Preference:

I wanted to create a web application, that allowed students, teachers, and parents to be able to measure a student with ADHD or ADD learning progress as we move towards a more online climate for learning. It was essential for me to create a web application that allowed the student to be able to organize and manage their own timing, and be able to seek mental health help throughout the school year. Being that, the problem with people of color with learning disabilities is facilitators and educators, isolating a student apart from other students, or on the opposing fence many educators not knowing how to handle ADHD. There is also a huge lack of resources for mental health and emotional support for students with learning disabilities. In 2015, it was noted in the NYC Data Report on Children with Mental Health that 82% of children did not get help from a school counselor when 71% expressed emotions of sadness and 92% attempted suicide.

What is ADHD and ADD ? How does it impact the Latinx and Black Communities ?

Mayoclinic defines ADHD as a chronic condition that can be identified by someone's behavior, there are 3 different types of ADHD there is a common characteristic of hyperactivity, inconsistent attention, and impulsiveness which helps us differentiate between them. The first type of ADHD is called Primarily Inattentive the symptoms of someone with this kind of ADHD is inattentive, distraction, and disorganization. The second kind is identified as Primarily Hyperactive/ Impulsive; symptoms of this ADHD hyperactivity and impulsiveness are symptoms that die out with age and time but they are still very heightened. Lastly, the last type is classified as The Combined Type; it is a combination of all the symptoms all in one. ADHD plays a role in social and emotional development as you age, interfering with day to day interactions and stressors. Diagnosis by an early age is important because this condition is passed on genetically. Statically it is proven that the average rate of it being hereditary is high referring to “*Attention Deficit Hyperactivity (ADHD) in Children*” “When one person is diagnosed with ADHD, there is a 25%-35% chance that another family member will also have the condition, compared to 4%-6% of the general public.”(WebMd, 2019).

More often than not people of color, were able to identify their ADHD in adulthood because they didn’t have the right resources or attention and it was not spoken about affecting their work life and relationships. Schools and facilitators aren’t provided with textbooks alone to nurture a student and their education needs; one can only imagine how much funding within public schools actually goes to those with learning disabilities if it isn’t in a private institution.

When taking a look at the web application, I took aspects of design in consideration such as imagery. One of the most common ways for learning with ADHD is kinematic, meaning for physical interaction to learn. In schools in Asia, it is more often for students with ADHD to fall into the tech world because it allows the brain to focus on an activity for an extensive amount of time. Educators also mentioned on forums, that when addressing students with ADHD they did not want to treat them like an exclusive student rather they wanted to be as inclusive and provided the students with similar methods. One teacher used the form of being able to read a students emotional frustration or anger and allowed them to take 5 min laps around the school, I implemented this idea by incorporating breaks. Another teacher said they used a change in learning by having videos and introducing new forms of learning to the classroom, allowing teachers to consistently maintain sharpness.

Pre - Existing Apps : When looking at pre- existent mobile applications for students with ADHD they all re-centered on organization and provided a sense of memorization and reminders. The most popular mobile applications were Evernote, FreakyAlarm, and Todoist. Evernote is a cloud based platform, that will allow students to make tasks and upload them on the cloud service where it will then take all documents and organize them for you and place them into notebooks. It's like Google Docs but a place where you can store all your reminders in an organized manner. FreakyAlarm is for the constant snoozer, freaky alarm makes your mind become automatically sharp by giving it a task to make the noise stop. You must be able to solve a math problem to make the alarm stop ringing.Todoist allows you to add mini tasks and projects to your tasks and connects with your email and other plug-ins to remind you. These are some of the most popular commonly used apps that all prefer the same ideology or organization, re-centering, and refocusing.

How The App Works :

First the user is welcomed to the homepage, with the logo and webpage.Then from there the user is taken to the main login or sign up page. If the user is new they are asked to sign up, and lead to a series of questions. If they are a student they will be provided with an enrollment key from their teacher. From when they are on, they can place their email and create a password. If a teacher they are instructed to place their email and then create a password as well. [ Something to think about, when does the teacher create an enrollment key ]. If the user is a parent they login, and place their student enrollment key. The user will then be sent a confirmation email and will be able to sign in. If the user is a returning user they will log into their account.

