**Project Proposal**
**Due: Jan 31, 2022**

Project Title: Stimulation
Project Acronym/Mascot: Rams

Team Members: Christiana Taylor, Sean Criswell, Tanner Kellogg, Abigayle McVaney

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.

A single application, called Stimulation, will be produced for mobile phones, both in the iOS platform and the Android platform. Stimulation will be a minigames application, the games being focused on cognitive stimulation and memory building to boost neural activity. The main focus of the application will be engaging games that appeal to our target audience, adults who only have a few minutes throughout their day to play. The games will include memory exercises, problem solving and critical thinking exercises. This is for adults that do not have much time to focus on stimulating their brain (keeping their brain refreshed), will be able to take 5-10 minutes a day and play a minigame that keeps their brain engaged, instead of letting the repetitive day to day routine wear down their capacity for memory and focus. Another element within Stimulation will be a national leaderboard. Users can choose to enter a unique username to place them in the leaderboards, if they wish.

This application will be coded through Python, using a Kivy framework for the games and the Django framework for the leaderboards. LucidChart will be used for diagrams and design functionality. GitHub will be used to keep track of individual student's contributions and keep us on track for the project deadline.

Deliverables will include a README document, the open-source code on GitHub, and supporting documents like technical specifications, operational requirements, and architectural designs. The README document will include instructions for use, as well as key components of Stimulation, and any bugs we might have that have not been worked out. We are toying with the idea of leaving our code open source so that after this project is complete, we can open the code to other programmers for their personal use. This will allow our application to be used in its original purpose. Technical specifications and operational requirements will be for the user to go over before using Stimulation, to ensure they are able to experience the application to its full potential. We will also include the architectural designs as we create them, so the progress from what we planned as far as layout and design in the beginning is seen throughout until the end.

2. **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.

Our target audience are the busy adults in everyday life, suffering from boring routines and unable to find stimulation in their day to day life. Recent studies have shown that just 15 minutes a day, over the course of 3 weeks, can improve memory recall, and other cognitive domains such as attention and motor speed. Our finished project will have a sleek, adult feel to it, although it is a gaming application.

The reason for this target audience is to appeal to the adults who know the importance of engaging the mind, yet lack the time to actually accomplish that. Our minigames will all be less than 10 minutes to complete, fitting nicely into a busy schedule. Currently, there are applications that provide this service, like Lumosity and Impulse, however they also require paid subscriptions to access all the games and limit the number of games you can play. We are trying to appeal to the people who realize that paying a subscription for an application a person uses once a day for a minimal amount of time is ridiculous, and attract them into playing these games to benefit themselves without worrying about the monetary aspect.

Another possible user audience would be Alzhiemer's patients. Although they are not the target audience, their use of Stimulation may prove to be beneficial in reducing the intensity of Alziehmer's, though more research is needed to prove this claim.

3. **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?

People have busy lives. Whether they spend 40 or more hours a week in the office or in school, they can quickly get exhausted both physically and mentally. One way for people to exercise their brain and stay refreshed mentally is to play short puzzle games and challenging minigames. This lets them think about something other than work, and do some mental exercises while doing so, helping them to relax and rejuvenate before they have to dive back into the complexities of the real world.

Currently, users of puzzle games, Intelligence Quotient (IQ) games, and other mind-stretching minigames are treated as consumers rather than people who need a break. Time spent in the application is nearly evenly split between actually playing the game, and watching an advertisement. Applications that don't rely on advertising have undesirable payment-walls that prevent many people from using them. We want to provide an application that focuses on the user experience rather than the bottom line. People have precious little time, and when they finally can afford a small break in their busy day they should not be forced to spend half of it watching an advertisement. They should get to enjoy the break they have worked hard to earn. In Stimulation, we will produce a collection of puzzles and minigames that the user will be able to enjoy without having the annoyance of dealing with ads and pay-walls.

The need for stimulating games that are geared towards adults is one that will be satiated by Stimulation. Most brain games in our world today have a childlike appeal to them, attracting more of a younger crowd. Adults that seek to slightly improve brain function through these applications can feel adolescent, which can turn them off to playing the games, no matter the benefits they lose from not playing. This application will solve that, with its modern and sleek design, adult users can enjoy the same stimulation, but not feel undermined by a childish game.

