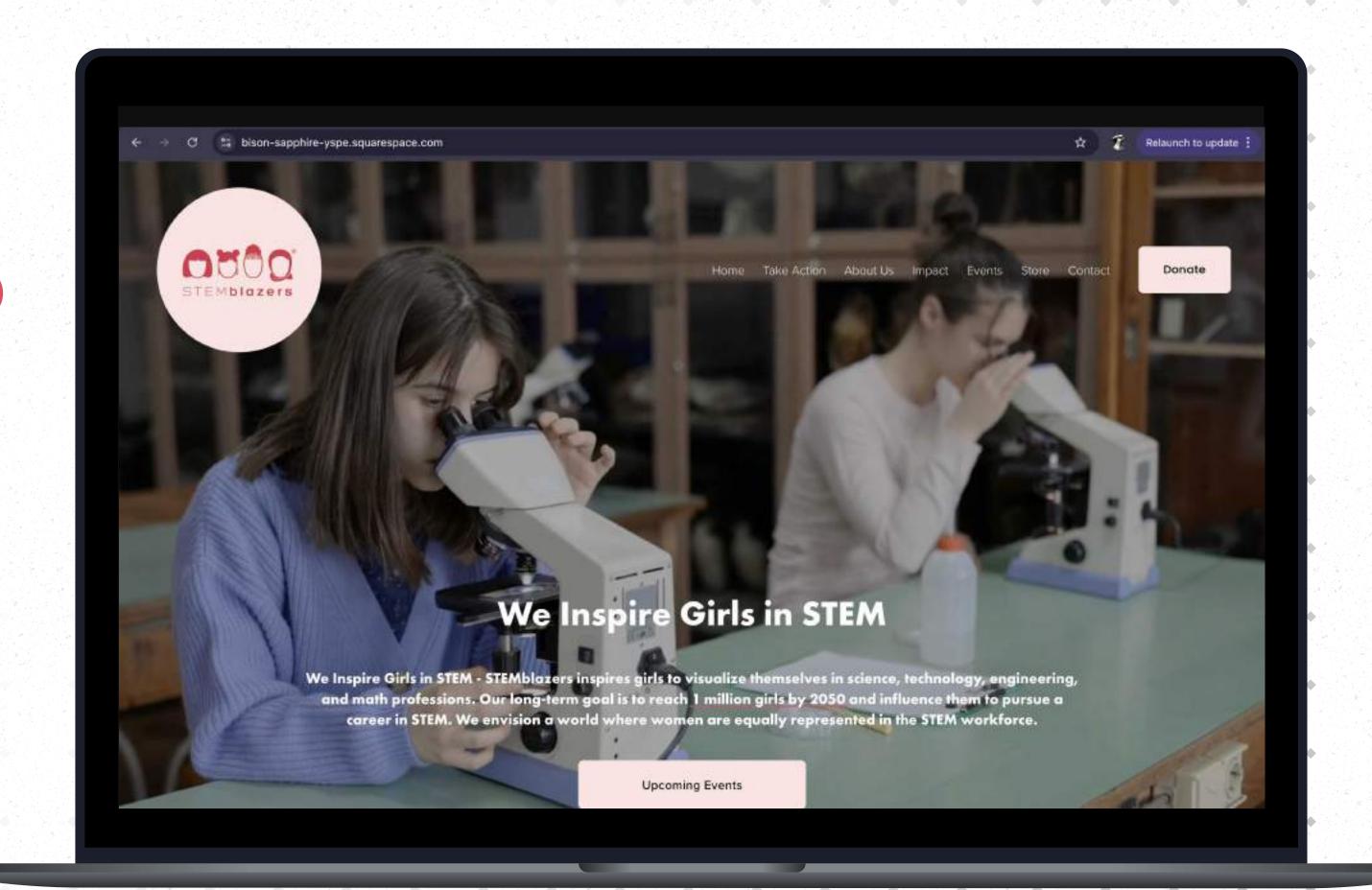


STEMblazers



Meet the team, define UX research, and project overivew

Introduction

Improve Usability

Understand Audience Needs

Website Audit

Appendix

Who we are?



Lauren Kemperman
M.S. CTD
UX Researcher /
Lead Communicator



Shraddha Shinde M.S. CTD UX Researcher



Saharnaz Hadavandkhani
M.S. CTD
UX Researcher/
UX Designer



Harrison Smith
M.S. CTD
UX Researcher



John Lettang
M.S. CTD
UX Researcher

What is UX research?

- 1 UX research actively investigates and reveals how real people interact with a product or service.
- 2 Specifically for STEMblazers, we are uncovering how students, teachers, and volunteers navigate and experience the STEMblazers website.
- Through this active process, we pinpoint concrete opportunities to make the STEMblazers online experience easier, faster, and more effective in guiding stakeholders toward meaningful action, assisting STEMblazers in their mission of reaching 1-million girls.



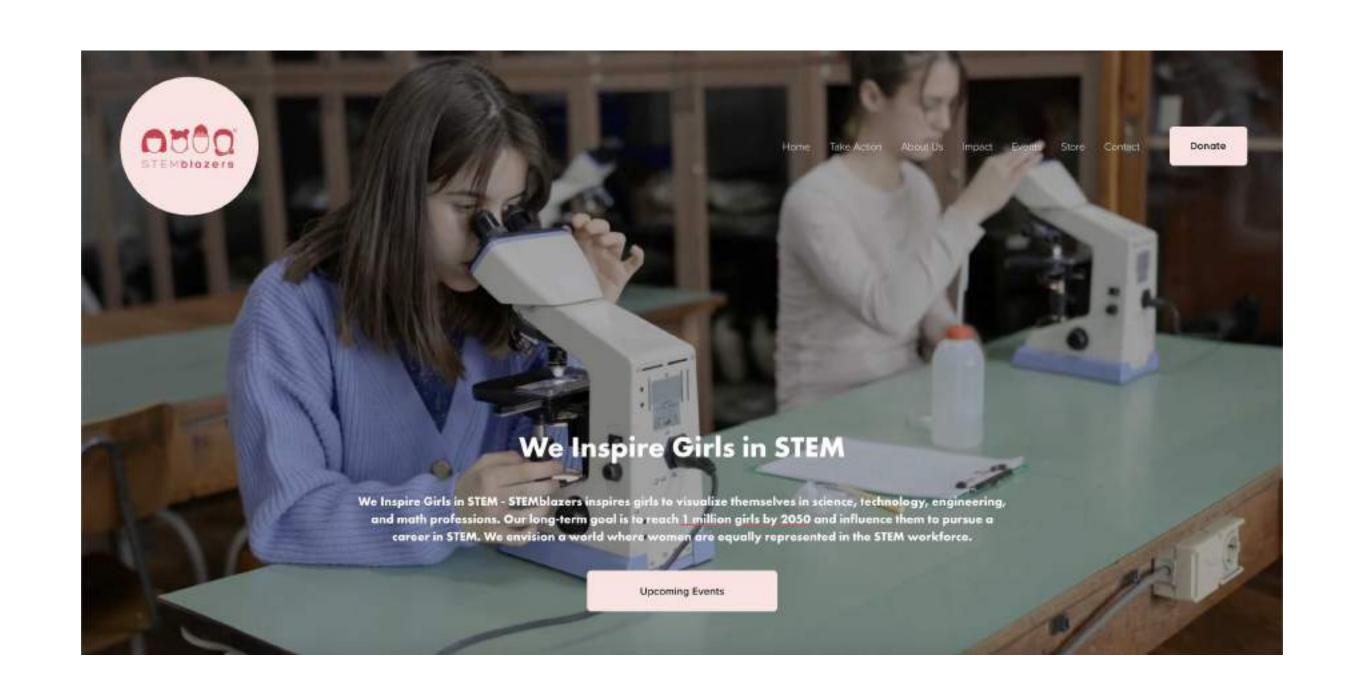
Company Background

STEMblazers: Inspiring Future Women in STEM

STEMblazers is a Colorado nonprofit dedicated to increasing middle and high school girls' interest and involvement in STEM fields.

Their website offers functionality such as:

- Chapter information
- Program and event details
- Volunteer & sponsorship options
- Donation portal
- Impact stories
- Contact & social media



Target Audiences

Students

Middle / high school age students who are curious about a STEM focused extracurricular program

Parents

Parents of middle / high school aged students interested in increasing their daughters' awareness and involvement in STEM activities prior to college

Teachers

Teachers at schools that are interested in getting a STEMblazers chapter at their school

Donors & Partners

Corporations interested in sponsoring events or charitable giving

Volunteers

Adults interested in leading a chapter a local school, serving as a guest speaker, serving as job shadow host or mentor

Similar Organizations

Girls Who Code

Mission: To close the gender gap in

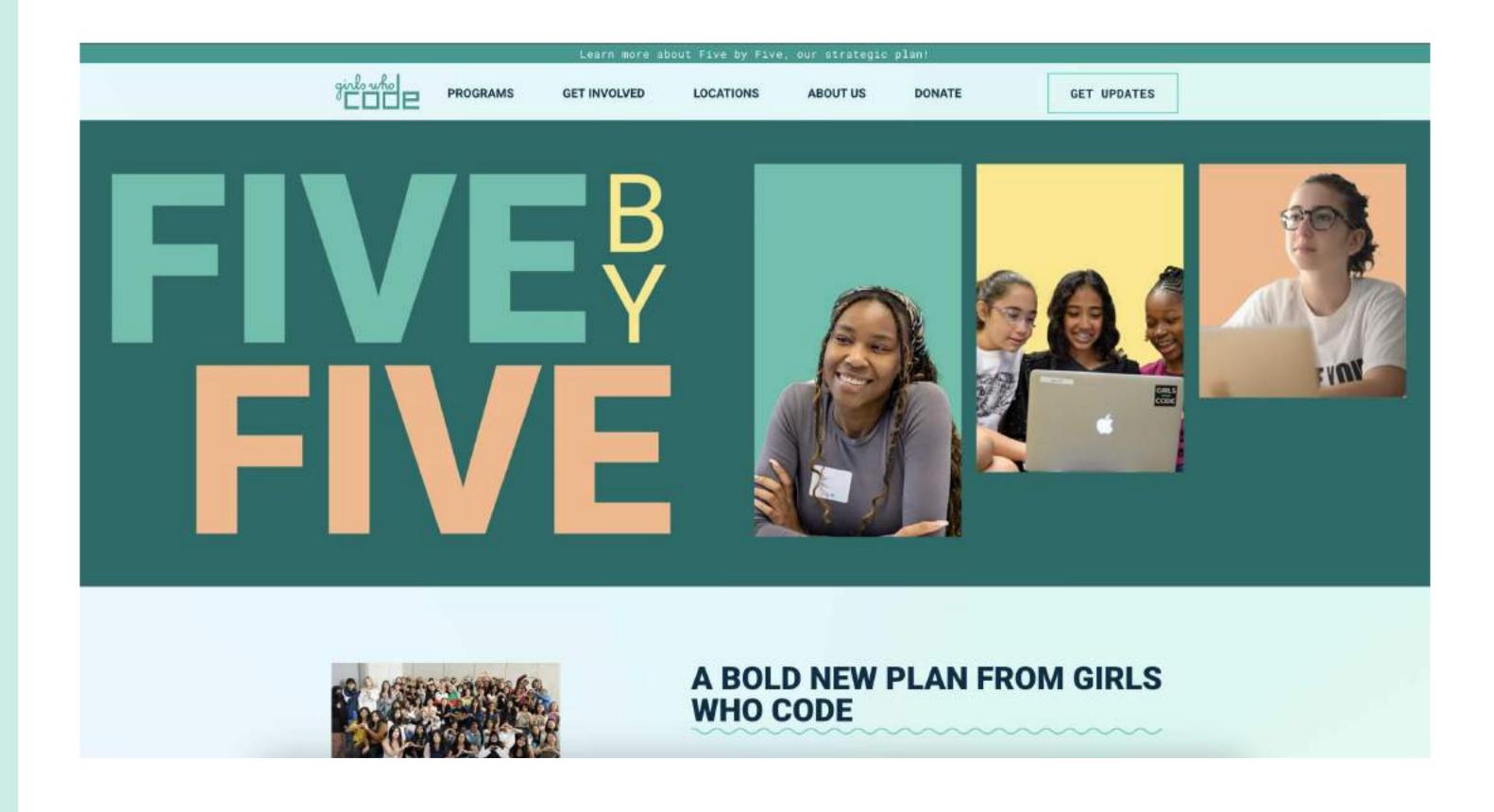
technology.

Founded: 2012

Functionality: Provides coding clubs (3rd–12th grade), summer programs, college support, curriculum resources, and alumninetwork.

Why Girls Who Code?

- Shared goal: Closing the gender gap in tech
- Focus: STEM education for girls
- Both are nonprofit organizations



Research Challenges

1 User Interviews

The primary target audience is students, but we were unable to interview anyone under the age of 18.

