6995 Team NOMAD

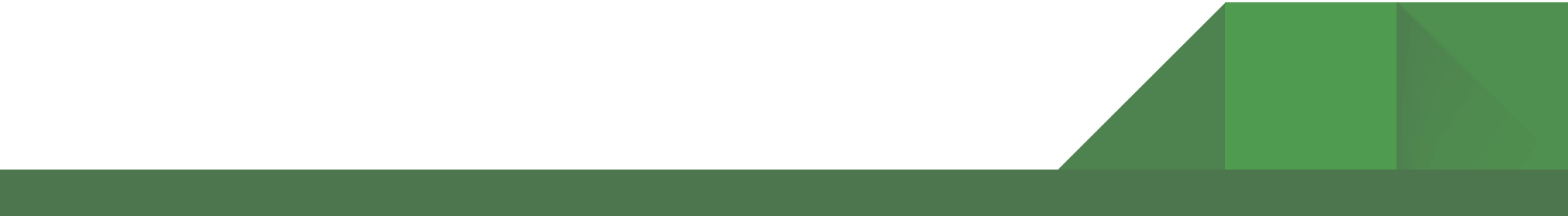
Business Plan

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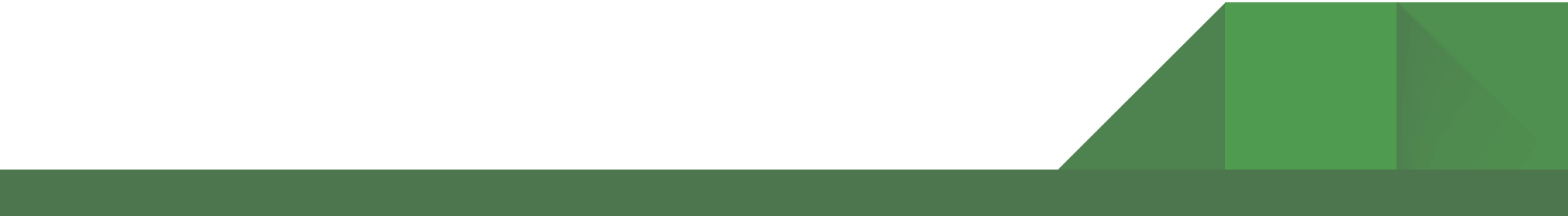
Mission Statement

NOMAD’s goal is to provide opportunities for all students to develop lifelong skills through hands-on STEM and business experiences in an exciting and fun environment. NOMAD endeavors to give students who would not normally have the opportunity to be part of a robotics team (such as homeschool or charter school students) the chance to be involved in the FIRST community. In all of our pursuits, NOMAD strives to build productive relationships, inspire the next generation, and leave a positive impact.

Team History & Growth

Our head mentor, Kevin Brady, and his family lived in Australia for several years where they were involved in the formation of the FIRST Robotics Competition team 5584, ICRobotics. When they returned to the States, their son wanted to continue participating in FRC but was not eligible to join any of the existing teams in San Diego County. In September of 2017, FRC Team 6995 NOMAD was established, allowing all students in San Diego County the opportunity to participate in FRC.

Beginning as a 2018 rookie team, NOMAD consisted of 7 students with very little FRC experience. By the end of the 2019 build season NOMAD had grown to 22 students, won the 2019 San Diego Regional, and traveled to the Houston World Championships. In 2020, COVID-19 restrictions forced FIRST to cancel the San Diego and Aerospace Valley regionals NOMAD was planning on attending, even though the team robot was fully completed. One year later, Team NOMAD participated in the “Infinite Recharge at Home'' and Innovation Award challenges, receiving the Industrial Design Award presented by Ford for our 2021 robot. In August 2021 NOMAD established the FIRST Lego League team 52311 Techno Tigers, who took 2nd place in the 2022 “Cargo Connect” challenge. Later that year, Team NOMAD competed in Beach Blitz and Battle at the Border, finishing in 2nd and 3rd place. In our 2022 season we achieved quarterfinalist status at the San Diego Regional, semifinalist at Las Vegas, and winner at Beach Blitz in the offseason. While at the Las Vegas Regional, we received the Innovation in Control award for our unique LimeLight adaptations. So far in 2023, we have competed at the Ventura, San Diego, and Las Vegas Regionals, and received two more Innovation in Control Awards and another Industrial Design Award, as well as a ticket to the World Championships.