4. **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?

The deliverables offered with Stimulation will provide a detailed description in the form of a README document of how the program works. With this document, the user will have all that they need to be able to fully utilize the functionalities Stimulation has to offer. Within the README document, key components of our source code will be explained in detail, so other people can understand the process behind it. It will help developers expanding on this project understand not only what we were trying to achieve, but how we achieved it. This document will also serve as a stepping stone for future developers that wish to add their code to our source code. It will detail how to attach their own working code into the main project for a seamless merge, and keep the whole work functioning. The README document will include a “known bugs” section for bugs that do not prevent Stimulation overall from working, but can be a nuisance, that we have not been able to work out in the time allotted. It will include what we have tried to do to fix them, but in minor detail. This will also give future developers the opportunity to try their hand at fixing the bugs.

Following the README, we plan to create another document that describes in detail what the operating system requirements along with other system requirements are to be expected when running Stimulation. We desire that anyone that tries their hand at our application (Stimulation) is able to utilize it to its full extent so that it is a seamless experience for that user. Within this operational requirements document, a user or future developer can see in its entirety what framework we built this project off of so that they can either enjoy the fruits of Stimulation as a normal user or build upon what we have already made in order to increase the experience for other users. All in all, we simply aim to provide any necessary details regarding the operational requirements to any and all that wish to interact with our product.

Another document we aim to provide is the technical specifications list. This list will be included in order to provide would-be or currently existing users with insight on the users system requirements in order to operate Stimulation without experiencing freezes, crashes, or possible screen tearing/lag. We aim that this document clear up any gray area for users that would be in a state of misunderstanding what this application expects regarding hardware ability or possible device operating systems (such as IOS or Android). What we have found that typical system requirements documents contain are operating system, minimum CPU or processor speed, minimum GPU or video memory expected, minimum system memory expected, minimum storage space required, and what audio hardware is expected. We would like to as well include a direct link to these documents before any purchase page we may implement within Stimulation so that at any point that a user wishes to invest anything other than their own personal time that

they would have a full comprehension of what the application (Stimulation) expects from their device.

One of the final technical forms that we aim to offer with Stimulation is our architectural design document. The focus of this document will be communicating the process for identifying the subsystems we used in order to make up the whole system and a detailed explanation of the framework for each of those sub-systems and how they communicate with the rest of the working project. The entire goal of this document is to communicate how all of the components we have developed work with one another so that if someone came along and desired to add on to the code or framework of Stimulation they would be able to do so without harming the integrity or stability of the application as a whole. Within this document we would also list many of the common issues that we confronted throughout the development process that may throw ambiguous errores or syntax issues that we had to work to understand or find a way around. The purpose of this is that if a future developer would desire to add onto this work they may experience similar issues and it would offer a large time saver to those going through the same problems.The format for these issues would be the following:

Description of what development was being done:

Consequences of that development:

The solution to those Consequences:

Problem Description:

This format would allow a comprehensive explanation of working around typical issues that we faced throughout development so that anyone in the future would have assistance in tackling those same issues.

Lastly, the final deliverable we would offer would be the actual open source GitHub for Stimulation. Like many other public applications in today's world users would be able to visit this Github and see all of the actual code that we used in order to develop Stimulation. All of our technical documents would be able to be found here as well. From this Github a user would be able to download and immediately port all of our code onto their own machine so that they could understand and add onto it as they wished in order to present to us as developers their finished work so that we might implement it into the larger application. We find that this is extremely necessary as without access to the actual code of the main application users would most likely develop their own additions for Stimulation only to find that the code that they used was all-for-not as it would not be able to plug directly into the main code base.

5. **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?

There already exists many websites that offer games and such that can test a users IQ, memorization, and reflexes. For instance there is a website known as Lumosity that contains over 50 games that consist of training programs that will track your process as you work your way through them. The downside to this website is that it requests that you pay between 4 and 12 dollars for a monthly subscription to remove annoying and unwanted ads from their page. While that is an unfortunate feature of their website, but understandable as there are upkeep costs, you will also gain unrestricted access to their website's features and other games under the subscription fee.