2 Similar nonprofit

Competitor websites have similar functions, but lack directly comparable step-by-step user journeys for all of STEMblazers' key stakeholders.

Identify strengths and pain points by observing interactions with the STEMBlazers website

Introduction

Improve Usability

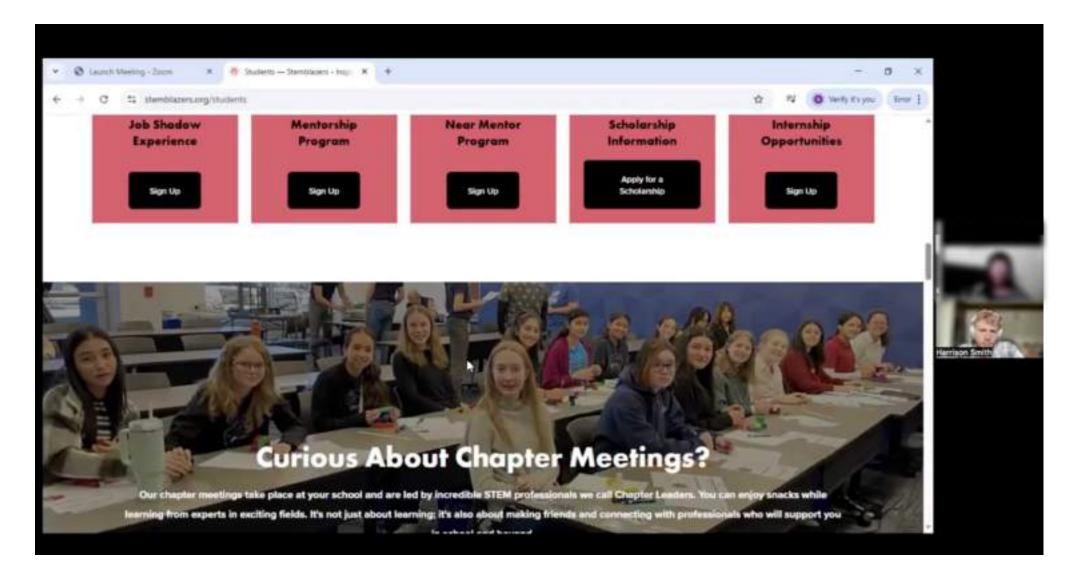
Understand Audience Needs

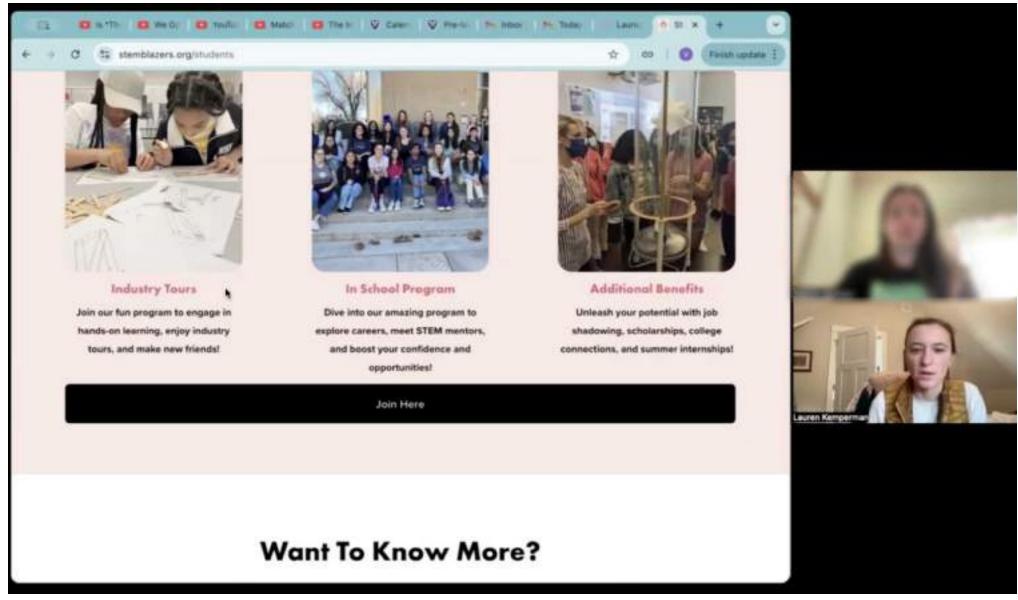
Website Audit

Appendix

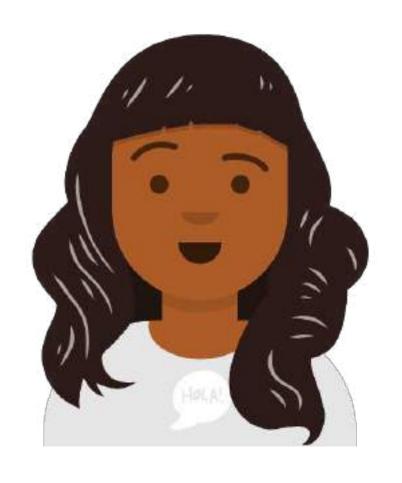
Remote Interviews

- **Goal:** Investigate the current site's usability through 30 minute, semi-guided remote interviews
- Interviewed 5 STEM-interested girls about their first impressions and thoughts on the STEMblazers site and organization

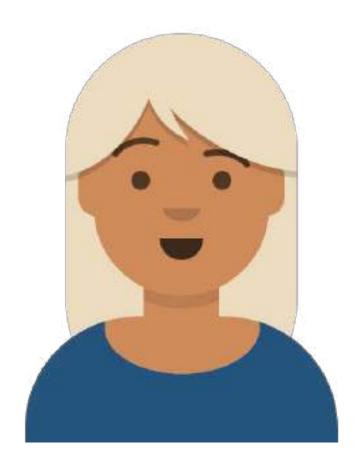




The Users (Students)



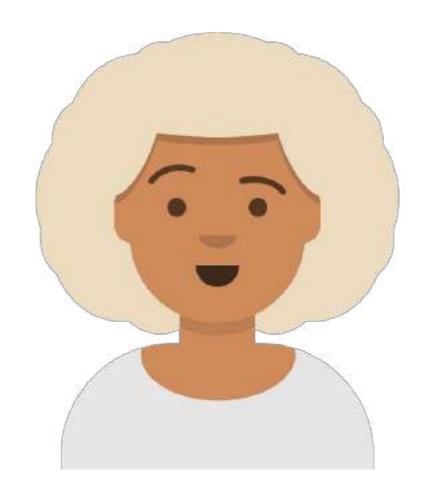
Karly
High School Senior
Age: 18
Germantown, Ohio



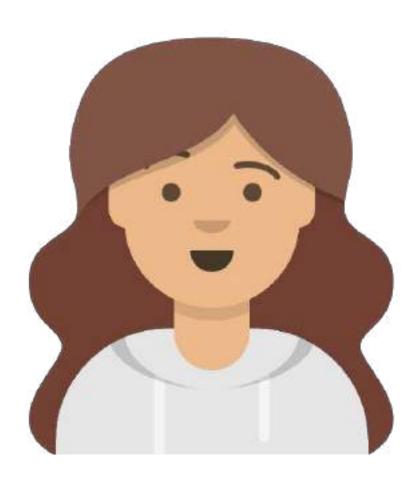
Sam
College Sophomore
Age: 18
Atlanta, Georgia



Vicky
College Sophomore
Age: 19
Atlanta, Georgia



Margot
College Freshman
Age: 19
Atlanta, Georgia



Emily
College Sophomore
Age: 19
Gainseville, Florida

Interview Plan

Explore the website and give initial thoughts

Discover how to get involved through the site

Register for a new or existing school program

Interview Plan

Explore the website and give initial thoughts

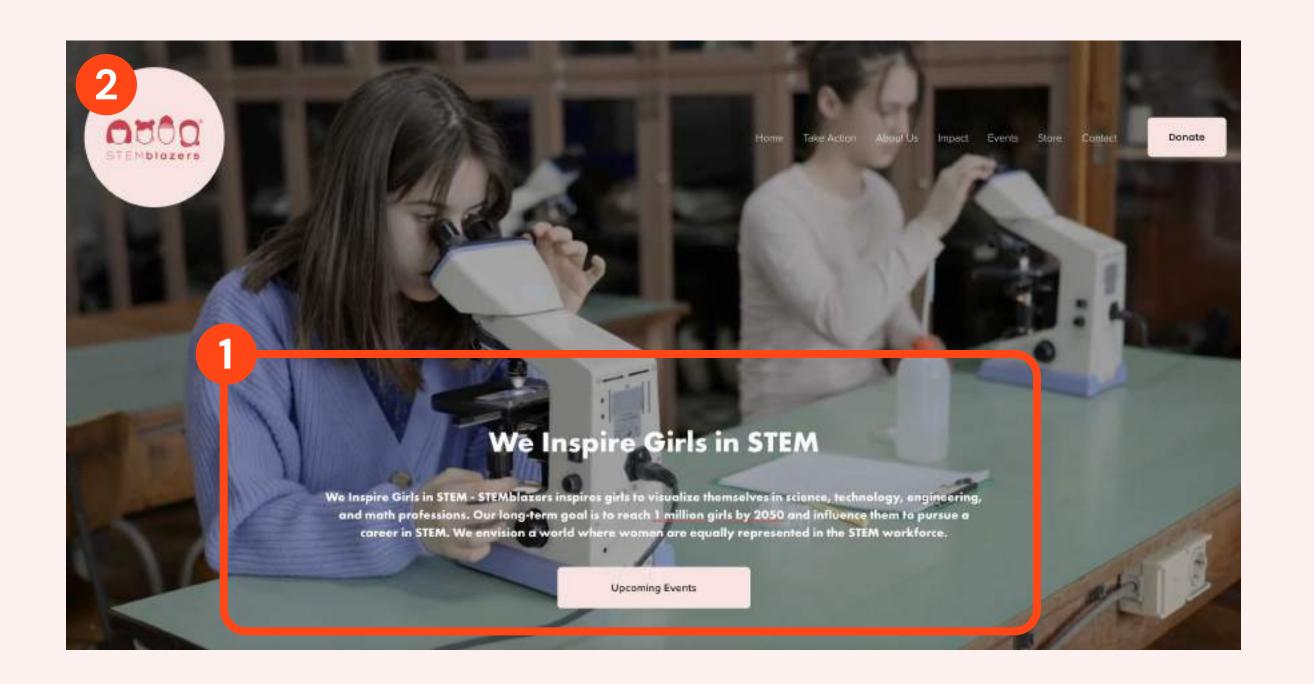
Discover how to get involved through the site

Register for a new or existing school program

Successes:

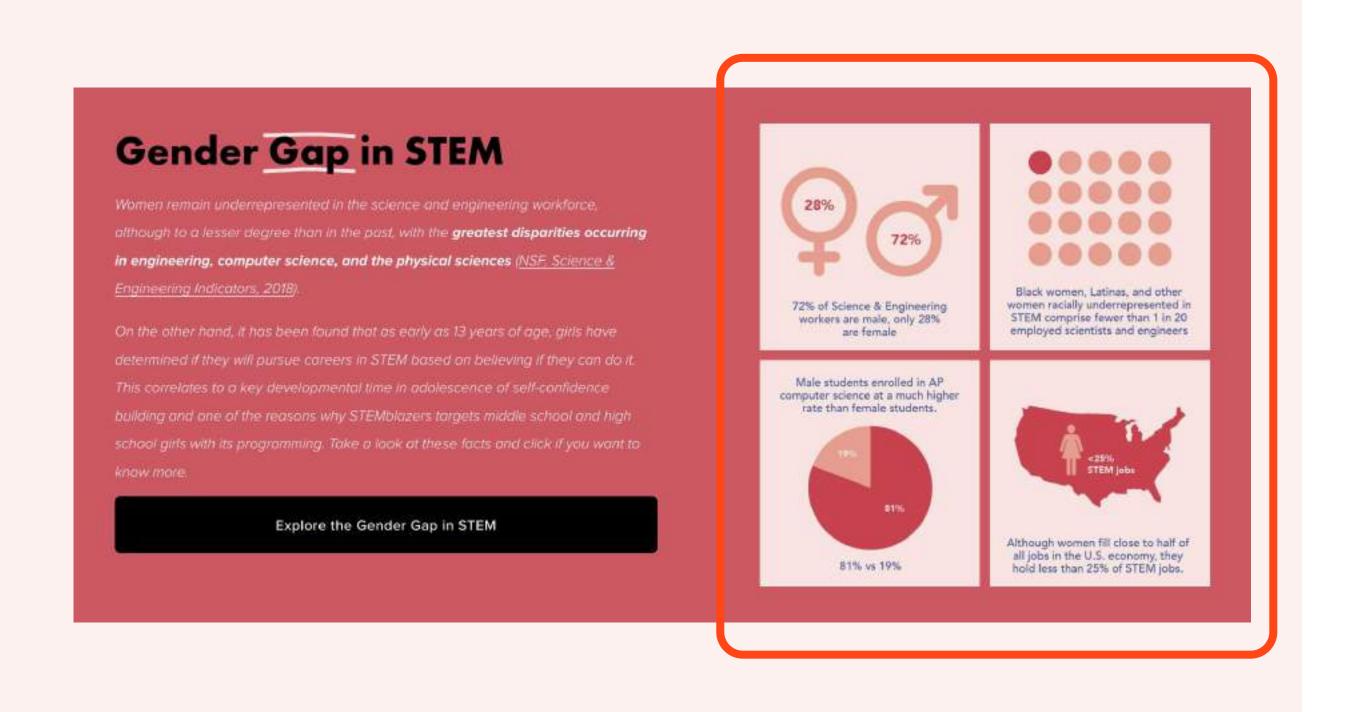
Users easily grasped STEMblazers purpose and target audience due to:

- 1. A clear mission statement
- 2. The visual identity (photos of girls, the logo, & pink hues).



