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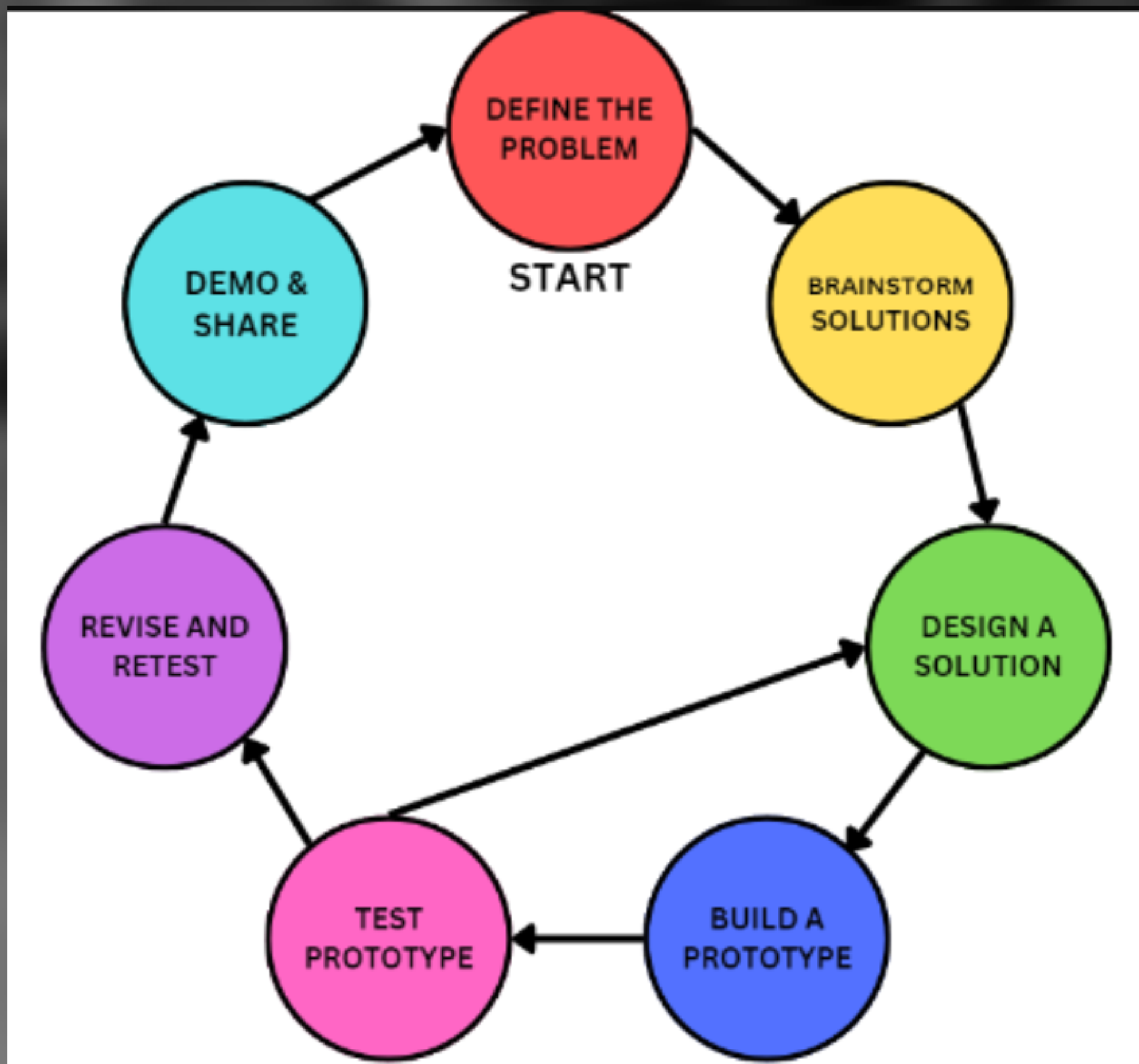
GENZ

Georgetown, TX

Sai, Sam, Tanish, Krishna, Naren

# Engineering Design Process

The purpose of the engineering design process is for a structured & systematic approach to solving problems. We took advantage of the Engineering Design Process to design a poster that caught the attention of viewers and be informative. By following the desing process, we became more organized and had a structured approach to create a poster.



# Define The Problem

We first had to define the problem which was to create a poster that inspired students, mentors to tinker, experiments, and build skills such as communication, collaboration and time management. We also had to look at the requirements of the challenge such as the Judge Requirements and any other requirements. Once factoring in the requirements and defining the problem, we were ready to brainstorm some possible solutions.