Similar to Lumosity, there is another application called Impulse that offers a list of 30 IQ and brain focused games, over 200 different and time consuming puzzles, as well as reaction based and memorization tests. Unfortunately though, just as Lumosity had, it contains a feature that requests a user to pay a subscription fee of between 7 to 10 dollars a month in order to remove ads from their web page so that there is less clutter or distractions that a user may accidentally click to navigate them away. And again, just as before, the user will also gain additional access to many other features of the website such as a large variety of other games and unrestricted play of all games under the domain, after payment.

One of the more popular websites that is making the rounds these days, even among popular users of Twitch.tv and other streaming services, is a website known as Human Benchmark. On this website they have a much smaller selection of tests but they are much more refined and feature an ability to immediately compare yourself to the previous users that have challenged themselves against each individual test. The website offers a Reaction Time game that tests your visual reflexes, a Sequence Memory test that tests a users ability to remember an increasingly long pattern of button presses, an Aim trainer that allows a user to test their reflexes on clicking multiple targets that pop up on the screen after hitting each target, and four more that target individual components of a users brain. The website contains a sleek and consistent color palette all throughout its games and flows very well into each one of the benchmarks a user can put themselves to test with. After completion of each of these minigames a user's score will appear on the screen along with the option to save their score. Mind, even though a user may save their score it never requests that person to actually create an account of their own. By saving their score they are then immediately rerouted to a screen that contains the rest of their benchmarks with a percentile score next to each one of them to show exactly how they compare to the users that came before them.

Another example of competing software and/or applications would be Quizlet. While you can make your own study cards very easily, take practice tests, etc., users still have to pay to unlock additional features. Quizlet offers three different subscription services, Quizlet Go, Quizlet Teacher, and Quizlet Plus, each for $35 per year. Now, this may sound very appealing to some people, but may not to others. There is still a group of people that is left out with that option. For example, if there was a poorly funded school and the teacher wanted to but couldn't afford to use the features from Quizlet Teacher, then that leaves out a chunk of our population. Those teachers may have to go out of their way to help their students, which can be a large inconvenience. This is where we come in with Stimulation. We want to offer every user an equal chance to access all the features we have to offer, without discriminating against those who dont get a subscription.

Another appeal that our application will have, compared to these other websites and applications, is that Stimulation will be purely designed with adults in mind. Although children and younger crowds will be allowed and encouraged to play, we wish to create a sophisticated environment geared towards adults. Lumosity, Impulse, Human Benchmark, Quizlet, and others, although they are open to people of all ages, definitely have an almost whimsical appeal to them, which tends to attract more children than adults. Their games are very infantile and youthful, which can put a condescending feel on the application, especially for a struggling adult if it seems obvious a person of adolescent and preadolescent age can accomplish it. For grownups competing against other grownups, not only is it positive motivation, but if there is a user doubting their ability to solve a puzzle or beat a game, they will not feel the frustration of not being able to win an adolescent game. They may even be more encouraged to try and beat the game! With our sleek, modern design, we will take away the unsophisticated aspect of these existing softwares and websites, and allow for a mature experience for our adult users, while keeping it just friendly enough for any young grasshoppers that want to enjoy it as well. Lumosity, Impulse, Human Benchmark, Quizlet and other existing softwares or applications will hopefully continue to attract youngsters, but with Stimulation, the adults of our nation will finally be able to enjoy their own application, carefully catered to and created just for them.

Overall, Stimulation will enhance the experience of current users of these existing softwares and websites, like Lumosity, Impulse, Quizlet, and Human Benchmark. Through not only offering the games at no cost to the user, but giving the users free reign over the amount of time they wish to play, our application will have more appeal than the paid applications. Also, with our design and architecture of the layout concentrating on adults being a focal point of the project, it is safe to say it is an improvement upon existing softwares, pointedly with adult customers. People too busy to consistently play these games will not have to stress about affording a potentially costly subscription, and will have the full freedom to improve their brain function in a fun way and on their own time.

