the Java language. Again, a couple of members are not completely confident in their understanding of the language but have all the tools they need to get the process started. As this language is obviously not their first language, they also have the ability to easily learn Java even if they were starting completely from scratch.

In addition, we have to consider the costs of the software and hardware that will be needed. All members of the team have either their own laptop or have facilities to work on a computer. For example, one of these locations would be the Texas Tech Library. Here, any Texas Tech student is allowed and even encouraged to use a computer or rent out a laptop. Therefore, there are no hardware costs needed to complete this project. The Discord application is currently being used as the team’s main communication platform. Through Discord, the team has been chatting at their convenience, audio calling to discuss project specifications at an agreed time. Video calling is also available on the Discord application. The team will also be using the Android studio IDE to program the RaiderMeet application. Android studio is completely free to download and is available for multiple operating systems. The RaiderMeet app will be completely free of cost to any Texas Tech student trying to use the app as well. Our team believes that no one should have to pay to meet new people. A price on the RaiderMeet app will only serve as a barrier between friends and that is exactly what we are trying to eliminate. Other obstacles that are intended to be avoided when meeting friends are awkward and strange encounters as RaiderMeet users will have the chance to chat with new people to discuss meeting terms as well as critical personality traits that RaiderMeet users do not find suitable for a friend. This will allow users to only meet friends that they get along with. This is mostly because the team has decided that meeting someone who has ill intentions is not a price a RaiderMeet user should have to pay.

**Commitments:**

The whole team will be committed to complete the RaiderMeet app in the standard app development procedure. Within that we will meet to discuss a basic plan for app design using a collaborative interface design tool. This tool will help the whole team work towards completing the RaiderMeet app in an effective manner. These commitments will be discussed in advance in order to plan what days and times every team member will be free. In addition, as coding is the longest and tedious part of the project, the programming process will be divided evenly throughout the team as every member of the team is dedicated to the senior capstone project class. As this is a large scale project, the whole team is committed to completing the RaiderMeet app successfully. There is also the commitment that the team members who do not fully understand the app building process or the java language have to take. This commitment comes from trying to understand and to make the process easier on the members who do know these skills. The programming process will be easier when all team members know the language that the project will be coded in. Similarly, the app building process will be less complicated when all team members fully understand each step that is needed to complete the RaderMeet application successfully. A final commitment of the team is definitely communication. Although the project process has just started, the team has done a great job at communicating with each other about anything. From questions about the project proposal, to clarifying what one of us meant concerning the RaiderMeet app, to overall moral support.

1. **Provide a list of the major activities or steps you expect to undertake in completing this project.**  (1 page) [1 mark]

Include a brief description of each activity or step and an estimated start and finish date for each. (Estimated 8-15 steps)

We plan to proceed with app development by referring to the standard planning and development schedule for the app development.

App standard planning and development schedules mean continuously performing tasks that take a long time to increase efficiency in application development, but other tasks are shared and performed. Many app developers or app development teams are developing applications in compliance with this standard rule. Our team is planning to develop the app in five steps.

Step 1: Establish a basic plan for app design and function using an app planning tool such as Figma.

The tools that can be used in app development planning have diversified. The more complete the app planning, the more efficient the app development is.

Step 2: If a basic plan has been established, perform important functions and frame code tasks necessary for running the app.

Coding is the longest and most continuous modification and fixes in the app development process. Therefore, if the basic functions to enter the app are determined, first, organize the necessary functions, or create a frame code.

Step 3: Use the app planning tool to complete the final app planning, such as an actual prototype.

If you have a perfect app plan, it is much easier to develop an app. If app planning is insufficient, there are many things to modify or supplement for app development, which increases the development period or complicates the app development process.

Step 4: Develop the app based on UX design and final app planning.

The UX design determines the final design based on the contents planned in steps 1 and step 2.

It continues to develop apps and fixes errors.

Step 5: Review the app and maintain it continuously.

The completion of app development does not mean that perfect development has been made.

It is necessary to find problems with the app through continuous review and testing.

It also provides continuous maintenance to identify new problems that arise when users use them.

Step 6: If no problem is found through Step 6 testing, have an app tester period through the prototype version.

Step 7: Users go through the process of identifying and supplementing problems that occurred during the tester period. In this process, the inconvenience of UX is also modified through feedback.

Step 8: Launch an app in the final stage and prepare a data management method in preparation for an increase in the number of users.

1. **What hardware, software, or other resources will you need to complete this project?** (0.5 pages) [0.5 mark]

Describe where and how these will be available for use in this project.

The Senior Capstone class is completely online at the moment. As a result, the team will be meeting online as well. The team will use their own computers/ laptops to meet as well as to complete their own section of the project proposal and their portion of the code itself. Approaching this project remotely, for the time being, allows the team of students to cooperate and share information to create an original piece of work using our computers as a tool. The RaiderMeet app will be used via any device that supports android. An example of this would be an android phone or an android tablet. The software will be programmed through the Android Studio IDE. The Android Studio IDE is available through developer.android.com for free. The download is available for download on Windows, Mac, Linux, and Chrome OS. This variety of operating systems allows every member of the team to be able to work on compatible IDEs even if they have distinct operating systems. Android Studio provides all the tools that the team will need to build an app on any type of android device. Among these tools, there is a visual layout editor. This tool will allow us to create the layout we want in a timely manner by dragging user interface elements into the editor. The Android build system also facilitates the testing, deploying, and distributing steps of app building. The language the team has decided on is Java. Java is supported through the Android Studio IDE and most team members are proficient in the language.

