

FIRST[®]
Robotics
Team 238
Business Plan

Mission Statement:

The members of Team 238 strive to provide project-based learning opportunities for students of all backgrounds in the various fields of science, technology, engineering, mathematics, art, and business. We emphasize and encourage diversity, Gracious Professionalism[®], teamwork, and self-confidence while helping student participants develop 21st century life skills. We challenge ourselves and those around us to expand upon our creativity and originality, and not be limited by what is already known, but rather strive for the unimaginable. Our current team goals are to stay invested in our community, design and construct a competitive robot, and train team members for the future.

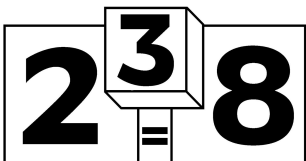
Team History and Growth:

A Memorial physics teacher, Mr. Adams, founded our team in 1992 under the team number 69. In the early years of FRC, team numbers were assigned yearly based on sponsors. We participated in the first ever competition, Maize Craze, which was held in our gym. The team had to take a break in 1997 due to lack of a teacher liaison, but we bounced back for the 1999 season with the permanent number 238.

Over the years our team has gained and graduated many students. Six of our seniors graduated after the 2017-2018 season, leaving us with eleven members. Since then we have recruited eleven students for the 2018-2019 season, essentially doubling our team size. In respect of our team's history, we pride ourselves in "building bots since 1992."

Organizational Structure:

In the past few years, we have worked to develop our team as a small business. At the start of every season, our mentors choose team leads who help in the organization and distribution of projects. The team's structure is based upon three divisions: Technical, Operations, and Community (as referenced in Appendix 1). These three divisions are essential to how we operate. Each division has distinct roles that contribute to the overall success of the team. Our Technical division is responsible for designing the robot through CAD, machining, wiring and programming work. Operations mainly focuses on finance and travel logistics. The Community division focuses on outreach by conducting demonstrations, volunteering at local events and sending out newsletters to keep both the public and sponsors involved. To ensure members are maintaining interest and getting the most out of their *FIRST* experience, we encourage member participation in as many divisions as desired.



A great way to guide our team is to set season goals. For instance, a current goal is to “train team members for the future.” This helps the team stay engaged and future-oriented throughout the season, allowing for growth each year. We acknowledge that an even flow of new members is the best way to keep our team sustainable. Due to this, recruitment remains a driving force for the continuation of Team 238. Annually, we participate in our high school’s freshman orientation where we can actively recruit new members. By also presenting at our feeder middle schools, we can introduce students to *FIRST* and involve them in our team.

Risk Analysis:

We decided the best way to look at the potential risks of our team was by creating a SWOT analysis, as referenced in Appendix 2. From this assessment, we were able to review our strengths and weaknesses, the opportunities we can create for students and threats to the team’s existence.

We identified student turnover as one of our weaknesses and worked to solve the issue by turning recruitment into one of our greatest strengths. At the start of the season, only eleven experienced members were left, having had six key students graduate. With extra determination and time, we were able to recruit eleven new students, doubling our team size and ensuring our sustainability for the next few seasons. Training new members each year can be challenging but is managed through veteran members passing down their knowledge. By working year round, we ensure students learn skills necessary for a successful build season.

Through our imperfections, we find opportunities to grow. We recognize that we do some events in the community but could do more to help spread the *FIRST* message and grow *FIRST* teams in our area. As an ambitious team, funding is essential to expanding our efforts. Without our sponsors, Team 238 would be unable to contribute to the community as much as we’d like, falling short of our aspiration to create a more *FIRST*-inspired environment.

A threat that we are currently facing is the loss of our second largest sponsor, Texas Instruments. Such a loss is undoubtedly devastating, but we’ve been making up for this misfortune through gaining new sponsors and maintaining current sponsors’ interest. As a result of our efforts, we have gained two new sponsors and are working with a potential third.

Marketing:

Marketing is an essential part of making the public aware of our team. As an active team in our community, we find it imperative to establish a consistent team

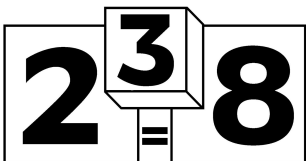


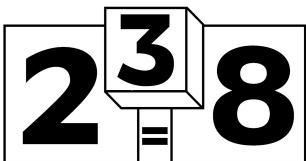
image. Tips and protocols are outlined in our branding standards document. Our Marketing subteam follows these guidelines to create logos, graphics, videos, and other promotional materials. We have shared this document on our website to demonstrate how we maintain a cohesive image within the community. We presented our branding standards at the BOB off-season event in 2017, showing teams how to better establish themselves as a part of the community.