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

According to the American Psychological Association, people in their 20s or 30s can start to see a decline in cognitive functions. However, lasting benefits have been seen in people that play brain training games for a few hours a week. This is from people applying what they have learned in these games in their everyday life. The biggest advantage of Stimulation will be the easily accessible brain training games that we will create, and the benefits those games provide to the user.

With Stimulation, adults will be able to participate in brain training games, without paying for subscription. Current applications require payment to access all the games, or restrict the number of games a user can play, or have an annoying amount of advertisements. This is apparent that the companies see the user as a consumer, not as a person trying to relax and improve their daily life. Stimulation will have multiple different games, all targeting different cognitive functions. This will allow the user to pick and choose exactly what they want to play that day, instead of being restricted to a small list. We are also allowing our target audience to be able to play as much or as little as they wish to play, because we feel as though limiting the amount of time a person can play these brain training games would be more detrimental than beneficial.

Another benefit of this application will be the time it takes to play. Each minigame will be 5-10 minutes long, maximum. Since 15 minutes a day is long enough to show cognitive improvement after 3 weeks, we feel having longer games would not work as well to keep a user engaged. Having short games gives a person the ability to still play more than one game, especially if they have limited time to spend.

There will be a national leaderboard implemented into Stimulation. The only requirement for a user to add themselves to the leaderboard is to choose a unique username, and an internet connection.

The design of this application will also be a sort of advantage for users as the target audience are adults. The current applications with brain training games are very childlike, and seem to target children as opposed to adults. Adults that play these games may feel juvenile, and lose interest. Stimulation will have a modern, mature and sleek design. With a user interface that is geared toward adults, our target audience should feel more comfortable playing through our games.

A proposed benefit that we will try to implement is a way for users to earn points to redeem coupons. This will be a way for businesses to advertise without affecting gameplay. This will also entice players to continue playing each day.

7. **Describe the 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]

**Requirements:**

The purpose of this application is to be very accessible, zero cost, and enjoyable. That said, our requirements of the user are limited, and there are no costs or commitments of the user. The requirements we have thought of so far for the user are that they must have a compatible phone/tablet. Since we will be building an application for ios and android users, the users must have a working phone/tablet that can download our app. We will be using the most recent update version for our application to start out with. The most recent IOS update is 15.3 and for android is 12. We will also be catering towards people that may have some learning disability, to help them improve/maintain. That said, our users must have the ability to see and read in order to play the games on the app.

We do not have many requirements of our users because that would cause exclusion of people that may want to use our application, but cannot. Requirements only allow users that fit in the application's criteria to use and enjoy their features. With our application being a brain stimulating game application, we want as many people as possible to use it. Having limited requirements allows users to explore and enjoy using a brain stimulating app. Our goal is to also have our games short in time, encouraging users to use the application more often since there is no requirement of finishing a game in more than 10 minutes.

Another requirement of the user will be for them to make an account, linked to an email address. This way we can send notifications out for notifying them to come play on the application, or for when a new update releases which will include what all we improved. We can also alert them through email in case they get locked out of their accounts. The point of the users being required to make an account with us is so their game preferences may be private or public, depending on their selection of choice. This allows them the privacy to protect their disability(s), because that is confidential. The users can feel safe and private when choosing their game preferences which is why we will require the users to make an account. For example, if a user has dyslexia and would like to choose a game that is made for working their brain for that learning disability, then they can choose that with confidence that others won't see unless they allow it. The users can also make anonymous usernames and their emails will not be visible to other users, again increasing the privacy tactics we are taking for our app. Of course though, the users do not have to have a particular disability in order to play the game, but we want all users to see all of what our application has to offer.

Again, we do not have many requirements from the users as our main goal is to help people better themselves. Everyone knows how important helping themselves is, so we are giving a chance for our users to help themselves save money and live better!

**Costs:**

The costs of the application Stimulation are designed to be minimal, if any. The only cost that is necessary to use Stimulation is that of the user's cell phone, which most users already possess. According to Pew Research Center, over 85% of Americans own a smartphone that would be capable of enjoying Stimulation as of April 2021. Therefore, we would not consider this cost as being imposed by Stimulation, but as a cost of the user for a basic necessity that will be required to use Stimulation.