- **Up to 5 points** for a poster that visually represents one or more facets of involvement in VEX Robotics and encourages students, mentors, and/or supporters to get involved.
- **Up to 5 points** for high-quality art and good layout.
- **Up to 5 points** for readable, well-written text that adds to the message of the artwork.
- **Up to 5 points** for the clarity of the poster's message in the artwork and accompanying text.
- **Up to 5 points** for the creativity of the poster and its theme.

1. Poster and descriptive text are created and produced solely by student team members.
2. Format:
  - One PDF, JPG, or PNG image file (up to 20MB) with a minimum resolution of 300dpi and a printed size of 18"x24".
  - One PDF file that includes a brief description of the poster and how the students created it, along with the title page described below.
3. Title Page: Each entry must include a title page that includes:
  - Title of submission
  - Names of students who participated (using first names only is acceptable)
  - Team number
  - Location of team
4. Content must be appropriate for all ages.



# Brainstorming Solutions

First we decided to look at previous year finalists and winners to get an idea on what is expected in the poster. We then brainstormed possible things we should include in the poster. We brainstormed that we wanted to promote VEX programs, catch the attention of viewers with VEX theme colors, and bring awareness to the benefits of participating in VEX.

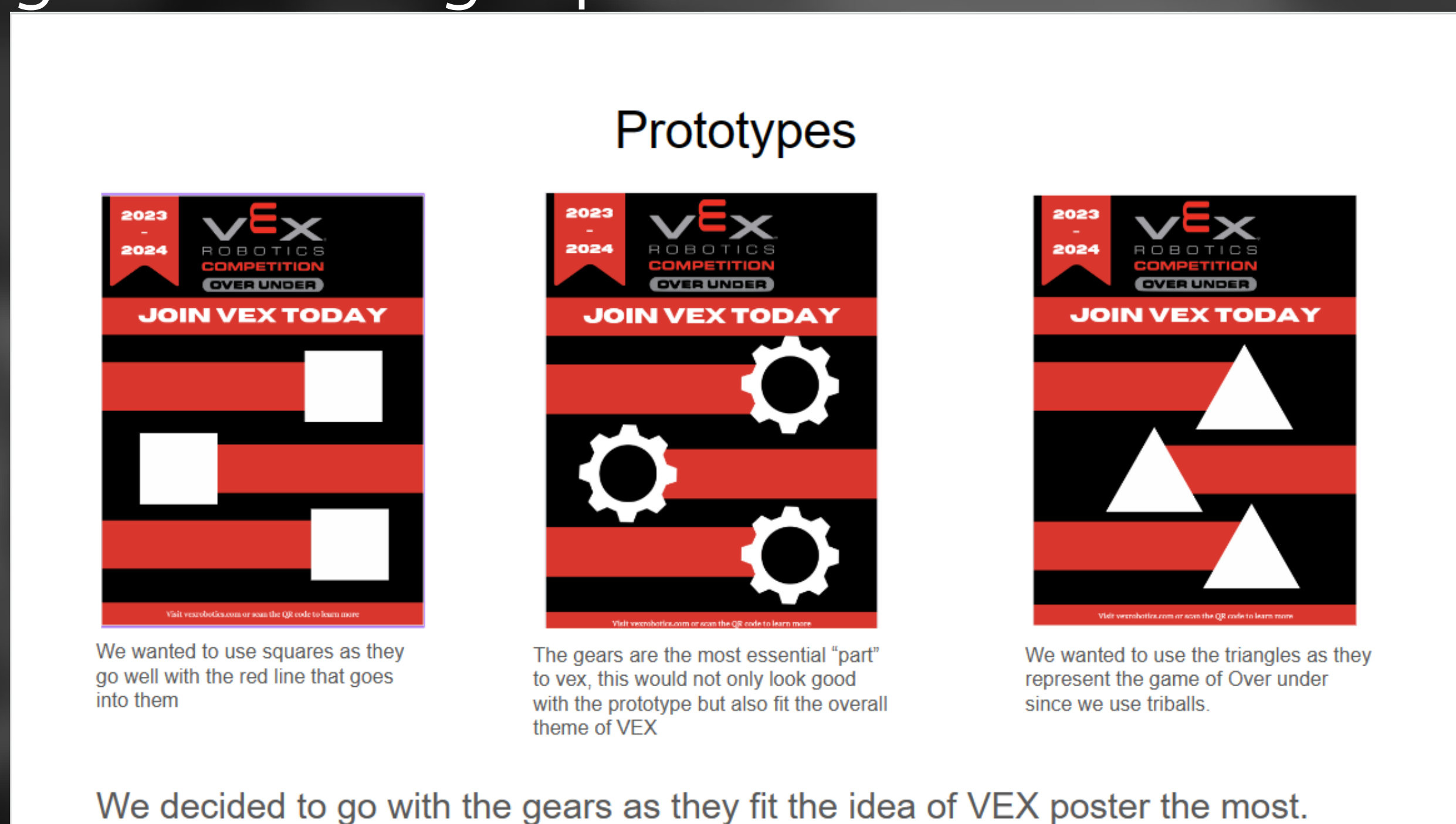


ROBOTS. MEMORIES. FRIENDSHIP.

