# **Essay**

Team G3 6740

**2016-17**

## Our team

We are team G3- GlueGun&Glitter #6740 from Pardes-Hanna, Israel.

And our team is a proof that FIRST works.

We started six years ago, as dreamful, inexperienced children (grades 3-5), a literature teacher (which is still involved until this day) and parents who - mostly - have no experience in STEM fields. We always loved robots, spacecrafts and things along those lines, and dreamt of building such things ourselves. For us, FLL was a dream come true.

We didn’t, and still don’t, have any entrance examinations, because we hold the opinion that anyone that wants to share our dream and is passionate about robotics and mechatronics should be, and is, able to join us.

Today, years later, we have become enthusiastic students, whose passion has lead us here. And like years ago, again, we start inexperienced. Other than that, our team is also entirely based in the “Shvilim” democratic school, which affects the way we work. The democratic and free spirit is a hallmark of our team. We value the dialog between team members, and due to our small size, we are able to make important decisions knowing all our team agrees and is involved.

## Our dream

Being a FRC team - for us - was a dream. And now, as we engage in our rookie year, we opened a mechatronics program as well as the FRC team for the children in our community, ourmunicipality, and for ourselves. In that way we can help them grow and continue for years on as we did in the FLL and FLL.jr teams of our school. We want to teach other people robotics, but not just robotics. We want to show people that meaning in life is found not by looking, but by doing. We demonstrate to everyone we work with, whether it be our students or their parents how to work as a team, how to make decisions together in a democratic form, and also to be innovative and independent.

## Our story

Our story starts about six years ago…

At the time in “Shvilim”, our school, in Pardes-Hanna there almost wasn't any FIRST activity neither robotics activity at all, nor was there anywhere else in our municipality. Several students, that are now in our team, joined two FLL teams (#354,#390) and a Jr. FLL team (#3) and started our love affair with FIRST. Since then many of our members were involved in FIRST activities, but not just as team members.

## **How it all started**

*2010-2011* The first impact of FIRST on our community :

A student saw one of FIRST’s programs on the web. He went to search for a supportive teacher (which later became the mentor of the FLL teams) for the program. He found one and together they managed to get funding from the school to get the registration, and just like that the two first FLL teams of our school started!

## **Continuing FLL**

*2011-2012* Our first year in the FLL was a huge success, everybody got involved with the project, many more students wanted to join and everybody was already thinking and waiting for the next season! The second year continued and improved upon that spirit wonderfully.

## **The first FLL competition we hosted, volunteering & more**

*2012-2013* Since the demand in our school’s community grew for more and more FLL teams, we opened two more FLL teams! And with that started a new generation of robotics learning in our school. With four FLL teams and a growing FIRST community we hosted for the first time a qualifying competition and volunteered in it. In addition we volunteered in a nursing home during a research we did about elderly people.

## **Second year hosting a competition**

*2013-2014* The qualifying competition we hosted in our school on the last year was a big success and we were told by many people that it was one of the funnest FLL competitions in Israel, due to that we were asked to host the competition once more, we agreed and also volunteered in the competition which all was very fun and rewarding.

##  **Volunteering & improving**

*2014-2015* As we continued to maintain the four FLL teams and improve our robots, researches and values, we started another very fun FLL season. As we endeavored to keep the spirit of volunteering and donating from ourselves to our community and to FIRST. We volunteered in some of the FLL qualifying and regional competitions. In addition to that we mentored the younger children in our school who were taking their first steps in the FIRST journey. We also Taught the younger kids who weren't a part of the program about electronics and robotics in general, giving lectures and trying to invest the children in the STEM fields.

## Our last FLL year

*2015-2016* Was our last FLL season. We decided that we don't want to focus so much on the competition. We love the fun and excitement of the competitions and that is what we wanted to focus on. Sure, we built a robot and did a very good research but in our spirit we came to turn this event to a true celebration. We made costumes and capes and just tried to make the competition a fun thing, not just for us, but for everyone in it.