A chief principle of Stimulation is our accessibility. User costs were a major factor in our decision making as we analyzed other similar applications which did impose costs. We found that the monthly subscription model that Lumosity and Impulse push onto users was far too excessive and limits the usefulness of the application by restricting the user base to a small group willing to pay the excessive fees.

Lumosity and Impulse follow similar models, with a "free membership" offered that provides very limited access to the platform. According to Lumosity's earnings report, they have 60 million members registered on the platform, with only 0.5% of them being premium members. Following this trend, we find that restricting the majority of the platform to premium members is detrimental to the vast majority of their user base, and is not a model that we will follow. Stimulation will focus more on user experience than the bottom line.

Due to the fact that our primary audience that we are marketing towards is busy adults with little free time, we believe that it is in the best interest of both our users and Stimulation to make this a completely free service. Stimulation and similar games are not able to be enjoyed by those people who have such busy lives that they can only devote a few minutes a day to refreshing their minds and improving cognitive function through these games. Most users would disregard the applications as wasteful, with large subscription fees being the primary barrier.

While we aim to make a product free for all without any attached or hidden fees, without any content locked behind paywalls, we are realistic about our development's costs. We will implement a completely voluntary donation system to support ourselves, with users being granted the option to donate via PayPal to further the development and fund maintenance of the app. This donation system should completely finance the application without intruding on the user's experience by locking content, pestering the user with unskippable, intrusive advertisements, and restricting their daily play.

We took this approach so our users don't feel discouraged by there being interrupting ads or pressuring subscriptions. Keeping this application free is a huge goal for us, as we only wish to encourage more people to continue learning and exercising their minds.

**Commitments:**

We target busy adults that are unable to commit lots of time to an app. Knowing how busy users can be, we are able to make the users not feel pressure of committing so much time or money to an application that they may not know if they will use every day or not. This encourages the users to feel flexible with the app. This application can fit their daily lives and still adapt to their preferences of types of brain games. With our features, we can enable them to have customized selection of games, which again encourages them to come back for more. With that, they are able to gain more confidence in the application helping their goals.

Our goal for this application is to allow the users to not be pressured to use our application because that can bring a negative feeling out from using the application, which we are avoiding. There are applications, such as Quizlet, that are very helpful and beneficial. Those applications will promote themselves that there is so much you can learn or do using it, drawing passionate learners to it, and stomp on their hopes by making them rethink if they should or even could afford the service. Users that are unable to afford those platforms, feel discouraged by the limitations they have and therefore cannot progress in their learning.

We have hopes to make users, including timid users, feel comfortable, relaxed, and excited to learn. This is because our games won't be long so users can hop on in between meetings or baby naps, to have a moment of break. People feel constant pressures from everywhere in their day to day lives, that they might not want to sit down for a long period and feel more pressure from using an intense application that they may not want to commit to adding more pressure.

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

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

1. Come up with product (Jan 17 - Jan 21)
    a. Before we could begin creating our product, we first had to find an area where we felt there was a gap that we could fill. We felt that there was a large amount of puzzle games available for mobile phones, but that they were not as friendly to the users as we are aiming to be. They were either paid apps or had intrusive ads, and none had the variety or content we felt should be included in the app.
2. Research Similar applications and Relevant Scholarly Articles (Jan 21 - 31)
    a. We researched similar apps such as Lumosity and Impulse, their services offered, what services we felt they lacked, and their users. We also researched brain games, specifically Lumosity's, effect on the brain to verify the usefulness of Stimulation.
3. Create elevator pitch (Jan 21 - Jan 25)
    a. We proposed our idea in a powerpoint format showcasing our ideas for the app.
4. Research Development Tools & Studios (Jan 21 - Jan 31)
    a. We will research which tools and languages best suit our needs. This is covered in Question 9 of this proposal.
5. Begin Development of Backend (Jan 31 - Mar 14)
    a. Prior to the user interface of the application, we will develop the games and their backends using Python with the Kivy framework, as well as integrating them into the application's collection of games.
6. Customer/User Discovery & Analysis (Jan 31 - Feb 4)
    a. We will explore our intended consumer's desires and expectations for this application, and incorporate what we can feasibly accomplish in our time window into the app.
7. Begin Development of Frontend (Feb 14 - Mar 28)
    a. The frontend will be developed in a roughly 6 week window which will provide a friendly user interface to navigate the games. This front end will be compatible on both iOS and Android mobile devices.
8. Develop Leaderboard System (Feb 28 - Mar 7)
    a. The leaderboard system is a much lower priority of the project than the games and user interface, and as such will be taken on later in the development process. This will be done using the Django Framework.
9. Begin Dedicated Testing & User Testing (Mar 28 - Apr 18)
    a. Before release, we will extensively test the app on both iOS and Android devices to verify that everything operates as intended.
10. Create Final Presentation & Demo (Apr 11 - Apr 18)