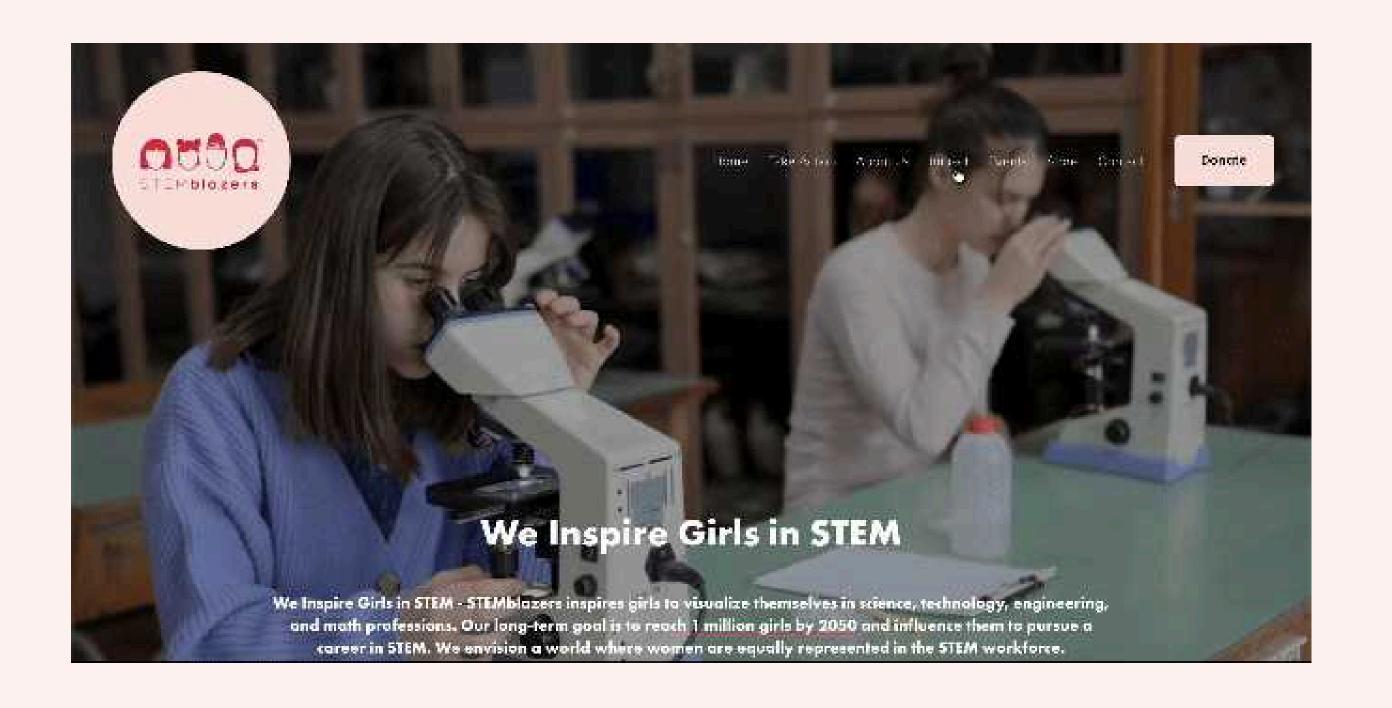
Successes:

Statistics-driven mission generated empathy with the users by visually quantifying the problem for anyone to understand.



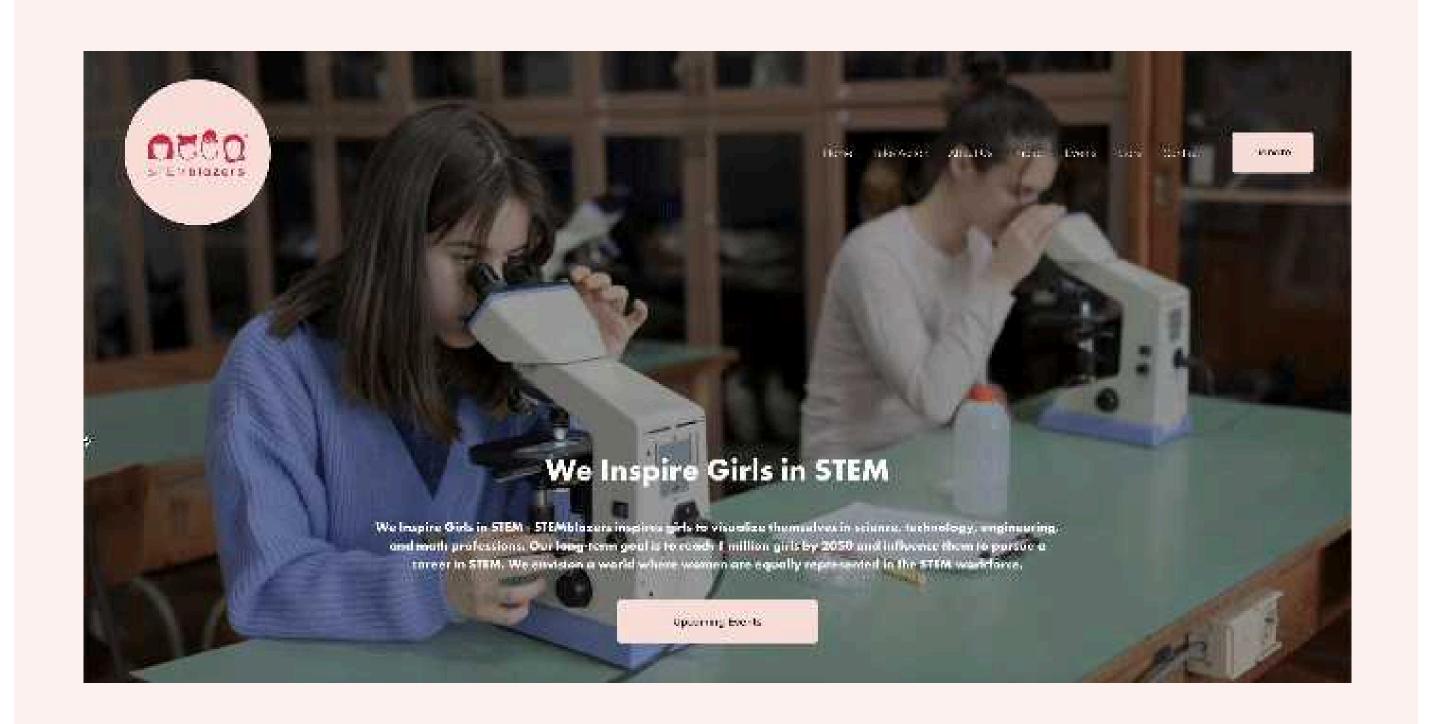
Successes:

Participants connected with the testimonial videos because they saw relatable students and could imagine themselves being part of the organization.



Insights:

While exploring the landing page, some users did not understand what STEMblazers does or could provide them.

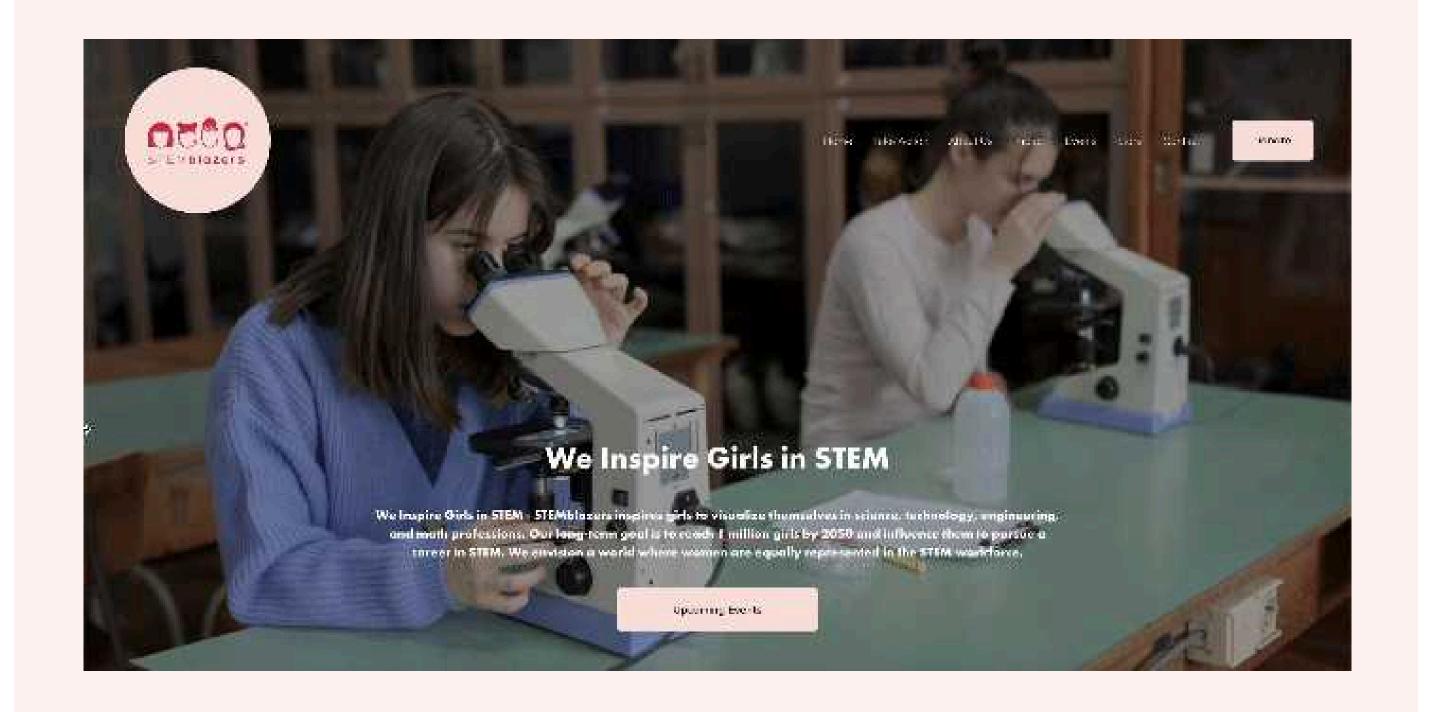


6 I think based off this it's just explaining women in STEM, I don't really know...

K - high school senior

They are just trying to encourage girls to be in STEM related things by, I guess, putting on events?