Every user is presented with a dashboard. A student’s dashboard containing a navigation bar on the left hand side. The first button on the navigation bar is the “let’s look at your progress button” that contains a tracker for their progress. The tracker allows for students to be able to view their timing for assignments so they see their overall pace as well as get an overall weighted calculation of how they’ve done. Next they have the “How are you feeling'' button, which will allow a student to express disconcerns or enjoyment of an assignment, incorporate ideas, and see how they’re emotions have changed throughout units and lessons. Assignments completed, allows you to resurface back to old work. Then there is the “Want To Talk” button which allows you to set up a call with a counselor, or speak to a 24/7 hotline for mental health. Lastly, there is the classes button where you are able to set calls with your professor, and tailor to the specific lesson you may want to discuss or get extra help on. On the top of this navigation bar, there is a search tool just in case the user wants to go to a specific assignment/ area within the dashboard. On the main section of the dashboard, we have a calendar. This calendar is so students can see physically what assignments are coming up next, future exams, and schedule their own timing. Then on the top left there is a success rate, this is how far someone has gotten through the course. As a student it is important to track several milestones that are made within the class. On the top right hand corner of the dashboard, is a timer. I implemented this idea by looking at previous apps that reinforced the idea of seeing something physically and using the countdown method to allow you to re- center and re - focus onto one’s idea’s and assignments. All these concepts are important, as they teach students to value the idea of taking breaks, re-charging, and being able to execute plans that are efficient by managing their own time with the help of someone taking in the best times and dates for you. The reason why having a platform for all is important is because studies show that it is important to have a collaborative effort when it comes to the behavior of students with ADHD. Positive rehabilitation is important to not look at the child's behavior as disruptive and a positive outbreak. Also whether you have ADHD or not, it is important for students to set habits that benefit them within their future success.

The teacher’s dashboard is similar to the students as they enforce communication and organization and planning around the academics, it is important for teachers to be able to make changes to their lesson plan to take in consideration the disruptive behavior. The teacher’s page features consists of mailboxes, students, lesson plans, and consultations, a calendar, a phone call, and a search navigation tool. First, we start off with the mailbox that contains an inbox for the teacher to view messages from her students, counselor notes, and any other teacher or school board member information. The email is labeled based on who it is coming from. This was an important feature as communication can come through any end for a teacher. Next, we have the student progress feature which contains a dashboard of every student where you are able to view the students individually. The breakdown of the students consists of their pacing, their lowest score, their overall gpa, and how many times they have reached helped. It is important to note with adhd that hyperness, often distracts a student from an assignment understanding their engagement and timing can help understand whether a student processed an assignment easily or not.If a student takes an assessment and takes 20 minutes on a whole hour exam and gets a 54%, there is a reason the student was not engaged in lessons, had difficulty or even so was not the best test taker. Their lowest grade of an assignment reflects which chapter’s or skills they struggled with and need to be revisited. If several students in the classroom lost engagement with one chapter it is important to note why? As a teacher it is important to not only view the students but see how information can be changed to be understood. Understanding how many times a student has reached out shows how many times they need extra support, and made the cautious effort to make their grade better. The overall gpa, allows for teachers to know where there are in progression of the classroom. Then we have the lesson plan feature which allows teachers to edit, look at lesson plans that they have curated and keep up to date with lesson plans. As a student, I was always able to tell when a teacher did not prepare a lesson plan and when it wasn’t tailored to everyone’s skillset. The consultation feature allows teachers to go over a lesson plan with a consultant, in which they select to see suggested prompts, and make suggestions on how the lesson plan can improve. A teacher cannot know where she is flawed without the extra help. The call log consists of students, parents, call times they are available, and contact. The call log consists of students and parents because it is important to have communication with the student. The call log is formatted with the students next to the parents to have easy access. Next there is a column for available times that the teachers can contact parents and students. Ideally in black and Latin communities parents are hard to reach, I grew up with a busy household and parents consistently working and having time to manage. Oftentimes a small window of time can be 30 minutes and parents go through as much stress. Lastly teachers have a calendar where they are able to view future lesson plans and when they need to have a live lesson, post lessons, or have meetings. It is important to time-block and frame one’s day.

A parent’s login dashboard will be a bit different as it will consist more of being able to meet with a teacher, view their student’s progress, teacher feedback, and meet with a counselor. I think one thing that isn’t provided often is free therapy sessions for parents as much as kids. Our parents hold on more repression and trauma from their childhood that can be passed on to their children increasing their adhd. They will be able to view counselor feedback if needed as therapy sessions should be kept confidential unless a warning is needed to be made. Lastly, viewing a student's progress allows the parent to see growth, and see that the teacher also see’s that growth.

ADHD students are the same as any student they require more engagement and understanding but that doesn’t stop them from their growth or potential.