a. Before release, we will create a presentation showcasing the development process, different features of our application, and show the demonstration in action.

9. **What hardware, software, or other resources you will need to complete this project?** (0.5 pages) [0.5 mark]
Describe where and how these will be available for use in this project.

Stimulation's backend will be developed in Python and will be available locally on each device with installation. The leaderboard system we will develop using Python and the Django Web Framework. This will also allow both Android and iOS users to be on the same leaderboard. We will not be using this for the rest of the application because, besides the leaderboard function, we want all other features of the application to be accessible without an internet connection.

To create the front end of Stimulation, we will be working in Python using the Kivy framework. This framework will allow us to develop both the iOS and Android versions of the application, and help take care of packaging and cross-compiling so that they will run on their respective systems.

For development studios, we will be using Visual Studio Code, IDLE, and Xcode to create the applications. We will be using Git and GitHub for version control in the development process and to track individual contributions of each collaborator to the development of the applications.

In the planning process, we will be using the proprietary diagramming application LucidChart to plan out the architecture and flow of the app. This will help in the planning of the project and will also be one of the deliverables that we will release alongside the application.

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

As the brainchild for the application, Christiana Taylor contributed to the idea and overview of the proposal. She recommended what deliverables were to be included in the project, such as the README document, source code, architectural designs, technical specifications, and operational requirements. She also answered who the target audience is, being adults with little to no time to play games on their phone that wish to relax and have a stimulating experience, without paying a subscription. She contributed to answering what problems Stimulation solved, including the fact that most applications currently like this target children as opposed to adults, and how Stimulation would be made for adults. Taylor also aided in answering what benefits and advantages are achieved by this project, including free software, short active time, and easy access. She also provided some research findings to support existing software and literature regarding the application, and wrote about how our design will enhance them.

Tanner Kellogg contributed to answering what problems Stimulation solved, including the lack of time people have to relax and play games. He described the exhausting routine of everyday life and how people need quick reprise at times. Kellogg was able to explain how beneficial the application will be to people with little time, unaffected by advertisements and payment walls, normally found in existing software. Kellogg also provided a detailed step-by-step plan showcasing the development process. He then described the reasoning behind the lack of a cost imposed on users, and the implementation of a donation system. He also described the different tools that would be used in development.

Abigayle McVaney assisted with coming up with the project idea and in deciding if it will be an application or website. Abigayle described the requirements, costs, and commitments of the user (Question #7), such as subscriptions or costly plans. She has also contributed to researching, examining, and assist in answering the existing software and literature relevant to our project (Question #5). After doing research, she has learned about other application's offered subscriptions, in order to better prove her point about why we have chosen for our to be cost-free and how to target more audience than other brain exercising applications.

Sean Criswell described the technical documents we will be providing with Stimulation. He has also done a bit of research on the effects of dyslexia and dyscalculia and how the programs we will offer within Stimulation will aid with these disorders. Among this he’s put together a list of applications/games that will be developed for Stimulation in order to aid with the handling of these two disorders. Other applications that he’s chosen will also aid with general IQ and memorization. All of this was described within what he wrote on question 4. As well Sean researched some of the already existing services that offer gameplay features similar to what Stimulation will be offering, such as humanbenchmark.com. He wrote many details about his findings on Question 5.