United States is one of the leading countries in obesity and that's a big problem. The Center for Disease Control has estimated that approximately 29 million people in the United States are now living with diabetes and that roughly one-third of our population is dealing with obesity. Now consider what obese really means. A person is considered obese when their Body Mass Index (BMI) is 30 or greater; a healthy BMI is considered 18.5 – 24.99. Obesity can lead to Diabetes one of the leading causes of death in the U.S., which results in more than 200,000 deaths/year. An obese person is not someone who is just out of shape but someone who is at risk because of it. These facts beg us to question "How do I avoid being a statistic? How can I avoid being another victim to obesity?" Well, one obvious answer is to exercise daily. Studies show that exercising at least 30 minutes per day helps reduce "bad" cholesterol and increase "good" cholesterol, support a healthy weight, decrease high blood sugar and various of other health problems such as heart disease. But what does that mean when the hardest part of starting any workout regimen is staying true to it. To make sure the success of any life change a plan is necessary. What are the point of plans? They are meant to be completed to meet either a personal goal or create a sort of routine. That's what our app does, it helps to meet a certain goal with a focused set of workouts. The app builds you a workout plan based on data entered by a user. After the data has been collected, the app learns what it can and gives you a schedule. If you follow the schedule and obtain personal achievements, the app will continue to mark your progress. If in any case, you can't finish the workout or set plan, the app will learn from this and decide to give you a new routine that fits your need.
It's all about getting to the end goal in your plan. If you need more time between breaks or the workout is too difficult, the app will give you something of a lower level but a more consistent set of small workouts. Also you can name your own work out and give it to your friends to try, adding in a small social component. They can give it a rating or add likes so then it could be featured in the home page of the site. Adding this little incentive helps people compete and help them workout. The point of the plans are to add consistency, you are meant to finish the routine and if you can't then the alternate will be supplied
With all that said, one of our goals is to help you meet your ideal body shape and support a happy and healthy lifestyle.

However with any major life change there are risks. We have to take responsibility for the proper guidance of our users. Having an injury can really affect the ego, taking away from your ability to do something without wincing in pain really takes a lot from a person. To take away from the hassle of looking through compatible workouts, we will apply the necessary changes to allow the user to continue having an active lifestyle, enjoying the use of whatever else their bodies can do outside their injuries. First, we as a team will need to compile all the injuries that a body can receive and connect the dots with our workouts, which will be done through the body parts the workouts actually target. By focusing on these factors, we will be able to link workouts with possible injuries, giving us the option to put such workouts into categories that highlight risk of injury. Aside from actual risk of getting injured, we will also have to include risk of staying injured with such workouts, thus we will make the user understands that if they continue to do a certain workout on their program, they will inevitably increase the odds of hurting themselves further. This however does not mean that we will take away the user's option of doing the exercise, as their wish is the priority, we will however offer rehabilitation exercises to help the user recovers and go back to doing their normal workouts. Now to talk about injuries further, we need to understand that the body is not indestructible, and it's not always made perfect, therefore when giving the user suggestions we need to take into play their body mass composition and the possibility of missing

limbs. These will take away some workouts entirely as we wouldn't like to exacerbate any pre-existing conditions (eg. Muscle Imbalances) and help the user move forward to the aesthetic they're working towards. Also, for injuries, things that are more severe, we will take out certain exercises entirely, but allow them to add it back on their own accord, thus taking away liability of our algorithms efficacy at picking optimal exercises for them.

As a team we want to work with unfamiliar programming languages, and collaborate effectively as a team. The way we plan to achieve our goal is by creating a fun and exciting application for the user to keep track of their workouts (Gymmie). The user will have to enter their most basic vital characteristics and their specific goal weight and according to the type of workout plan they choose, whether it'll be bulking up, staying lean, or losing weight, we will recommend the user the best type of exercises that will help them achieve their goal. As mentioned before we will consider injuries and certain conditions that may affect our recommendations. A 'test-run' will be implemented to determine the users' physical capabilities. This will be a series of timed and very basic exercises that the user needs to complete, and if the user is able to complete a series of exercises within a set time-frame they can get a head-start with additional exp. points with the possibility of leveling-up. If the user fails they will not get the additional exp. points boost. For each exercise completed the user will gain exp. points for a chance to level up. For users sake, they are not allowed to move onto more arduous exercises if they aren't at a specific level because of the risk of injury.

Our web app will leverage the power of HTML,JavaScript/, CSS, C++, and Python using the Django framework. The android app will use the Java language Since the data already exists, it will be gathered from certain fitness websites such as bodybuilding.com. The other part of the data will have to come from the user's end such as name, age, height, weight, gender etc. Obviously the data will be the type of workout exercises. Some of the challenges that we are expecting to face is learning multiple new programming languages, understanding how to integrate data from the database into our website and any other unforeseen challenges that lay ahead. We are also planning to learn how to adjust the wger API to not only perform basic operations but also the more advanced analytics.