**The 6ix Robotics**

After we did not make it to the Vex world championships in 2018, after a great deal of thought I decided to start my own private robotics team. This decision was due to a number of factors however the most pressing one was that we felt that the school was too restrictive, we could only work at certain times and there was a lot of bureaucracy and issues with going to competitions. I got a collection of 12 of the hardest working members from that club and we decided to start our own team together. There were a lot of challenges with creating this team primarily finances. We needed to raise as much money as possible as we no longer had all the resources from the school such as parts and tools. To raise money we made all members pay an initial fee however we also went out and got the majority of our budget from sponsorships. Initially we raised a small amount of money by going to local businesses in our area and asking small businesses for sponsorships up to $500. Eventually we rose up and got meetings with companies on Bay street including IBM, Dell, Deloitte and CIBC. We raised over $10,000 for our club to purchase parts as well as pay the fees to compete in competitions. Once the finances were dealt with building began, we built starting in May, my team built through July while I was away and we have been building 3-5 times a week in my basement. I play a large role on the team as the head programmer, a builder as well as the driver, this combination of skills allows me to have a large advantage over other teams as I can work with all three portions of the robot and get them to work together rather then having a disjointed system. Since November we have competed in 3 competitions, qualifying for the provincials tournament in our first tournament, making it to the semi finals in each tournament and winning 2 design awards. In our final competition before the provincial tournament we won tournament champions, going undefeated throughout the day and having an autonomous mode run that was undefeated. At the provincial tournament we had some issues. While our robot had run at every competition without much complaint, in inspection the inspectors determined that our plastic was 5 thousandth of an inch too thick. This plastic which we had thought to be standard, due to manufacturers tolerance was out of size. This meant that rather then networking and working on autonomous runs we had to sand down our robot(which took from 8 am to 12pm), ultimately it resulted in us being in a lower seed and losing the opportunity to team with some of the better robots. In our first match we were able to carry the match and went 32-0, however in the quarterfinals match we were beat by the provincial finalists. (The tournament finalists 99900a had a $10000 entry fee, resulting in an overall budget for their team of >150,000 which involved them hiring engineers and mentors). It was a sad day at provincials but I was not devastated as I realized then that robotics was not about the awards it was about the experience. When I first came up with the idea to start the 6ix robotics team, my family, my friends and everybody I knew called me crazy, how could I compete with $100k teams, how would we raise money, how could we compete with such a small inexperienced team. I was able to turn an absurd idea into a reality and this entire lesson, I will carry throughout my life.