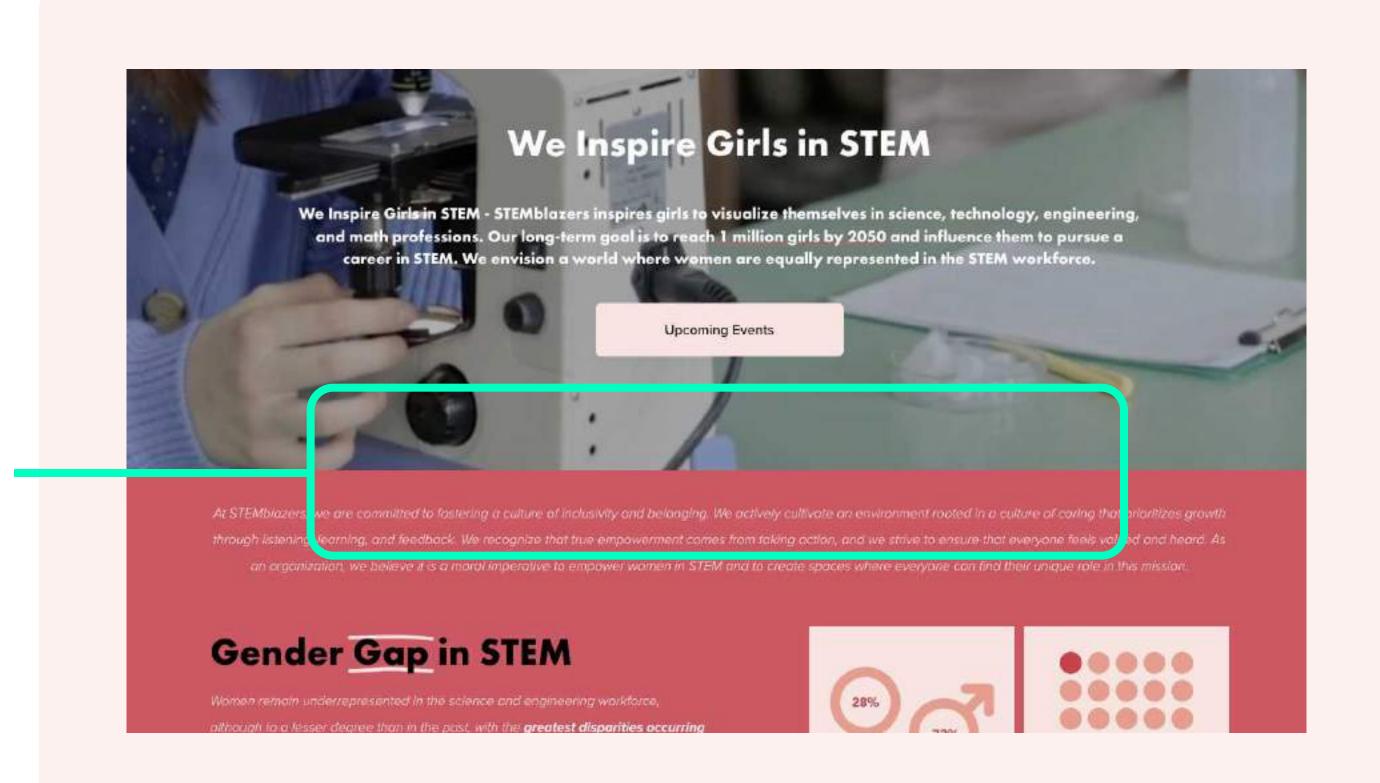
S - college freshman



Areas for Opportunity:

State more clearly what the organization provides on the home page for students and schools

• Example: Give specific details about after-school chapters, or the ways to get involved.



Interview Plan

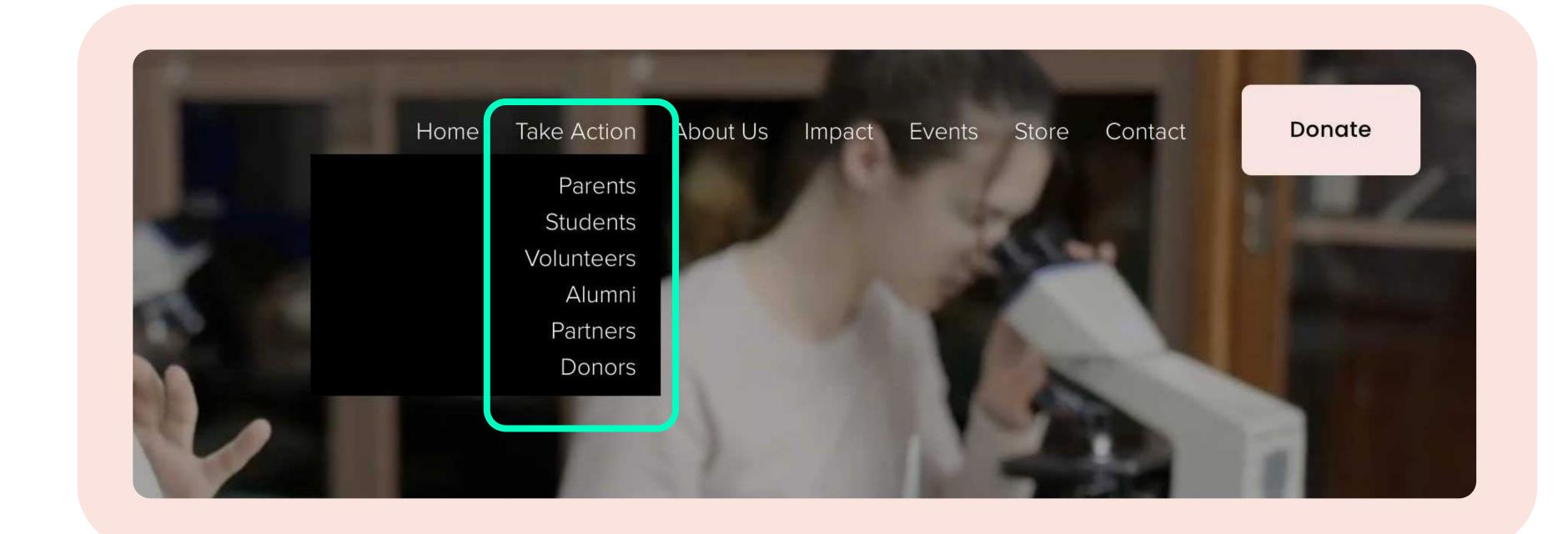
Explore the website and give initial thoughts

Discover how to get involved through the site

Register for a new or existing school program

Successes:

Clear "take action" options helped users quickly understand how to get involved.

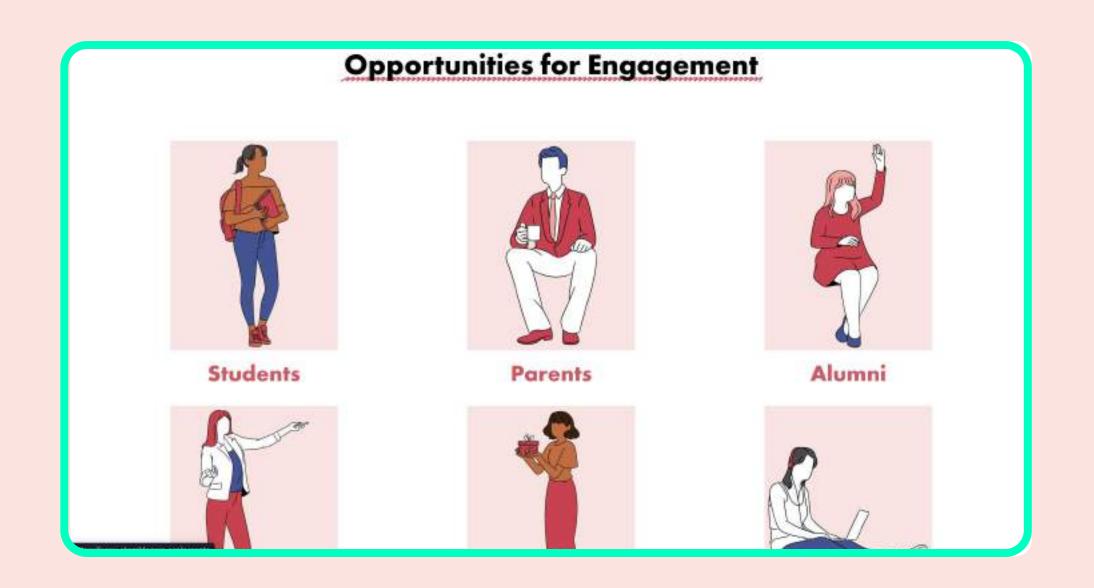


Successes:

Users also responded positively to how easy it was to find their school or contact STEMblazers, which could **encourage** meaningful participation.

6 tit was really interesting and cool that the organization doesn't just focus on students. Since I'm in college [...] I like that I could still make an impact by volunteering.

E-college sophomore



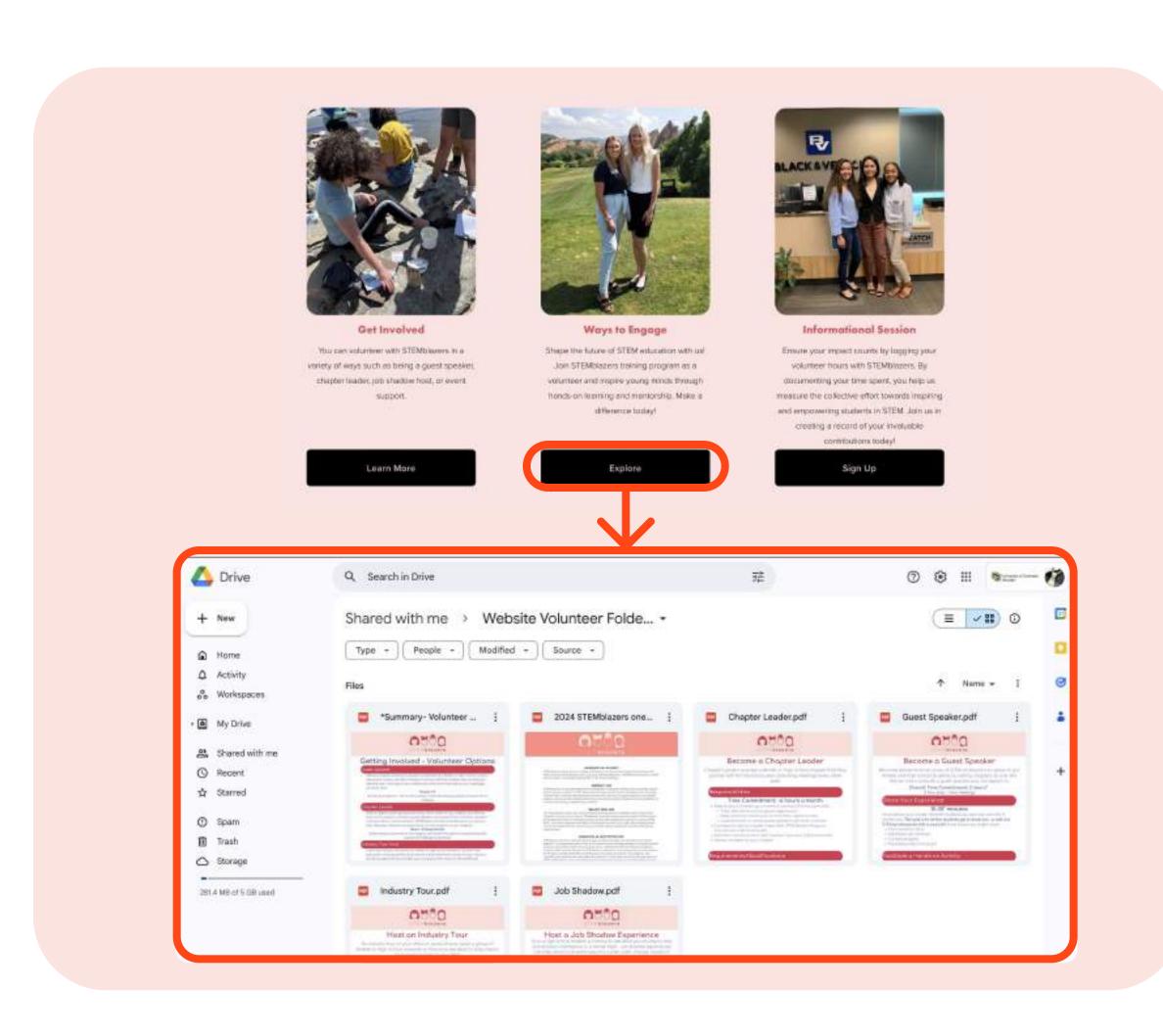
Insights:

Users encountered inconsistent access to key information, leading to confusion and frustration.

