Part 1. Cover Page with Elevator Pitch:

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Grade 12

Stay Well

Stem Commercialization Plan

      A multitude of factors can lead to dependence on substances, whether that be childhood trauma or unfortunate circumstances. Addiction can take control of lives and reduce life expectancy if not taken care of. Regardless of circumstances, everyone deserves an opportunity to improve their quality of life.

Part 2. Executive Summary:

Overdose percentages are extremely high in Akron Ohio. Akron makes up nearly 60% of all overdoses in Summit county (*The Ridge, 2021*). These people are mothers, fathers, daughters, sons, uncles, and aunts. Children raised by addicts are more likely to use drugs themselves (Robinson, T., & Berridge, K., 2000). To stop this deadly cycle, we need to focus on the users. Exercise is proven to help addicts recover because it helps get the user's mind off of the substance (Recovery Village, 2021). *Staywell* looks to provide an online application not only to give users a way of getting their mind clear of relapsing, but also a rewarding way to track your progress. Only a few addiction recovery apps have any science behind helping the user, so we look to change that by not only providing a support system in our app but also a way to get clean through activity. By providing distracting strategies to our users, we hope to reduce overdose rates and increase quality of life.

Part 3. Problem Summary and Proposed Solution:

The drug problem in Akron, Ohio is very bad, and too many people are losing their lives due to drug addiction. Akron has seen a 140% increase in overdoses since last year (*The Ridge, 2021*). A variety of things can lead to substance abuse, but lack of a support system, childhood trauma, and genetics can severely increase the likelihood someone will develop an addiction. Having no support system can lead people to rely on substances in order to relieve stress. People who exercise regularly are less stressed and therefore less likely to develop drug addiction (Recovery Village, 2021).

Giving people a virtual support system as well as giving them activities to get their minds off of the substance is our main goal at *Staywell.* By our users telling us how they are feeling, we hope to provide helpful advice to help them clear their minds and make them not want to relapse. We also look to let our users track their progress in a rewarding way that makes them

want to improve. Different things help people recover as everyone is unique, and we hope our way helps you.

Part 4. Summarize the STEM Concepts and Principles Underlying the Overall Plan:

  Stay Well is an online application that aims to help recovering addicts stay clean. The psychology of our users is of utmost importance as finding out how they think and feel is the focus of our product to help them work towards recovery. As stated in *The Psychology and Neurobiology of Addiction: an Incentive Sensitization View,* there are two main reasons people crave drugs, which are to get the feeling the drug provides and to avoid symptoms of withdrawal (Robinson & Berridge, 2000). To combat these two main reasons, we look to provide an interactive experience where the user tells the app how they are feeling, and why they want to use it again, where then the app will respond and give them an activity to do to get their mind off of the drug. Regular exercise is shown to prevent drug addiction by up to 95 percent as exercising releases endorphins that create a natural high (Recovery Village, 2021). Making our users feel safe and comfortable is another one of our main goals as we look to focus on making the app a relaxing place. As written by Kendra Cherry, "color is a powerful communication tool and can be used to signal action, influence mood, and even influence physiological reactions. Certain colors have been associated with increased blood pressure, increased metabolism, and eyestrain"(Cherry, 2020). She also mentions the colors we perceive as calming or triggering are all based on personal preference and deep-rooted experiences. That is why we will give our users an option of what color the app background will be. We want our users to feel at home while using our app.

Part 5. Commercialization assessment of the overall plan:

Problem:

Recovering addicts need a way to progress towards health because I learned that many addicts feel it is easier to relapse than it is to quit. As mentioned in the article *What Happens if I Relapse*, after users relapse they feel instant regret and believe that it is easier to continue their addiction instead of working towards recovery. I know this is a problem because people I know have died because they could not get clean and basically killed themselves slowly.

Proposed Solution:

My solution is a digital application that will let the user know that it isn't the end of the world if they relapse, as long as they are working towards recovery. The app will take input on how the user feels, and respond by giving them an activity to do to get their mind off of relapsing. It is proven that one of the best ways to stop addiction is through physical activity (Recovery Village, 2021).

Target Customers and Intended Users:

Anyone with an addiction to any substance is the targeted user of our application. It doesn't matter if the addiction has been prevalent for a few months or a few years, our family at *Stay Well* looks to make everyone have a better quality of life. If anyone you know is currently struggling with addiction, tell them to give *Stay Well* a shot.

Competitors:

There are similar products like this currently on the market such as the *Nomo- Sobriety Clocks* app, but *Stay Well looks to have* a more personable experience for our users. You might be asking why make an app if rehab is already available? The simple answer, rehab doesn't

work for everyone as only around 68% of people who go through rehab stop their addiction (Legacy TreatmentServices).

Customer Value Proposition & Competitive Advantage:

Stay Well separates itself from our competitors with our user-first approach and feature that speaks to the user to calm them down. Many recovering addicts don't have a support system and that is why we provide one. Our ai is programmed to take user input and come up with generated responses that relax and give the user alternatives to using again.