Because NOMAD is not affiliated with a school, we actively seek and recruit new team members through outreach events and presentations at various homeschool communities (such as CFS Poway, Masters Community, and Classical Conversations). In addition, the establishment of FLL team Techno Tigers allowed the team to expose elementary-school students to the world of FIRST. When new members join NOMAD, experienced team members and Team Leads train incoming students for future leadership positions. Since we intentionally keep our team roster small, every student contributes and is valued as a member. For example, at the end of the 2022 season several key students (Team Captain, Design Lead, both Business Co-Leads, and an experienced programmer) graduated from Team NOMAD. However, because these graduates had trained other students and passed on their knowledge, NOMAD was well prepared to continue full-force with the new set of Team Leads.

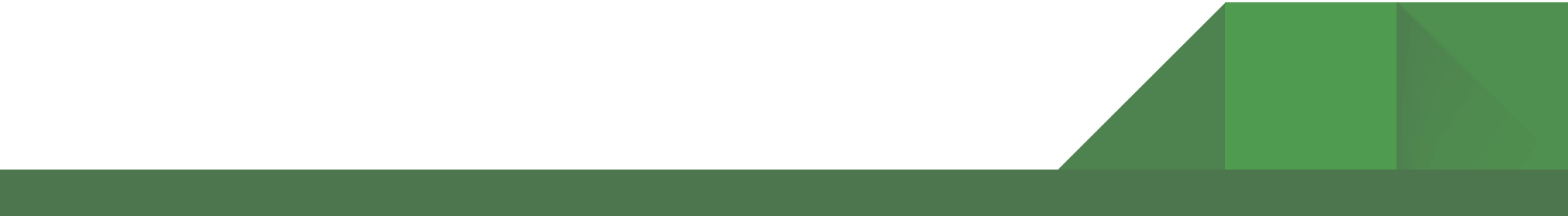
Organizational Structure

NOMAD is divided into five sub-teams (Business, Drive, Design, Mechanical, and Software). Many students contribute to more than one sub-team. To view a detailed description of each sub-team, see the chart in the Appendix. Each sub-team has a Lead, in addition to an overall Team Captain.

Team NOMAD’s organizational structure greatly encourages the mentorship of new students by older team members. Because almost all of our Team Leads are seniors, NOMAD is actively training our sophomores and freshmen to learn new skills, take on more responsibilities, and become future leaders. This method ensures that NOMAD has eligible Team Leads each season, which will help to sustain the team for years to come.

Because Team NOMAD is a community based team, we intentionally keep our roster small to ensure that every student gains hands-on experience. In addition, NOMAD fosters a diverse and inclusive environment which allows every new idea and opinion to be heard and discussed. NOMAD team members are encouraged to become leaders and to train other members in new skills. Each season NOMAD has a total of under 22 homeschool, charter school, and private school students. To spread team awareness and gain potential recruits, NOMAD travels to different homeschool communities (such as Classical Conversations, CFS Poway and Masters Community) to present the robot and to introduce students to the world of FIRST. In addition, NOMAD hosts an annual open house event for highschool students interested in robotics. By participating in frequent outreach events, NOMAD gains new team members annually. For example, between the 2022 and 2023 competition seasons the team gained eight new recruits, who have lent their own skills and experiences this year to benefit the team as a whole.