(One user did not expect to be redirected to a google drive for volunteer info)

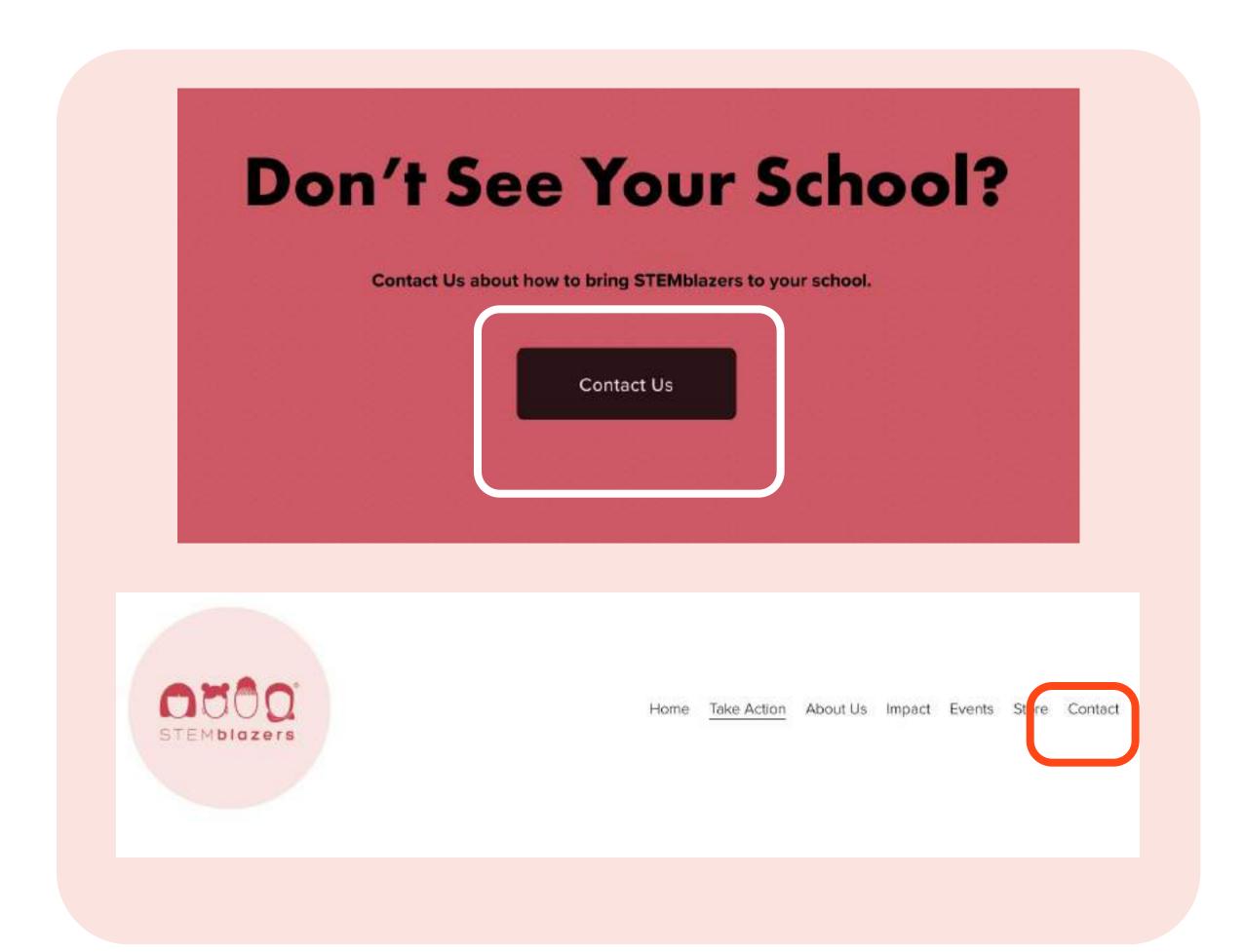
It's a little overwhelming to have all of this, and they look kind of similar...it takes you to a drive instead of just having things embedded.

M - college freshman



Insights:

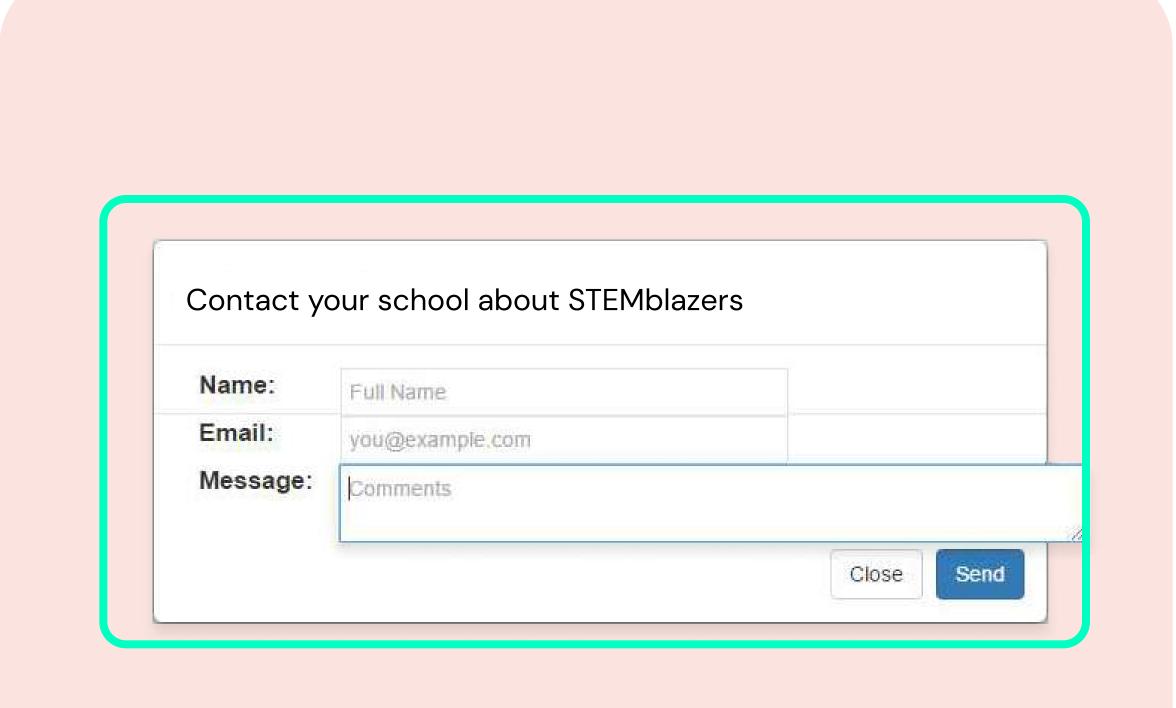
Hesitant to reach out via "contact us" when their school wasn't listed, revealing a disconnect between how students expect to get involved and how STEMblazers expects them to initiate contact.



Areas for opportunity:

Include school & teachers in new school registration to increase student confidence and support so that they are more likely to become involved.

• Example: Give students a shareable PDF or link to share with their teacher.



Areas for opportunity:

Translate the information on the existing PDFs natively on the website to make the information easier to access, search, and interact with and reduce friction for users.



Interview Plan

Explore the website and give initial thoughts

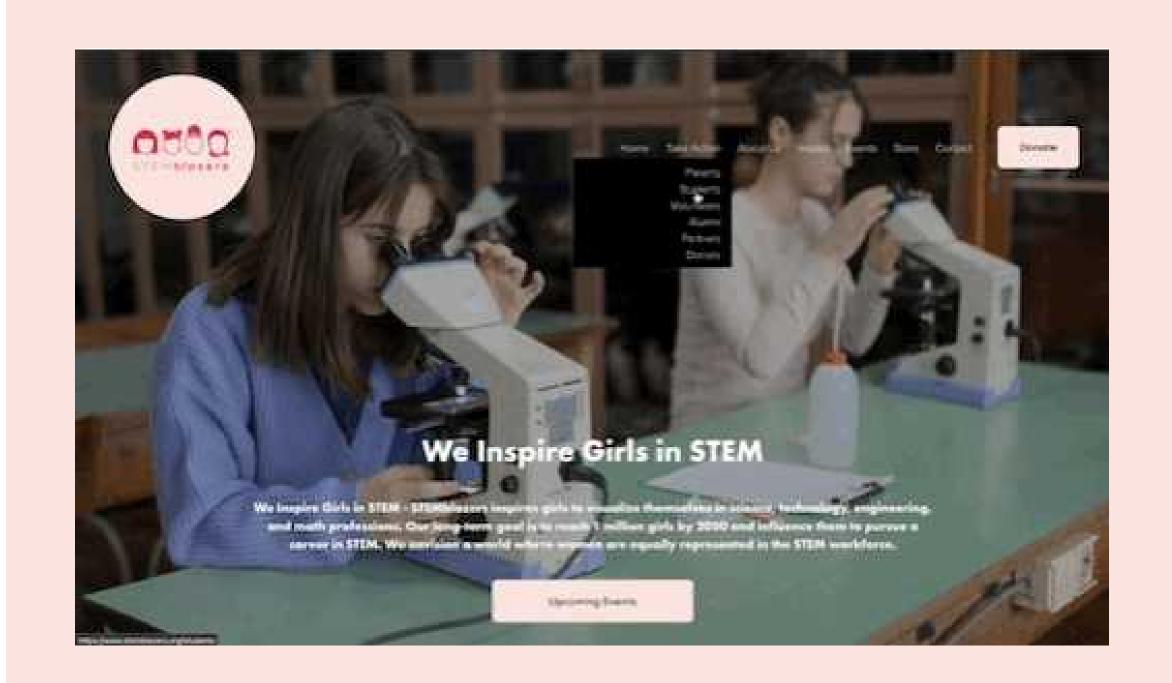
Discover how to get involved through the site

Register for a new or existing school program

Successes:

Users intuitively found the "students" page and looked there for trying to sign up for a chapter

 Having "students" under the take action section of the navigation bar and also as an "opportunity for engagement" led to a successful user journey



Successes:

Schools that had a program description showed transparency for what to expect from the STEMblazers program and at what cost

It gives you a good view of what you could be doing"

K - college freshman

Sky View Academy '24-'25

\$150.00

PROGRAM DESCRIPTION

Chapter is open to students from 8th through 12th grade.*Registration **FEE is \$150** to participate in this program for the entire school year. This chapter is limited to 35 students. Membership Includes:

- 1. 2 Chapter meetings per month
- Guest speakers; professional women working in STEM industries
- 3. Interactive hands-on activities
- Professional mentoring
- 5. Industry Tours around the Denver Metro area
- 6. Job shadow experiences

Insights:

Users reported that the chapter registration form was broken and couldn't be completed.

Oh, there's nothing on the form, so I guess, like I can't even like write my school name, or anything like that.

M - college freshman



Insights:

- Inconsistent chapter registration experiences caused frustration for some users
 - Forms hosted in-site had lots of helpful information while forms on google forms did not have any of that information

66 "Oh shoot, I wasn't expecting a google doc out of it"

K - college freshman

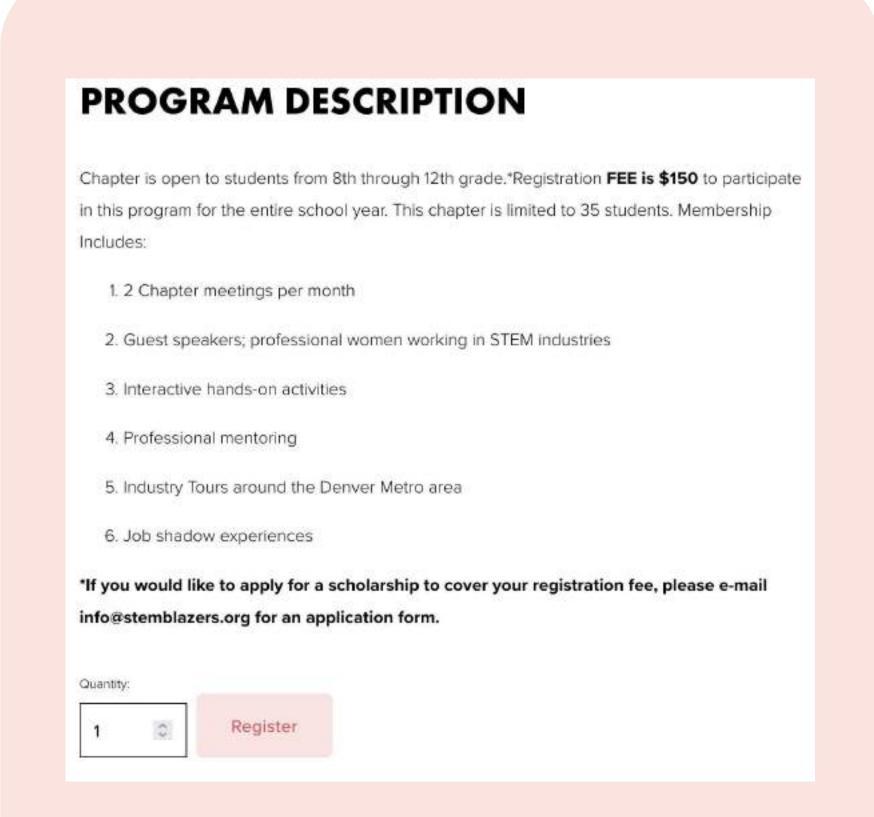


Insights:

Some users were confused by the registration fee, student capacity details, and quantity section in the program description

"Does it mean \$150 for 35 students? ...the quantity, does it go up to 35?"