1. **Contribution of each team member towards this report.** (1 page) [without this section, the project proposal will not be graded]

Junwoo Jang (Question: 1,5):

Towards the project proposal, I suggested an idea of making an app based on dating apps for our project. I also designed the scheme of our program and researched about the issues of currently existing dating apps. I actually signed up for accounts for existing dating apps to experiment and to find out possible issues or uncomfortable things that people may feel using those apps. Third, I shared ideas about what functions we need to put for our app and reviewed the other team members' ideas and parts for this paper to give them feedback. My part was question 1 and question 5. To answer these two questions, I researched and collected datas from myself by actually experimenting, from my actual friends, and from the internet, not to have biased information just based on the internet and to meet the real situation.

For question 1, I was focusing on what issues of the current dating apps are, not to make the same mistakes like current dating apps. I also planned the design and functions to see if our team actually can code those parts later. Not to cause any issues, to make our program perfect, I wrote down possible issues that can occur, while developing and after releasing our app regarding not only running issues but also copyright problems. Not to violate any kinds of laws especially involving privacy, I read all the United States privacy laws and planned to not to collect big private information from our users. As a foreigner, this part was a little hard for me because the law was a little different from where I am from. I even researched about how college life is without having friends and what kind of things are essential for college students, not only in socializing wise but also in the other life things. Not to make our users who may be minority people in this society, I researched on gender and race as well. Not to cause any kinds of issues, I read the article about problems of using dating apps and I found out that the biggest issue was sexual harrassment and rape happenings. To prevent this from happening, I focused our app to be safe first. At the end, I reviewed our program’s design, and got rid of some functions that might be not useful and rather make the program complicated to use.

For question 5, while searching on the internet, I found out that a lot of existing dating apps have a lot of commons which seems they all copied each other, so I tried to focus on something special, trying not to have any commons with existing apps. Therefore, I decided to make a friend relationships focused app, not a dating app. I also was researching why all these dating apps are still so popular, even though there are so many issues that need to be fixed. As you can see my answer for question 5, there is a discrimitation between the men users and the women users. Regarding this issue, I even studied the history of how sexism started and tried to focus on not making our women users be treated differently. I also found out that a lot of girls on the dating apps are treated very sexually most and this was one of the reasons why we do not put the top 10 picks and get rid of the swipe function as well. To have a detailed point of view, I researched how Tinder’s inner system is. For example, the unfair algorithms that make users purchase the membership. Because of this, I actually paid for the membership to see how useful it will be and to see if it is worth it to buy the membership with the price. Also, to figure out how the algorithm works.

Younghoo Cho (Question: 2,3,8):

I conducted a demand survey for potential customers about the RaiderMeet application. I analyzed communication applications or Dating application users and the age group of major users was identified. The demand survey for application users helped identify potential customers of the RaiderMeet application and determine its business feasibility.

I researched and identified practical problems and challenges in developing the RaiderMeet application. The difficulty at the moment is that development itself is highly difficult because, unlike other applications, various functions are included due to the characteristics of communication applications or dating applications.

In addition, the most important problem was data storage and management. There was difficulty in storing user data and managing it in real-time. When it comes to data storage and management, the cloud server will be used first. It is possible to find ways to identify and cope with difficulties in the development process in advance.

I examined and planned the development process of the RaiderMeet application step by step. The schedule divided into stages was able to understand what procedures should be developed in app development. In addition, it was possible to examine the development schedule in advance while checking the development process that took a long time or what to look at importantly. I think establishing a step-by-step development process in advance helped develop successful applications.

Monica Romero (Question: 7,9):

I had a discussion with the whole team to determine what requirements we wanted in the RaiderMeet app. As a result, we decided that the overall aspect of the app was to connect Texas Tech students through the app and create a friendship. We also discussed the Raider number aspect of the app where a RaiderMeet user will use a valid Raider number to sign in to the RaiderMeet app. This came up after rape allegations while using the Bumble app. People can always use fake information to make their profile more attractive to others. We also talked about a general way that the app will be organized. We talked about how RaiderMeet users will connect through common interests and they can only direct messages to each other if they have accepted each other’s friend requests.

I also analyzed what kinds of costs will go into the making of this application. One of the first costs that came to mind was effort. The reason that this was one of the first concerns was because the app will be free of cost and, considering that this project is for a class, the team members and I will not get paid for our time spent finishing this project. Furthermore, other obvious costs that came up during the discussion with the team was the kind of software we will use, which are also free. I also spoke more about that in the hardware, software portion of number nine.

Matthew Silva (Question: 4,6):

I provided input to the group on the type of applications we could develop with ideas consisting of a meeting app or game development. Once the group came to an agreement on the topic we wished to proceed with, each member was assigned specific questions to research from the project proposal. I was in charge of researching and analyzing the benefits and advantages resulting from the development of RaiderMeet as well as the different functions to be implemented within. I was also in charge of going into detail about how these different functions will be utilized throughout the users work activities. In order to find what benefits and advantages could result from this application, it was required that I research existing applications similar to this such as Meetup or Bumble. After doing so, I noticed slight differences that could be used to our advantage seeing as we decided to limit access to the app strictly to Texas Tech students. Taking this step in the development I believe leads to a more efficient process and utilization as well as makes the application more convenient to its users. With my research, I was also able to find what components make these applications successful and encourage people to use them. This information will be used within RaiderMeet to see what areas we can attempt to improve in order to meet our consumers needs and also allow us to stand out in the competition aspect of development.

In addition to researching these advantages of RaiderMeet, I decided on the main functions to be implemented within the message system and finding friends aspect of the application process. Since it is a group project, I made sure to inform the team of these decisions to ensure that each of us were willing to commit to these functions being developed. Throughout the completion of this report, I ensured that I communicated any questions I had about the topics we needed to answer. I also made sure to provide feedback on other members' research to give them a different perspective and generate more ideas.