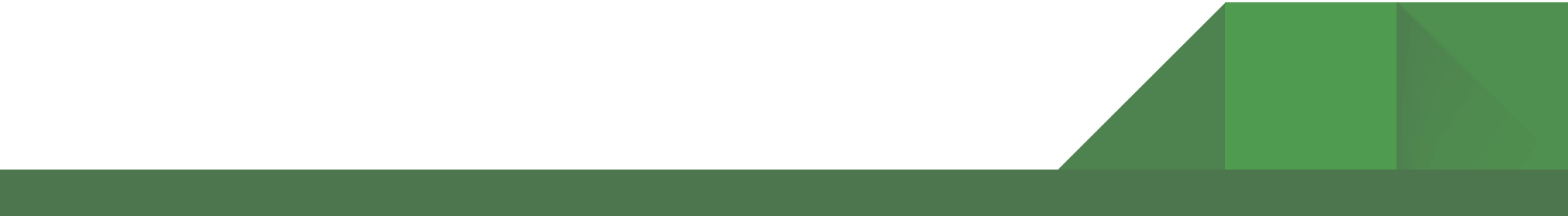
Risk Analysis

Team NOMAD was founded on risk and opportunity. As a small community-based team, NOMAD has extremely limited resources. Back in 2018, however, several mentors and seven inexperienced students decided to take the risk to start up Team NOMAD. As a community team, NOMAD doesn’t have an affiliate school, resulting in team workshops being hosted out of our Lead Mentor’s garage. When NOMAD advanced to the 2019 World Championships, the team did not have the funding to attend. But NOMAD was determined to make it to Houston (we ended up receiving a grant, making the journey possible!). Along the way there have been many teams in the FIRST community who have helped us (SuperNURDs, Daedalus, Spyder, Highrollers, and Millenium Falcons, to name a few), but NOMAD has still faced challenges due to the risk of being a small community team. This year, we have been able to pay it forward and see our own reputation as “the helpful team” grow. We are excited to be able to see many of the same teams who helped us in our early years at the 2023 World Championships.

Team NOMAD was started in order to provide students with the opportunity to experience the world of FIRST. At the time, NOMAD was the only San Diego team to not be affiliated with a school or organization, allowing students who wouldn't normally have the option to join a robotics team to learn about FIRST and to participate in competition. Team NOMAD upholds and encourages FIRST’s ideals of Gracious Professionalism and Coopertition both inside and outside the workshop. When new students join Team NOMAD, they are immediately taught and mentored by older students, equipping new members with the knowledge and skills to assume a leadership position in the future. This process, as well as FIRST’s ideals, equip students with both the experience and character needed to be a valuable asset in the workplace and community after highschool.

One of NOMAD’s biggest strengths is the community that we have as a team. During the competition season, the Team Leads and Mentors have weekly meetings to ensure each subteam is working according to a proper schedule and in unison with their fellow teammates. Team Leads train up younger students and encourage them to become leaders in the future. In addition, team members are recruited from diverse backgrounds and schooling, allowing the team to discover new perspectives and ideas during the competition season. For more information, see NOMAD’s SWOT analysis in the Appendix. As a result, NOMAD fosters a fun, inclusive and hard working environment, preparing students for the future.

Marketing

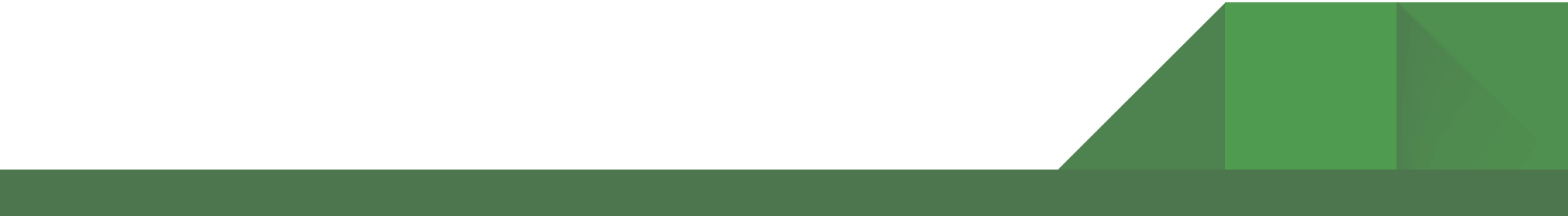
Team NOMAD prioritizes team branding throughout the season, making an effort to keep all documents and merchandise (judges’ gifts, social media, shirts, sponsor resources, etc.) consistent with team colors, fonts, and design. All merchandise includes the NOMAD logo and the logos of the season’s sponsors. In addition, Team NOMAD runs active social media accounts on both Facebook and Instagram, where the Business sub-team posts 1-2 times per week, informing followers and sponsors about NOMAD’s progress in the workshops. We include a generous helping of FIRST-related hashtags, to connect our posts to those from other teams or FIRST itself. Since our social media presence was created, NOMAD’S number of followers has dramatically and steadily increased.