Presentations and demonstrations are also a way Team 238 markets who we are and what we do. We present at both public events to the community and in schools to educate students. In 2018, team members participated in a demonstration at a local minor league baseball game. By displaying our robot to attending baseball enthusiasts, we were able to connect to a crowd that may not have been familiar with *FIRST*. Annually, we set up a booth at a fundraising event held by a local animal shelter where we spread *FIRST*'s message to a demographic that would not otherwise know about it. Additionally, we present and demonstrate to local middle schools to encourage them to join an FRC when they get to high school, or join one of the two *FIRST* programs available to them in middle school. By doing events like these, we make ourselves known in the community and show people how to involve themselves in *FIRST*.

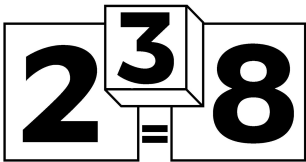
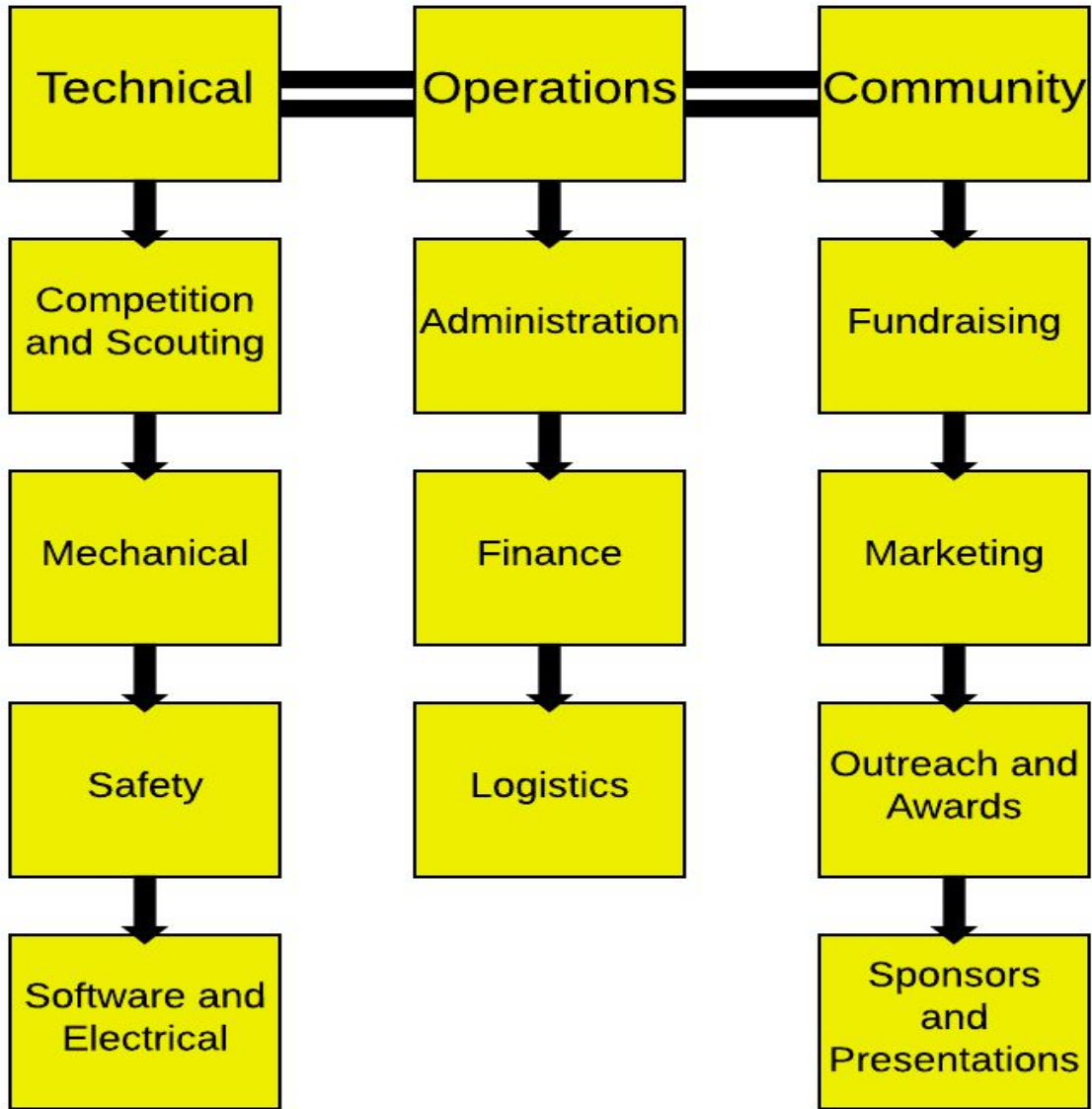
Financials:

Appendix 3 contains an income statement and a balance sheet. The income statement displays our net income by describing our revenues and projected expenses. Please note that Team Member Contributions is an estimated amount. Early in the season, our mentors predict the costs based on last year's actuals and our current goals and potential losses. The balance sheet provides an overview of our assets and liabilities as of March 1, 2019 and a summation of last year (July 2017 through June 2018).

Our team's main income is from sponsors. They help fund our larger expenses such as registration fees, shop upgrades and robot parts. Not only do they contribute funds to our team, but also provide us with mentors and access to machinery we wouldn't otherwise have. In remuneration, we offer sponsors a variety of things such as recognition on our robot and competition shirts, "thank you" presentations, and updates about the team in our newsletter. Another way we raise money is through fundraisers. These events aid in reducing student travel expenses and rely upon the students' motivation to raise money.

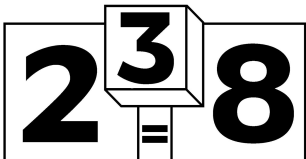


Appendix 1 - Team Division Flowchart



Appendix 2 - SWOT Analysis

<p><u>Strengths</u></p> <ul style="list-style-type: none">• Recruiting new members• Maintaining our strict branding standards• Strong parental involvement in logistics, and team building activities• Team Coopertition®	<p><u>Weaknesses</u></p> <ul style="list-style-type: none">• Student turnover• Lack of female members• Losing mentors• Not having full team at all events• Small in comparison to other school-related extracurriculars
<p><u>Opportunities</u></p> <ul style="list-style-type: none">• Continue outreach events• Increasing our team/travel funds• Gaining new support from local companies• Helping more <i>FIRST</i> teams	<p><u>Threats</u></p> <ul style="list-style-type: none">• Budget cuts through School District<ul style="list-style-type: none">○ Losing advisor's pay○ Losing our work space• Losing valuable sponsors and funding



Appendix 3 - Financials

Income Statement

Revenues		
Sponsors	\$27,550.00	
Fundraisers	\$3,002.09	
RiverRage	\$2,246.22	
Team Member Contributions - Projected based on travel	\$32,000.00	
Total Revenues:		\$64,798.31
Expenses - Projected		
Technical - Robot expenses and game supplies	\$10,700.00	
Operations - Team meals, business and shop supplies	\$1,000.00	
Community - Marketing and apparel	\$2,605.00	
2 District Events - Registration, transportation and food	\$6,250.00	
DCMP and Championship - Registration, transportation and food	\$42,600.00	
Off-Season Events	\$1,370.00	
Total Expenses:		\$64,525.00
Net Income		\$273.31

Balance Sheet

	2018	As of 3.1.2019
Assets		
Sponsors	\$41,100.00	\$27,550.00
Fundraisers	\$11,204.43	\$3,002.09
RiverRage	\$2,350.00	\$2,246.22
Team Member Contributions	\$17,900.00	--
Total Assets	\$72,554.43	\$32,798.31
Liabilities		
Technical	\$14,329.04	\$539.42
Operations	\$126.14	\$499.99
Community	\$2,577.83	\$19.78
District Events - 3 2018 events, 2 2019 events	\$7,659.00	\$5,000.00
District Championship and World Championship	\$39,871.01	--
Off-Season Events	\$425.00	\$418.00
Total Liabilities	\$64,988.02	\$6,477.19