Principal Revenue Expected Streams:

I am not looking forward to making money as the main goal of *Stay Well* is to make sure we improve the lives of people. We want everyone to have access to free recovery. We will promote our product on social media as that is one free option to advertise.

Principal Startup and Operating Costs Expected to be Incurred:

It will not cost me anything to start this business as there are free templates you can use to create an app, where you can change everything inside the application. I will use what is given to me and adjust it to how I want it to be. By using free resources we can keep the app free and available for everyone to use. At some point, I would like to put features in the app that require the user to pay, yet still making sure the free option is available. This paid feature may let the user talk to a real therapist to get a better understanding of their situation.

Part 6. Science and Technology Proof of Concept:

Review and Assessment of the Scientific Literature:

Mhealth did a study on 74 apps related to addiction recovery and only 7 showed any positive results, such as harmful reduction content, or behavior change principles integrated into the app (Mhealth.org). While there have been apps like mine, my pp has different features which are adaptable to the user. In another study done by Weaver et al, only 44 apps out of 500 met the criteria that actually targeted reductions in drug and alcohol use. So while there might be a lot of apps like mine, not very many of them are effective at what they do and that is what we are looking to change.

Statement of a Single, Clear, and Compelling Testable Hypothesis:

If I create an app that is fast, free, and adaptable to the user to help addicts recover by providing needed distractions, motivations, and strategies, then 50% more addicts who use my app will not relapse. If my app can help 50% more people recover compared to other leading solutions for addiction then that will be a success. We want everyone to have an opportunity to get clean. To add to this we know exercise is one of the best ways to get clean as it brings the brain's focus off of the symptoms and feelings of relapse (Recovery Village, 2021). So in theory providing users with distractions should bring the relapse rate down.

Inquiry or design-based discussion:

Our solution is going to not only just be an application, but an experience for our users too. From adaptable page backgrounds to our two separate in-app features, *Stay Well* will be centered around you. The 5 E's of user experience are crucial when making a product because it is describing how a user is intended to open or start the product, all the way to the point of closing out the product and coming back to the product. We will draw users in via ads on social

media. Our users will then download the app like any other app on their phone. The first feature on the app is a tracker that lets our users know how many days they have been clean and a feature that allows them to collect trophies for various achievements such as a week of no use. The reason this feature is integrated is that receiving trophies has been shown to motivate performance in individuals (Madigan, J., Tekai, Petelead, & Clyde, B. 2020). Our app will also have an Ai system which will take user input via a text to speech button, and then respond with an activity or task to do, to try and get their mind off of the substance while simultaneously being a support system and reassuring our users that they can do it. The app will also send push notifications in an attempt to have our users return with a reward for logging in multiple days in a row. We will need to find phrases that relax people and program them into the Ai system which will blurt them out randomly along with other coherent advice. The only additional research I believe I need is the actual "how to" make a smoothly flowing app. I believe I will rely heavily on templates as it will be easier for a startup.

Data tables, graphs, charts, sketches, engineering drawings or photos of prototypes or models, and cited references:
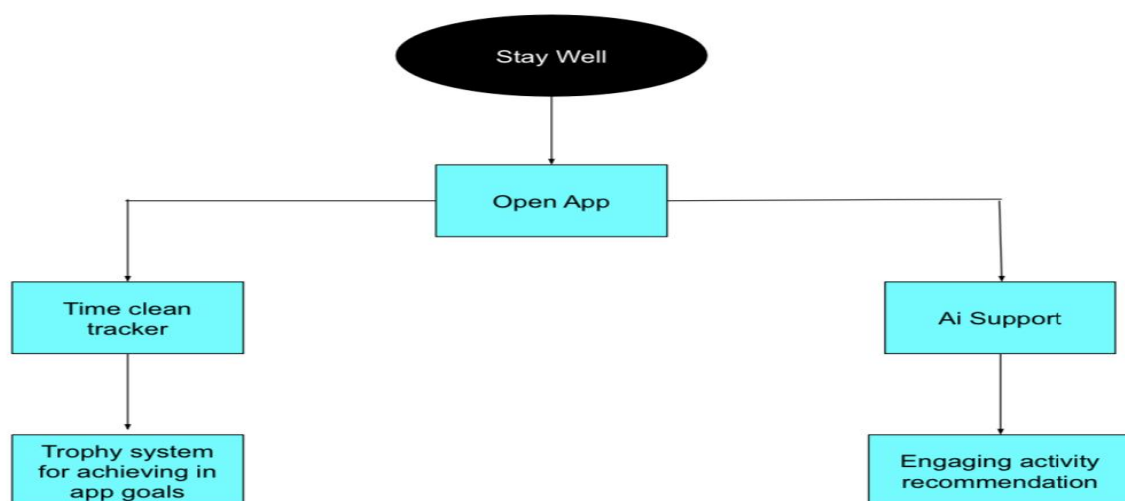
Figure 1: Flowchart

Part 7. Acknowledgments

I would like to thank coach Metcalf for helping me organize my project as well as the community partners that came into the building, of which I can only remember coach Griff's name. I got some good advice on where to go with my project from coach Metcalf.

Part 8. References Cited:

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