NOMAD runs several different fundraisers throughout the year. In November of 2022, NOMAD conducted a Christmas wreath fundraiser through Sherwood Forest Farms. Each wreath sold included a NOMAD pin which allowed different members of our community to learn about our team and display NOMAD’s team name and logo on their household decorations. In addition, NOMAD has hosted fundraisers at restaurants such as Chipotle, allowing the team to spend time together while raising awareness for FIRST and spreading the team name throughout the community. As for future fundraisers, NOMAD is planning to repeat the Christmas wreath fundraiser, as well as possibly sell team merchandise. We may also host a formal dance fundraiser in the fall.

Financials

Team NOMAD is funded through sponsorships and grants. Because NOMAD is not affiliated with a school, the team does not receive school funding or support. As a result, team members must personally reach out to companies and businesses in order to gain sponsors and arrange fundraisers. Because our sponsors are integral to the team’s success, NOMAD values sponsor connections and makes it a point to send out updates and thank you notes throughout the year. As detailed in the Appendix, sponsors will receive certain benefits based on the amount donated (although all sponsors will have their name advertised on the team slideshow while at competition events).

NOMAD budgets approximately $10,000 for Regional competitions, including travel expenses, and roughly $500 for offseason competitions. Additionally, $5,000 is budgeted for robot parts, and $1,000 for team expenses (shirts, machining, etc.). We have also predicted approximately $8000 in costs for our trip to the World Championships. For more information, please see the chart in the Appendix.

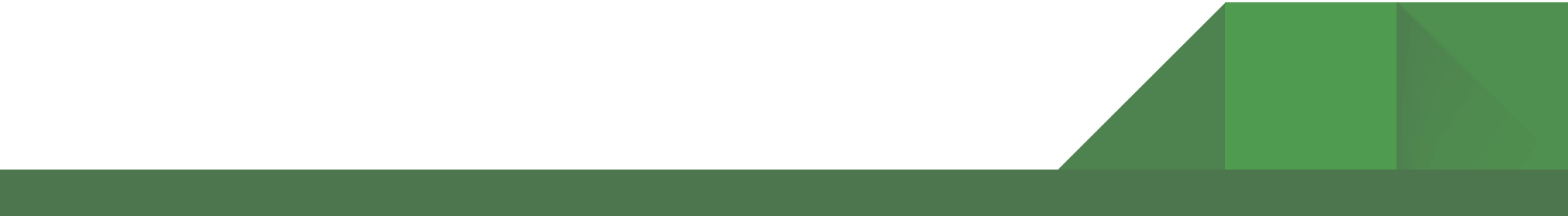


Appendix

Team Organizational Structure:

| Business | * Coordinates sponsorships and fundraisers * Promotes NOMAD to the community with outreach efforts * Creates documentation for competitions * Responsible for pit design and judges’ gifts |
| --- | --- |
| Design | * Creates representation of robot sub-assemblies through CAD (Computer Aided Design) * Responsible for design documentation necessary for robot construction * Works closely with Mechanical sub-team |
| Mechanical | * Responsible for machining and assembling the robot * Uses specifications given by Design sub-seam |
| Software | * Responsible for developing and testing the code that operates the robot, both in Tele-Op and Autonomous periods * Uses Java |
| Drive | * Selected through tryouts and is responsible for driving the robot at all competition and demonstration events * Includes Driver, Operator, Technician, Human Player, and Drive Coach, as well as backup members |

