## Girl<sup>\*</sup>/Powered

# Clean Your Mind of Can't!

As Beyonce once said, "Who run the world? Girls!!!"

Girl Powered Essay DECABOTS 63840R

#### Meet The Team:

Are ya ready kids?

İremsu is our team captain. She has been participating to VRC for three years and is very experienced in the field. She has tried various roles throughout the years. She has taken part in 3D CAD, coding and mechanics.





#### Aye, aye, captain!

#### This is our first year in VEX Robotics Competition!

Even though we don't have much past experience in VRC, we have all participated in various other projects and competitions in the past few years-- in which we've gained experience and information.

This year was full of new experiences besides the Covid-19 lockdown: We met new people, learned the process of being a successful robotics team, and we learned how to maintain efficient communication. Furthermore, this process aided us in figuring out what our interests are.

We're all aiming to learn even more and improve our knowledge. Welcome to our team, **Decabots**!

#### Our Team As Women:

Individuals around the world are infused with the concept that "Women can't be scientists, engineers or STEM workers". To some, women are weak. unsuccessful and need the assistance of a male figure, but to others women are powerful, strong, independent figures that have the ability to accomplish anything. We are women, and we are **bold** and **liberal**. We have never faced an issue unsolvable without our own abilities. Women face discrimination and are denigrated. However, though we are in a male dominated industry with our robotics team, we seek success. We are researchers, scientists, and engineers who have no difference than other male individuals among us.



A photo of Mechaminds, the first VRC team in Turkey and in our school, from a tournament. Additionally it was a girl powered team from the beginning.

## What Girl Powered Means To Us:

We are a girl powered team, full of women who worship each other.

Girl Powered means supporting all your teammates, classmates, friends and family to try new things and reach outside their comfort zone. Being Girl Powered means finding people who you don't see in STEM, getting them to try it, and making them know that they belong in these fields. Being a girl powered team is our key to success and it is what created an unbreakable bond within our team. We empower each other, by accepting our differences. There are differences that separate everyone from each other and this is not a weakness it's the advantage we have as a team. Differences make our team stand and rise. We complement each other with our differences alongside our similarities. We cover shortcomings using our differences, plus, we add more to our existing ideas with our similarities to reach the peak.

In our team, gender isn't a factor and never will be.



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We all have varying tasks and responsibilities, and our genders do not play a role in their distribution. As a matter of fact, this **equal** distribution of roles among our team is what makes us a **compatible** team of young women in the STEM industry. Some of us started off with 3D CAD or mechanics and are currently working on coding. These fluid dynamics in our team assist us to ameliorate our compatibility.







#### := Bringing Diverse Perspectives:

When talking about diverse perspectives within the team dynamic, we refuse to believe that this mindset is related to the gender roles within the community. We as individuals in a team, have interests and various hobbies other than VRC which assists us to bring contrasting and divergent perspectives to the design process of the robot and also the coding procedure. While someone working on art brings an aesthetic view on the design and someone working with sports presents strategies in order to succeed in the competition. These are all examples of how different hobbies associate with the diverse point of views of our teammates.



#### **COVID-19**

Due to Coronavirus, all activities done around the world have been detained: because health is, always will, and always must be a top priority to all individuals. This detainment led to an unprecedented online system. A system in which no one knows what needs to be done, and the world is paused. Teams can only get too much done with Zoom meetings, therefore we need to collaborate and innovate new ideas, especially now more than ever. When COVID-19 struck and deteriorated all industries, our robotics journey had to shift with an original perspective.



In this online process, where socialization is restricted, we played various Team-Building Games to get to know our teammates. We played Pictionary to get to know each other's hobbies, two options-choose one game to find what similarities we have, and more. We are a new team that started during quarantine, so these games helped us **elevate our performance**.

# Our Motto

The Design process was full of **combining opinions** and **respecting ideas**. This allowed our imagination to work **freely** and **fearlessly**. In this process, we tried to say **"We can improve!"** instead of deducting all various possibilities that may come our way. To illustrate, we came up with an unprecedented design within the season. We could've risked our success with this design, but we believed in our **planning** and **team-bonding**, so we confidently persuaded subsequent challenges. The notion that we follow consists of;

Imagination + hard work + supportive brainstorm = The peak



#### == Women In STEM

Engineering is the most male-dominated field in STEM, according to data. There are fewer women who prefer the engineering fields compared to men. All around the world, women are considered unfamiliar with areas built around STEM. We are deemed unfit for the job and we are regarded as fit for more basic and behind the scenes tasks rather than more centering jobs.

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According to the Engineering UK 2018 report by WES, in the United Kingdom in 2018; 25.4% of girls between ages 16 to 18 would consider a career in the engineering field compared to 51.9% of boys.

Engineering is one of the most male-dominated profession in the U.S., with only 13% of the engineering workforce being women-- as says Susan S. Silbey from HBR.

According to the 2016 Professional Engineers Employment and Remuneration Survey, the pay differential between female and male respondents is 24%, with the males earning more than the females. Percentage of female undergraduate students with engineering degree in Australia, Canada, the UK, and US

Country	% of women	year
Australia	14%	2010
Canada	21.8%	2017
India	29.7%	2018
United Kingdom	17.57%	2016-2017
United States	19.7%	2015-2016

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These statistics show that in the field of engineering girls and women are seen insignificant and irrelevant. We are often discouraged about pursuing a career related to the field and are told that engineering and related careers are fit only for males. Many obstacles exist which suspend women from engineering, and examinations of three of them is the aim of this study. These obstacles consist of, the existence of male-dominated organizational culture at work, the existence of the lack of job satisfaction at work, and the existence of the work-family conflicts that are confronting women in entering and remaining in engineering occupations.



#### In Our Country

In Turkey, the percentage of women in STEM is higher than the percentage of women in STEM around the world. Whilst, 27% of women get an education in the STEM field around the globe, approximately 37% of women do so in Turkey. Even though women are getting an education in STEM, the majority of the population has the mindset that women should stay at home or be unemployed, which is a basic traditional point of view. As we are in the 21st century, the extensive mentality has brought nothing but jeopardize the opportunities presented to women in the industry.

Role Model



Utku Öztekin

Utku Öztekin is one of the physics teachers at our school. He's not only a fantastic teacher but also the coordinator of Hisar Mechatronics, our robotics club, and has launched the Vex Robotics program in Turkey. He is our STEM role model because he supports and motivates each and everyone to go above and beyond their goals. He has not only always made sure the environment is welcoming and inclusive for all genders but has dedicated countless hours to boost our development, confidence, and courage. Mr. Öztekin has made the environment delightful to learn without supporting gender discrimination. Even though statistics show that women are not likely to be preferred in robotics, our teacher Mr. Öztekin encouraged us the opposite way. He leads us to believe in ourselves and that we can be successful in this field. He makes us feel that everyone interested in this field, whether girl or boy can be successful if they try to improve and develop themselves by working and having FUN! Unlimited thanks to Mr. Öztekin, with his open-minded system, we are continuing to work much more enthusiastically as a team.

### Work Cited



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Credits



Written by: Lara Ceren Ergenç, Ayşe Yalçın, Gupse Ada Çelik, Selin Gökçe

Edited by: İremsu Baş, Lal Zeynep Nizam, Defne Konuk, Gupse Ada Çelik, Lara Ceren Ergenç, Ayşe Yalçın

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@hisarmechatronics