During this season we decided that against all odds, we are going to open a FRC Team! We started talking to everyone and anyone who will listen to us about our FRC dream. We started taking physics and mechanics classes, we met FRC team #1960 Orbit to learn from them about the FRC program. Our dream is to open a FRC team and we are willing to give it our 200% and more to make it happen.

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## Our rookie year

*2016-2017* During the summer break we had several meetings in our school regarding the FRC idea.  Our school has no budget for robotics therefore we started looking for sponsors. It was clear to us that if we won't find ourselves a sponsor our dream will not be possible! After weeks of searching, phone calls, emails with no sponsors, we were on the edge of despair, We kept working, until one day, a member of our team said that he found a good potential sponsor and after a few days of emails and presentations the sponsor - diesel engineering - agreed to support us and give us a budget of 50,000 NIS!!!!

This means we can open our very own FRC team!!!

We were so excited and motivated to start our Rookie year!

Meanwhile as the FLL season started…

We opened and mentored a FLL team from a nearby high school “Haklai” in our town (team #1567)

We opened and mentored two FLL teams which come from elementary schools in our municipality (teams #1364,#1368), and, while doing all this we regularly assisted all four veteran FLL teams representing our own school (teams #354,#390,#670,#671).

## Spreading out FIRST

Earlier this year a group of teachers from ukraine came to ask about the robotics we do in our area, the FLL, jr.FLL and the FRC. They were interested mainly in the FLL and said that they want to know more about it, so that maybe, they could open a team in their area. So together we decided to stay in touch, and we did.

In the “community FIRST day” we brought a kindergarden to our workshop and showed them our FLL robots and a catapult we built and told them about our robotics teams. They were really excited and asked allot of questions and had allot of fun with us, as we had let them drive the robot.

In the FRC build season we had a group of 25 chinese teachers that came to our school to learn about the education in israel, two of them were interested in our robotics class. When we went there we showed them the FLL in the internet and they really wanted to know more and see how can they take part in it, they gave us their emails so that we can send them materials about the FLL, and so we did.

In a doors open day in “Haklai” high school, We did our regular session with FLL students (from team #1567) just that everyone could come and see, ask questions and look at the robots we built with them. It was really good because many people got interested, asked for more information to see how can they participate in the team and even took our cellphone numbers to ask more specific questions. What truly amazed us, is that after seeing us explain, our students started explaining by themselves.

With this spirit of continuous learning, expanding our robotics activity, and reaching to as many people as possible, the head of education department in our town’s council announced that the Council of Pardes-Hanna Karkur (our town) wants to open a local robotics center hosted in our school and that we will be the leading core that spreads the love and passion to the STEM subjects and mainly, FIRST programs .

## Our Robot

His name is Mobidict and we love him! We already know that in comparison to other teams our tangible resources are low and it is visible in our robot. Therefore our strategy is to be useful and attractive so an alliance will choose us during the draft.

On the other hand our energy and attitude resources are so high - we believe it will be noticeable and make a difference.

One thing is for sure, we are “all out” and “all in” this project and are enjoying every minute, yes, we stay at school almost every day until 22:00 and yes, we had a few conflicts and crises’ but, our spirit is high!

## Dreams come true, but they don’t end at that

Our dream came true, Our team was formed, we already are winners!

We will continue our FIRST journey, spreading our love and passion for STEM in our community and beyond.

Until this year we opened FLL. jr & FLL teams in our school and municipality, now we want more, now we want to spread out, reach new places and spread FIRST even further.

Our goals for the next season :

* Attract more sponsors,
* Cooperate with local business and reinforce professional Engineering support,
* Open more FIRST teams, in more places, further places, whether it be, FLL.jr, FLL, FTC and FRC!
* and above all - maintain our high and passionate spirit!

GO FIRST!!