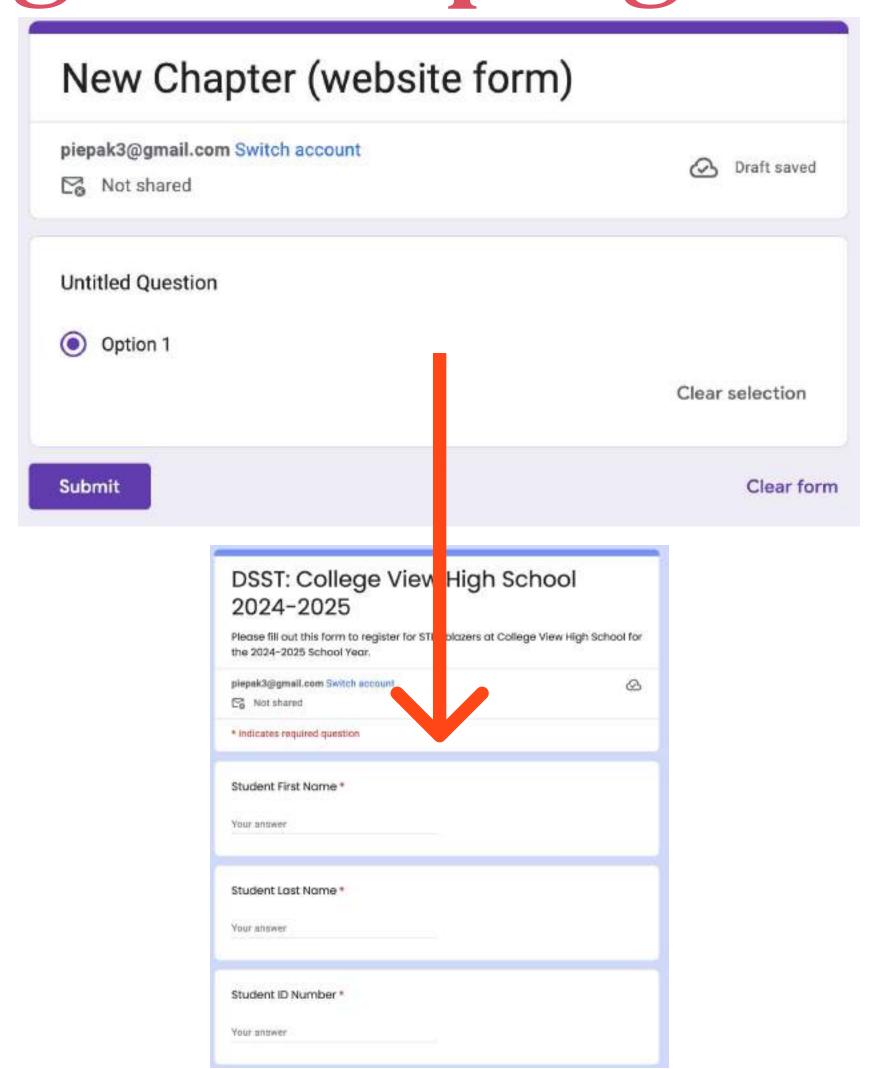
k - college freshman



Areas for Opportunity:

Audit existing google form links to ensure accuracy and functionality

 The "New Chapter" form was the only one our researchers found that was entirely broken



Areas for Opportunity:

- Adjust program description for clarity around payment, chapter limit, and registration
- STEMblazer chapter overviews should connect with their school's website in order to build verifiability and trust

This STEMblazers chapter is open to students from 8th through 12th grade enrolled at Sky View Academy.

*Registration FEE is \$150 per student to participate in this program the entire school year. This chapter is limited to 35 students.

-suggested additions

PROGRAM DESCRIPTION

Chapter is open to students from 8th through 12th grade.*Registration **FEE is \$150** to participate in this program for the entire school year. This chapter is limited to 35 students. Membership Includes:

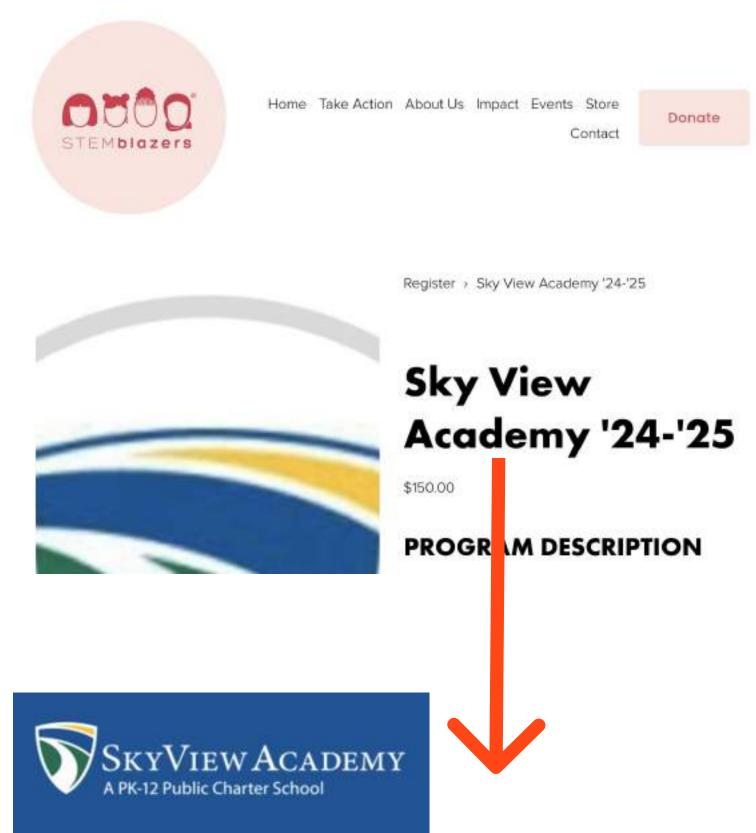
- 1. 2 Chapter meetings per month
- 2. Guest speakers; professional women working in STEM industries
- 3. Interactive hands-on activities
- 4. Professional mentoring
- Industry Tours around the Denver Metro area
- 6. Job shadow experiences

*If you would like to apply for a scholarship to cover your registration fee, please e-mail info@stemblazers.org for an application form.



Areas for Opportunity:

STEMblazer Chapter Description should link with their respective school's website in order to build verifiability and trust

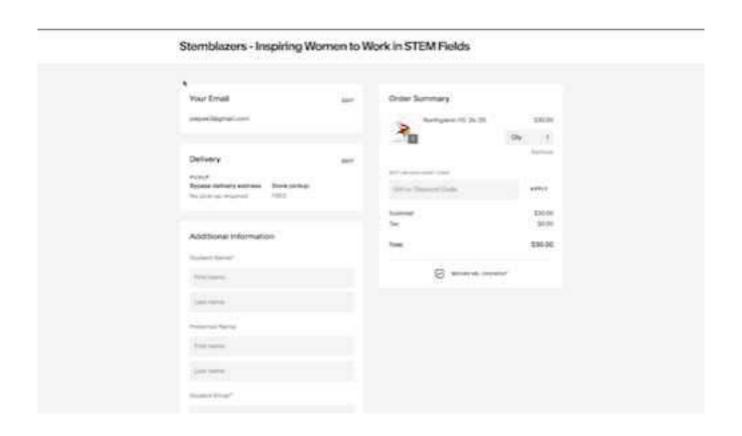


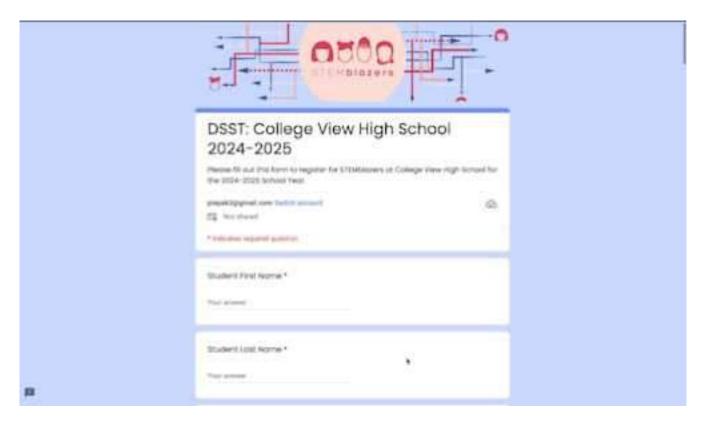
STEMblazers is Now Open for Registration: 8th - 12 graders

Registration for STEMblazers is now open to students in grades 8-12. In Douglas County, this unique opportunity is only available at our campus. Join students, teachers, and professionals who work in the STEM industry for afternoon meetings centered on career exploration, preparation for college and careers, and engineering challenges. Register here at STEMblazeres!

Areas for Opportunity:

- Formalize and standardize the registration process to be consistent for each STEMblazers chapter
 - Users trusted the form embedded on the website more than the google form
- We recommend separating information sign up form and e-commerce payment platform for a more seamless online experience





Explore how different user groups (students, teachers, parents, donors) experience the website.

Introduction

Improve Usability

Understand Audience Needs

Website Audit

Appendix

Understanding Audience Needs









Corporate Sponsors

Teacher User Journey

Their Goals:

We expect teachers want a simple way to connect students to STEM opportunities and start local chapters easily.





Teachers

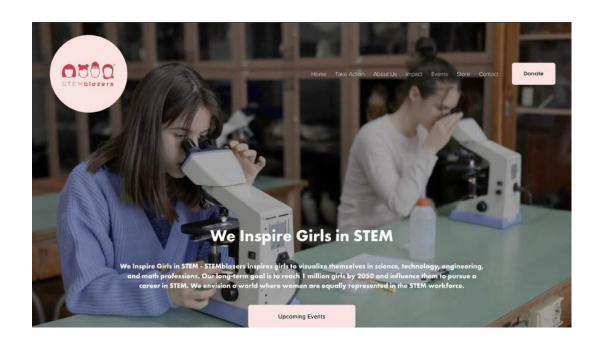
No actual path for teachers

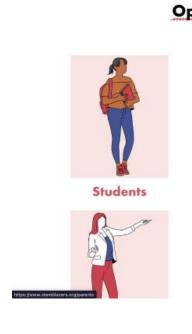
Existing Strengths:

- Clear path for Volunteers
- Shows multiple ways to get involved as volunteers

Areas for Opportunity:

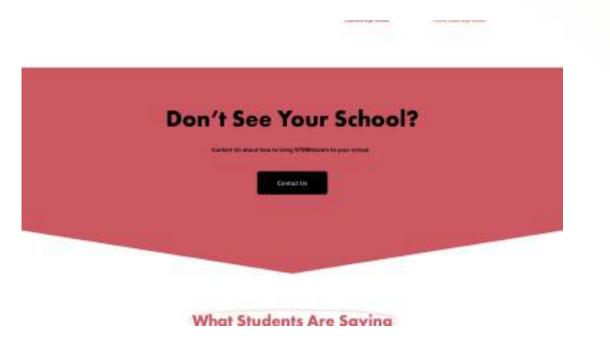
- Add a clear way for teachers to register schools.
- Include a "Teacher" link under "Take Action" on the homepage.











Become Part of the STEMblazers Community



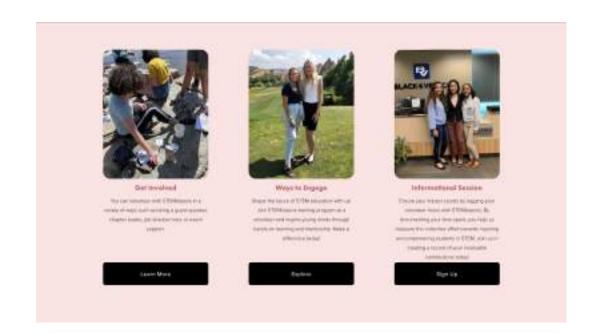
Home

Opportunities for Engagement

Go to Students page & scroll down

Contact form





Scroll down, Become part of community

Or join as a volunteer

Different ways to get involved

Parents User Journey

Their Goals:

- Explore opportunities for their children
- Partner with their employers to offer mentorship and sponsorship for STEMblazers programs





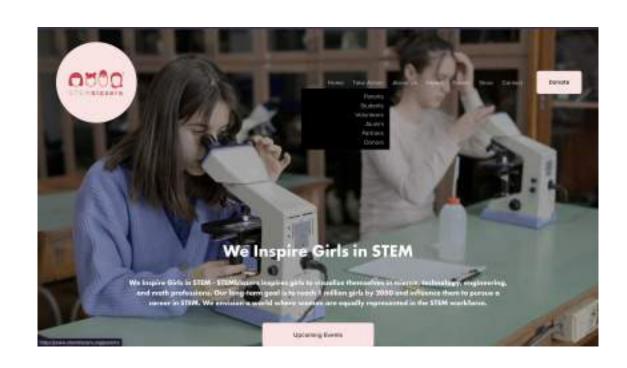
Parents

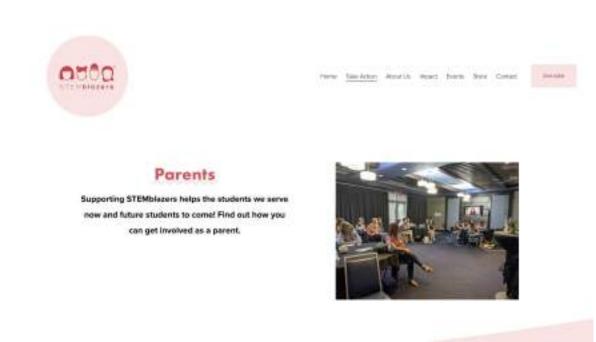
Existing Strengths:

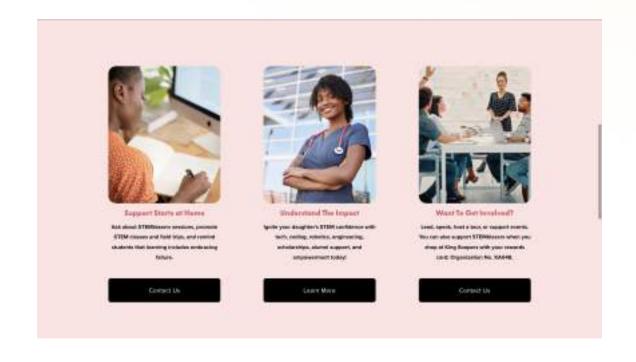
- Targeted resources for parents
- Clear engagement paths

Areas for Opportunity:

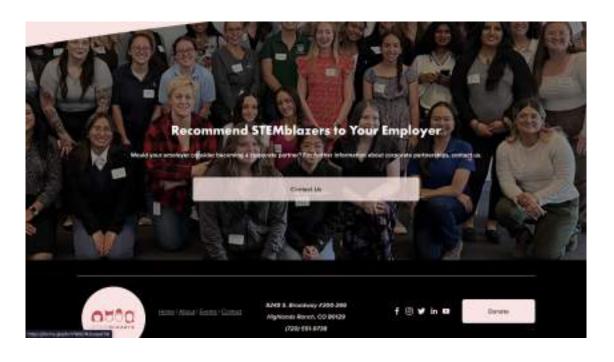
- Inconsistent experiences for forms
- Lack of details about opportunities







Take action: parent resources



Call to action: get involved

200	Hora Shekimi Apolik homi tumb tum Omis .
Contact Us	
Name (1920) Of States	Last home
Brief property	
Page .	
Seen.	
Service and or	~

Opportunities for parents

Employer partnerships

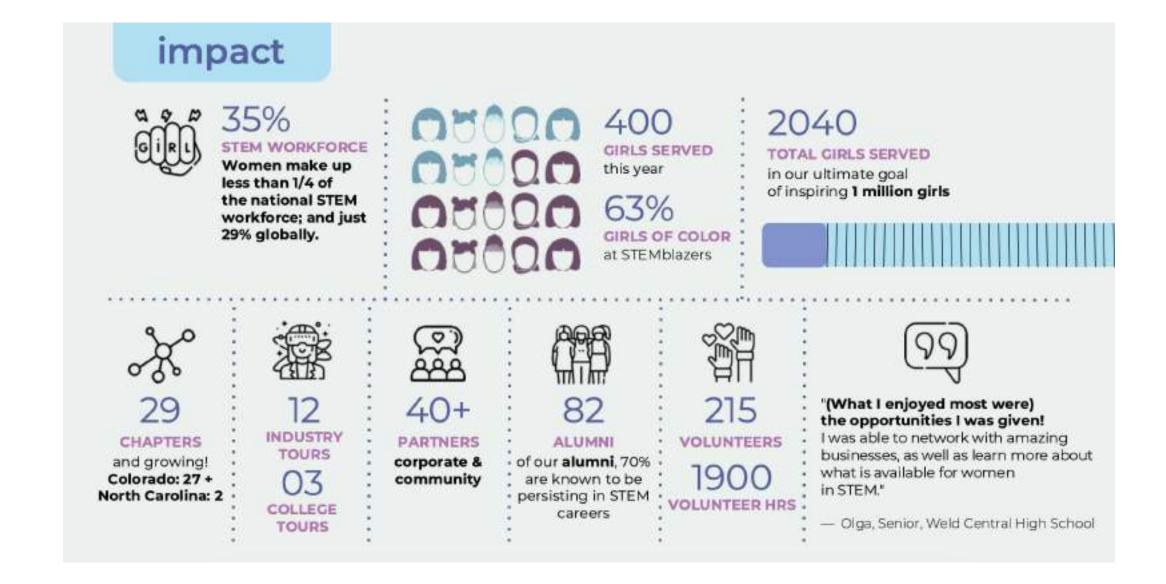
Contact form

Donors & Partners User Journey

link

Their Goals:

We expect donors and partners to seek clear impact from their support—through funding or sponsorship—so these pages should showcase benefits, success stories, recognition, and simple ways to get involved.







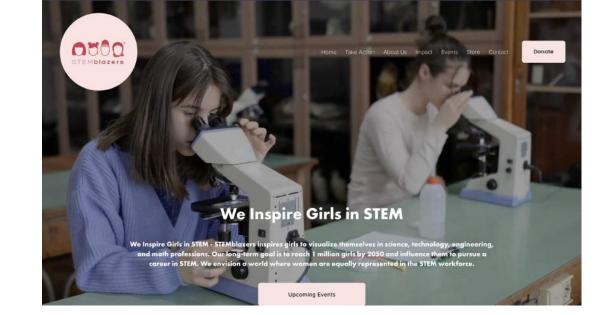
Donors & Partners

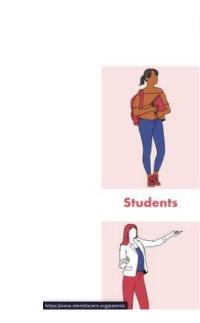
Existing Strengths:

Clear donation andpartnership opportunitieswebsite includes partner and donor testimonials

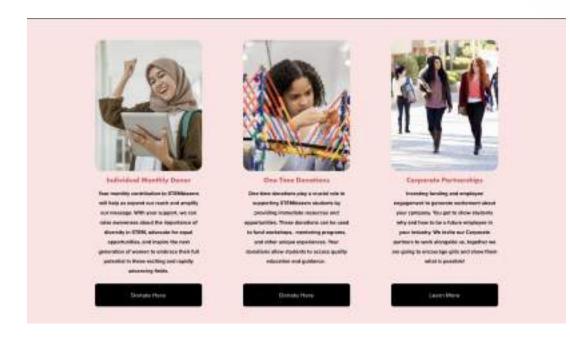
Areas for Opportunity:

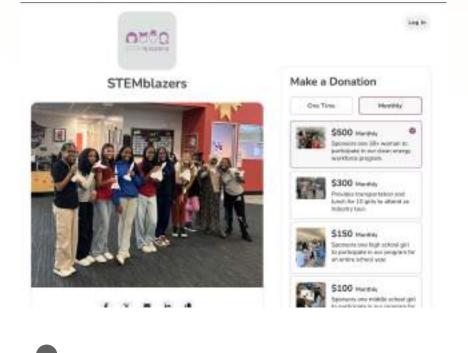
- Adding transparent impact data









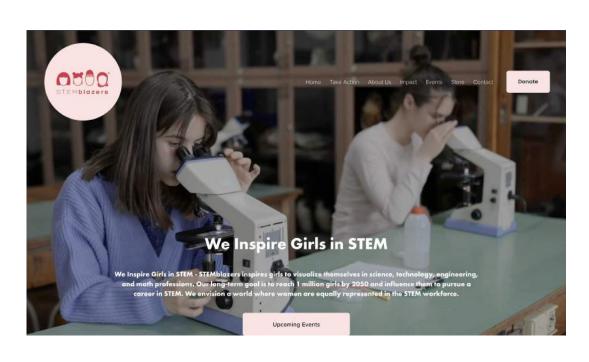


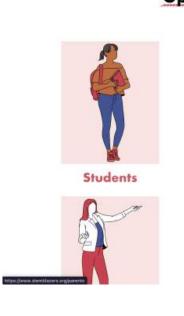
Home

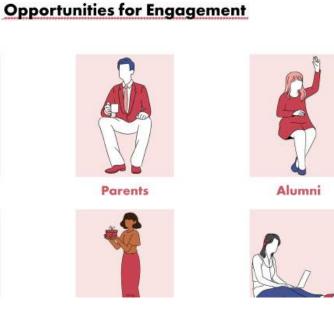
Selecting the role

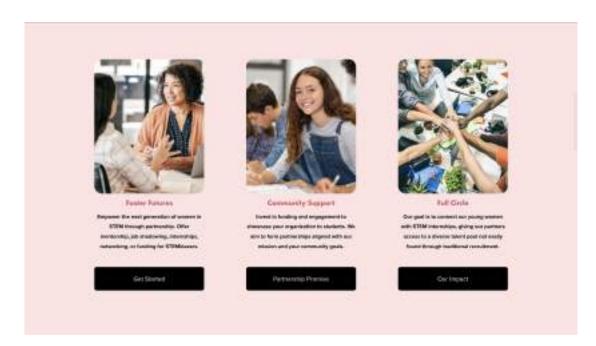
Exploring Donation Options

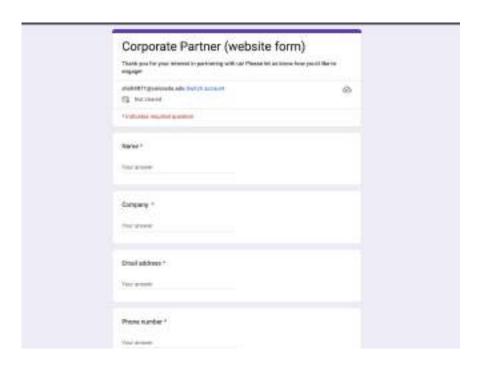
Making a Donation











Home

Selecting the role

Exploring Options

Contact Form

ome

Key issues observed during the audit, including details about its links, logos, and some of the processes observed during the review.

Introduction

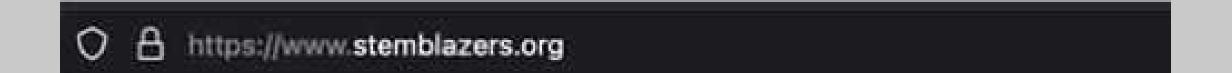
Improve Usability

Understand Audience Needs

Website Audit

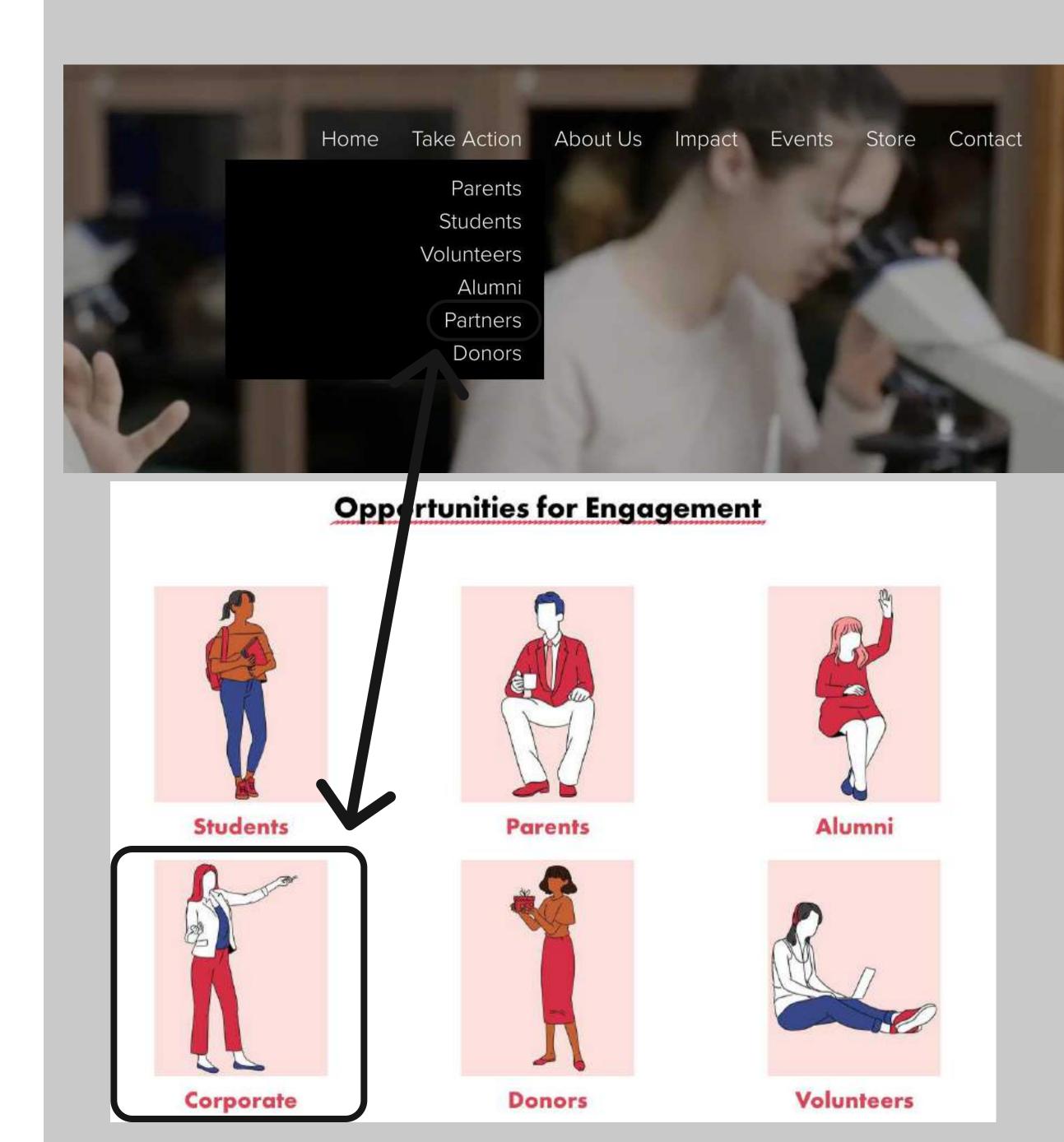
Appendix

Website URL changes to "bison-sapphire-yspe" when clicking the "home" button at any point and this change remains consistent throughout the rest of their visit on the site. This makes the website lose credibility and seem fake or untrustworthy.