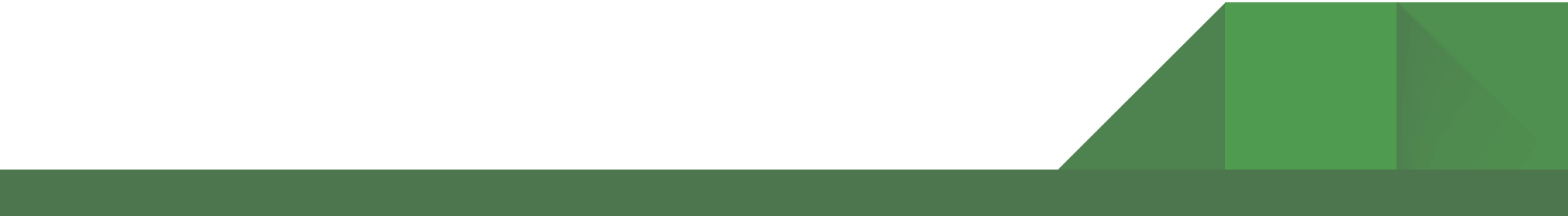
Sponsor Benefits:



|  | Platinum | Gold | Silver | Bronze |
| --- | --- | --- | --- | --- |
| Amount: | $5,000 and above | $2,000 - $4,999 | $500 - $1,999 | Under $500 |
| Team Shirt: | Large logo of business | Medium logo of business | Small logo of business | -- |
| Robot: | Large logo of business | Medium logo of business | Small logo of business | -- |
| Banner (displayed at events): | Large logo of business | Medium logo of business | Small logo of business | -- |
| Website (on our sponsorship page): | Large logo with link to sponsor’s website | Medium logo with link to sponsor’s website | Small logo with link to sponsor’s website | Name of business/individual |

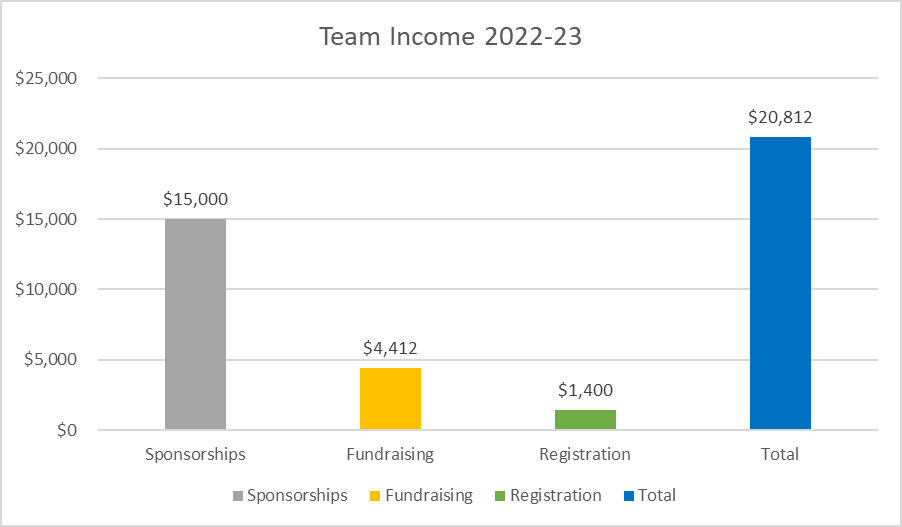
SWOT Analysis:

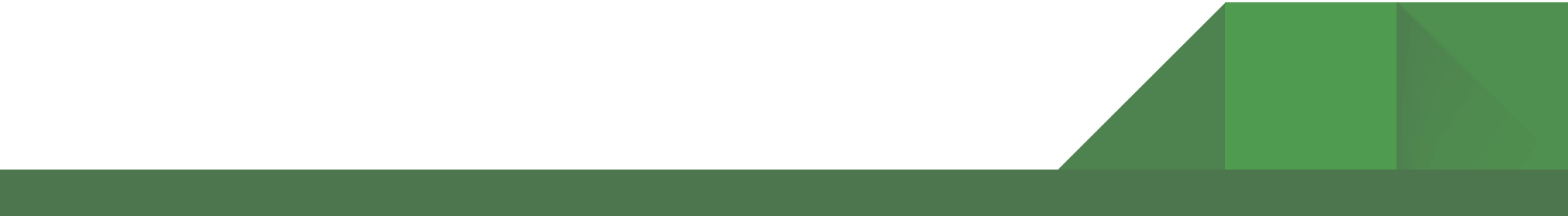
| Strengths | Weaknesses |
| --- | --- |
| * Team members are hardworking and willing to learn and improve. * Diverse team personalities and leadership skills provide streamlined organization during competition season. * Team members are experienced in FIRST ideals and actively apply them while in the workshop. * Older students pass on their knowledge to new team members, allowing them to be equipped for the competition season. * NOMAD provides a fun and encouraging workshop environment. * The small team size fosters community within the group; NOMAD is a tight-knit team that creates strong, lasting friendships among team members. | * NOMAD has limited workshop space and workshop hours. This greatly impacts our building capability during the competition season. Unlike neighboring teams, we only have 2-3 workshops per week. * NOMAD is not affiliated with a school, which limits our recruiting pool. * NOMAD does not have access to a competition practice field. This severely limits our ability to practice before competitions. |
| Opportunities | Threats |
| * We are teaching the next generation of NOMADs both robotics and FIRST ideals, as well as demonstrating these ideals to the FLL team Techno Tigers. * Team NOMAD has friendly connections with neighboring teams and our community. * NOMAD offers an opportunity for students looking for a private robotics team. | * Lack of proper funding during the season can inhibit our ability to build the best robot possible. * Our workshop space is limited, which also limits our team size and workshop frequency. * We are not affiliated with a school, so unless team members actively recruit and outreach we run the risk of our team size dwindling. |

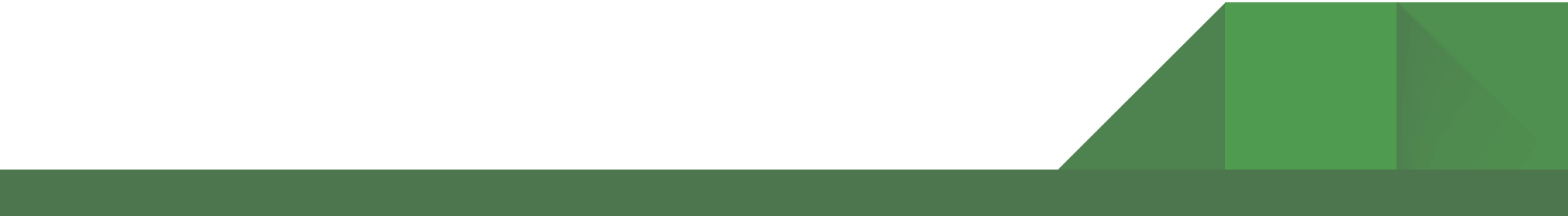
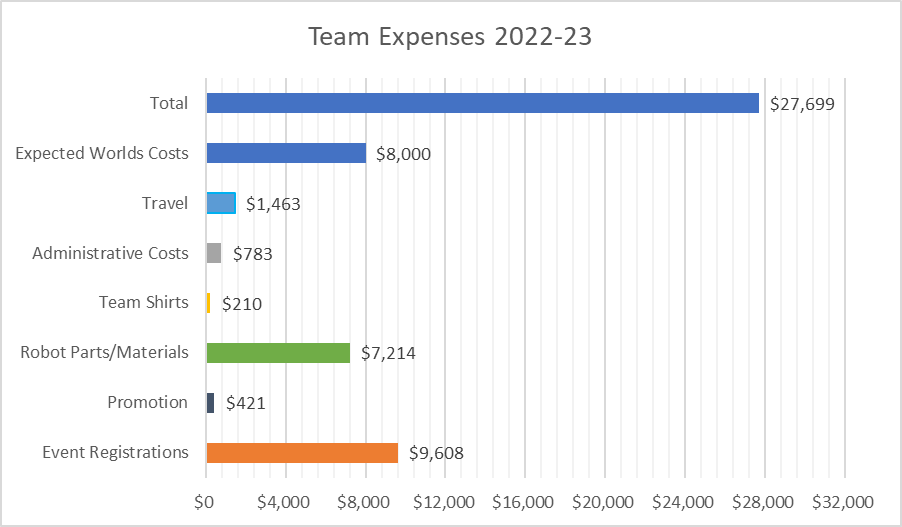


2023 Income/Expenses:



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