WRITE. TEST. DEBUG.

# Prototype and Testing

After defining the problem and finding potential solutions we developed a prototype and we started checking the list to see what we could improve on and if it took into account everything we wanted. Through this process we found out that that we would stick to the gears as they represented VEX the most.



After deciding on the final look, we found an image to add to the background. We decided we would use a picture of our robot. Then we again rechecked the guidelines and saw promote all VEX programs. This lead us to decide to add a small part at the bottom which showed all the VEX programs so it shows that everyone has a place at VEX. We also took out the Over under below VEX, added the REC foundation symbol in. We also attached a QR code that takes you to the VEX website.



# Final Product

We used Canva to design our poster and used google slides to prototype possible designs. By following the Engineering Design Process, our team was able to break a challenging task into small approachable steps. We also learned how to collaborate and incorporate everyone's ideas when brainstorming. This made sure that no idea was left out and everyone's inputs were used to create the poster.

The poster was designed to show the reasons that a person should join a VEX program. We promoted the building, coding and competing aspects as robotics as well as teambuilding and communication skills. These skills are also necessary in the STEM field to be successful.

We used VEX colors of red, black and white to be able to make a good poster that encompasses VEX but also has the pleasing looks to make the human nature find it pleasing.

In the poster we used the font of "Brake" is an open-source font style. We decided to use this as the name itself reminds us of VEX Robotics. It also has an aesthetically pleasing look and suits well with the gears. We were able to find this font through the iteration of trying to find the best font that suited both VEX as well as looked good to make the poster look beautiful.

All the photos that were used in the process of making this presentation are either from our own photos or from Freepik.

In the Design Notebook we used "Livic" as it suited better with the background.

We used the picture of our Robot as the background image for both our design log as well. This is to show the outcome that you could gain if you join VEX and work hard.

# Final Poster

2023  
to  
2024

VEX  
ROBOTICS  
COMPETITION



## JOIN VEX TODAY

### BUILD

ROBOTS. MEMORIES. FRIENDSHIP.



### CODE

WRITE. TEST. DEBUG.

### COMPETE

FOR THE WIN



## VEX PROGRAMS

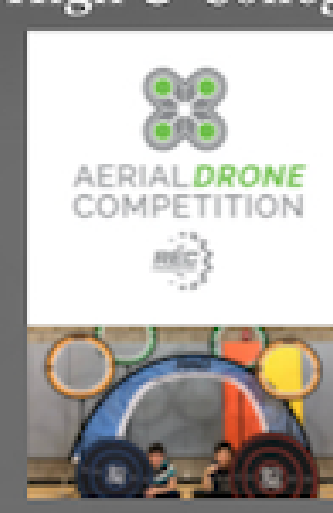
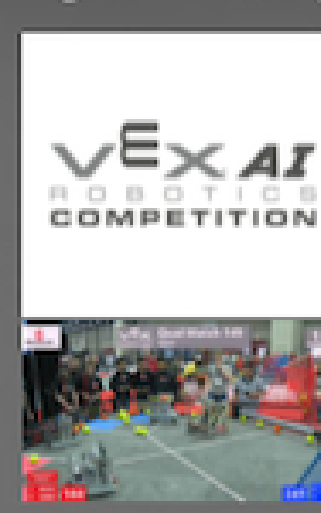
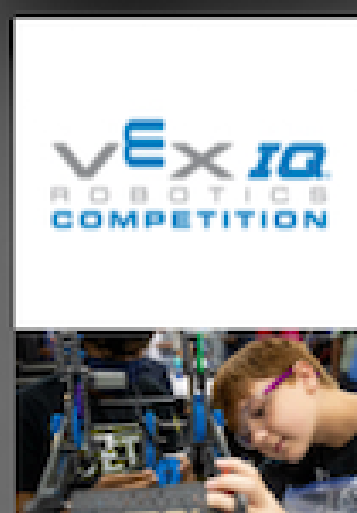
Middle & Elementary

Middle & High

High & College

High & College

College+



SCAN ME

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