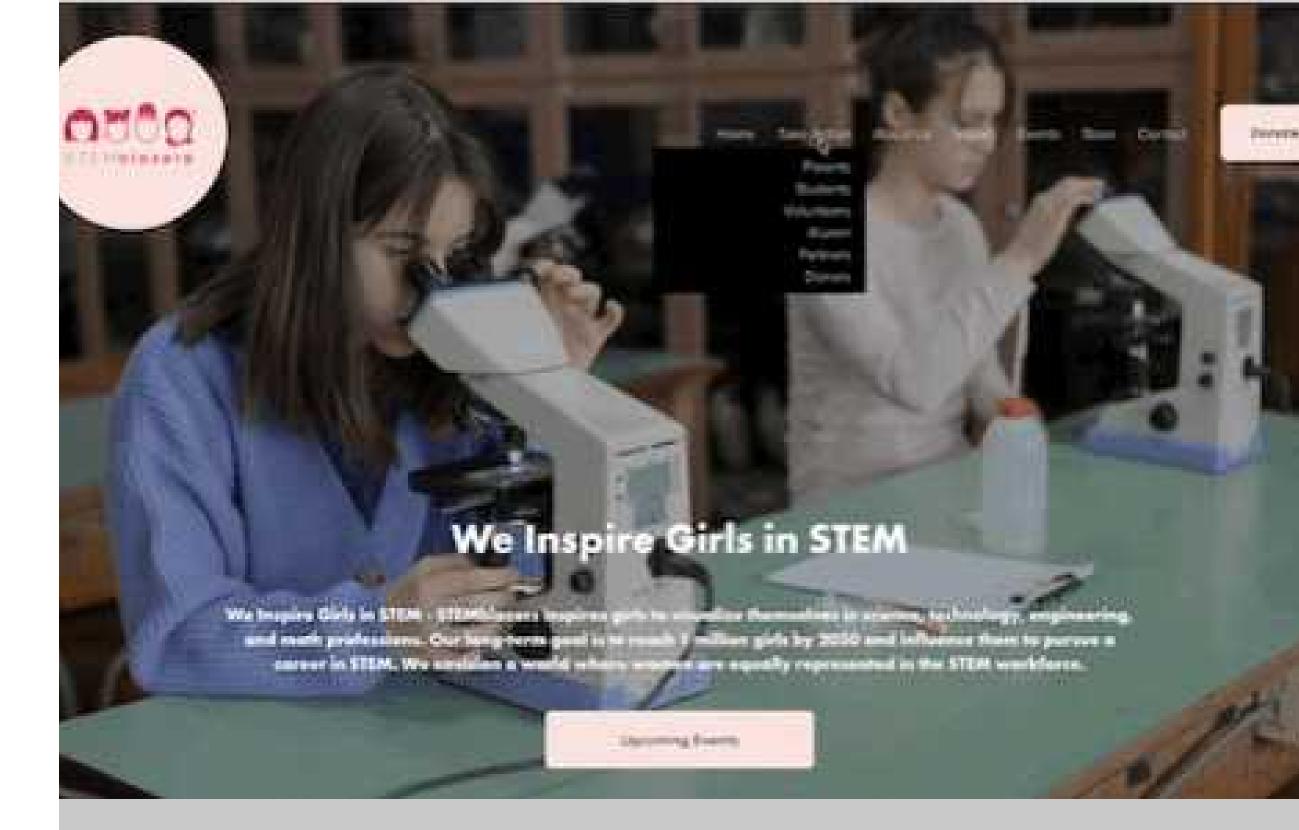
List of engagement options is different on the home page and on the "take action" sub menu – namely "Corporate" and "Partners" both lead to the "Partners" page.





Users cannot currently click on the "Take Action" or the "About Us" sections at the top of the navigation bar. In typical website flows these go to general pages that will unpack the drop down menu options

- Home > Opportunities for Engagement
- About Us > General Info



Take Action

Parents

Students

Volunteers

Alumni

Partners

Donors

About Us

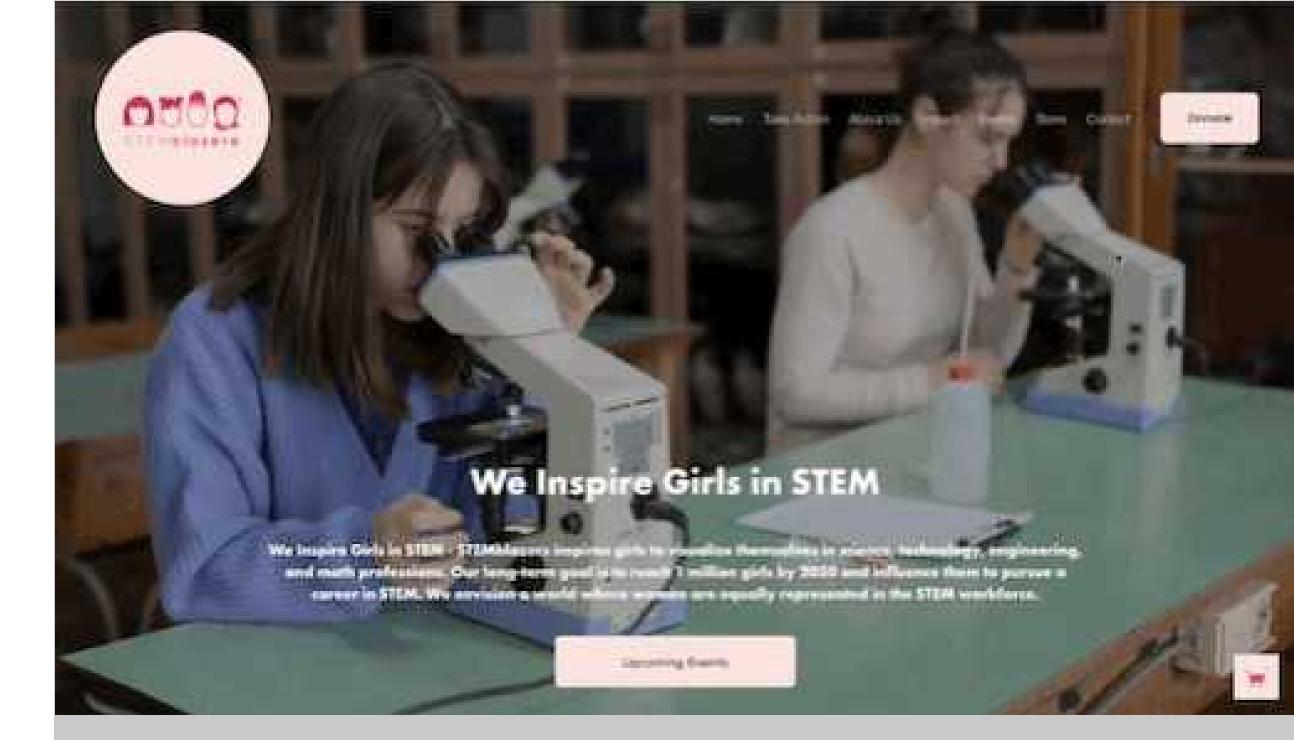
General Info

History

Team

Blog

The STEMblazers logo on donations page does not match the shape or color palette for the rest of the brand. This leads to a branding mismatch for a critical stakeholder.

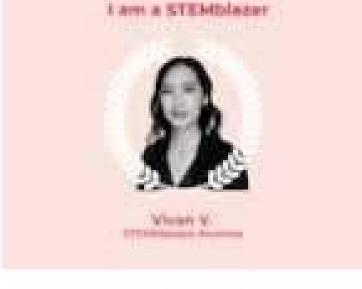




Alumni testimonials link to YouTube, which is okay, but the videos could be embedded into the website for a more professional and wholistic look.

















The schedule looks awesome, but with only one event in the whole calendar, it seems under utilized and may be an easy way to slim the website down.

North Carolina Golf Tournament



May 2025

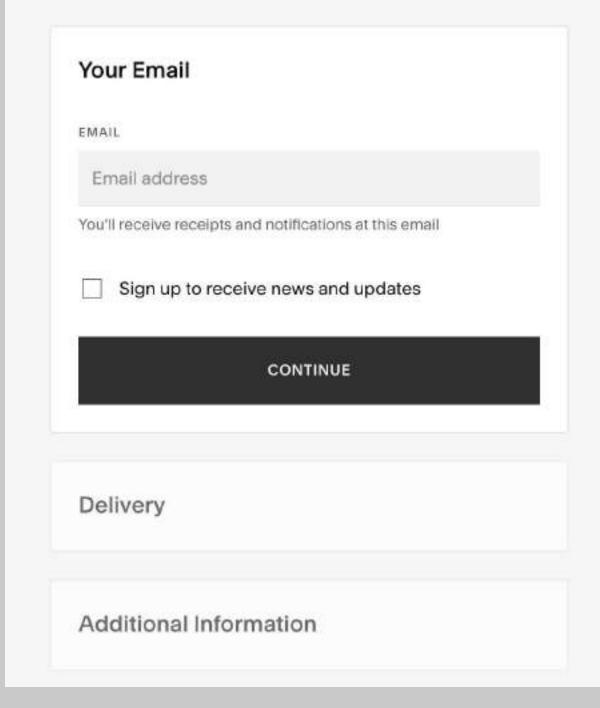


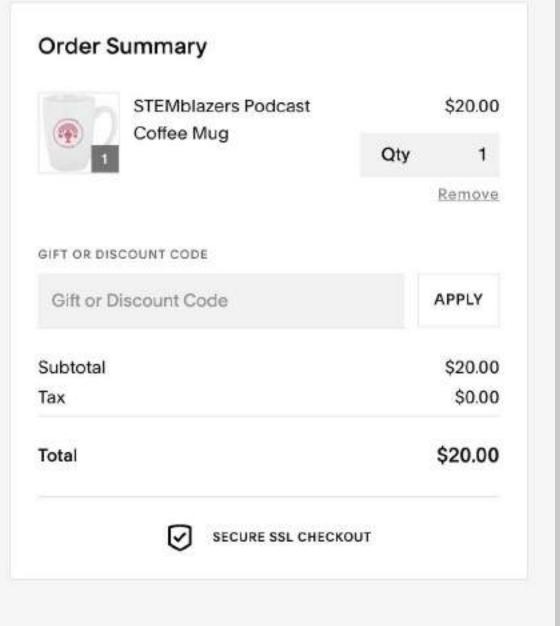
In the STEMblazers store, the items say "purchase" instead of "add to cart," which is a confusing and atypical practice.



The checkout page does not include an intuitive way to navigate back to the main site. We recommend using the STEMblazers logo or include the navigation bar to help users navigate back to the main site.

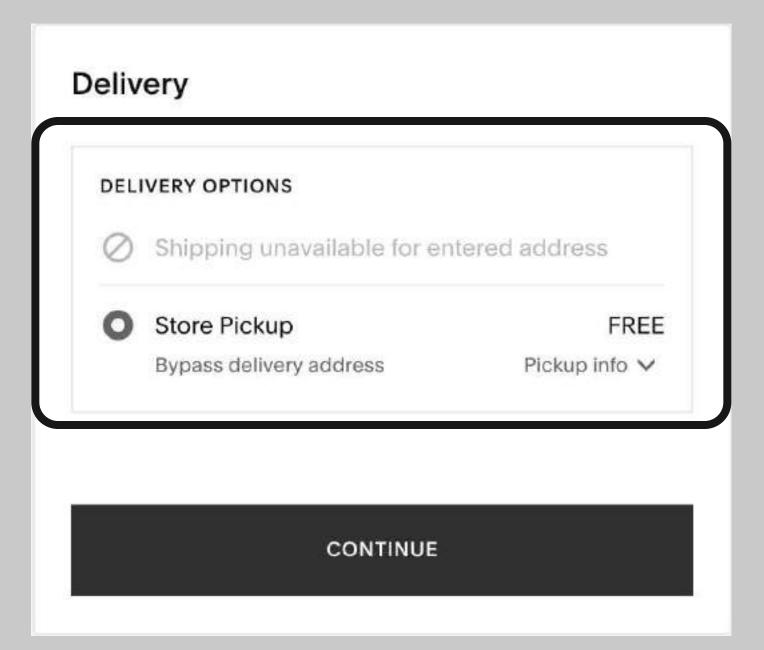
Stemblazers Inspiring Women to Work in STEM Fields

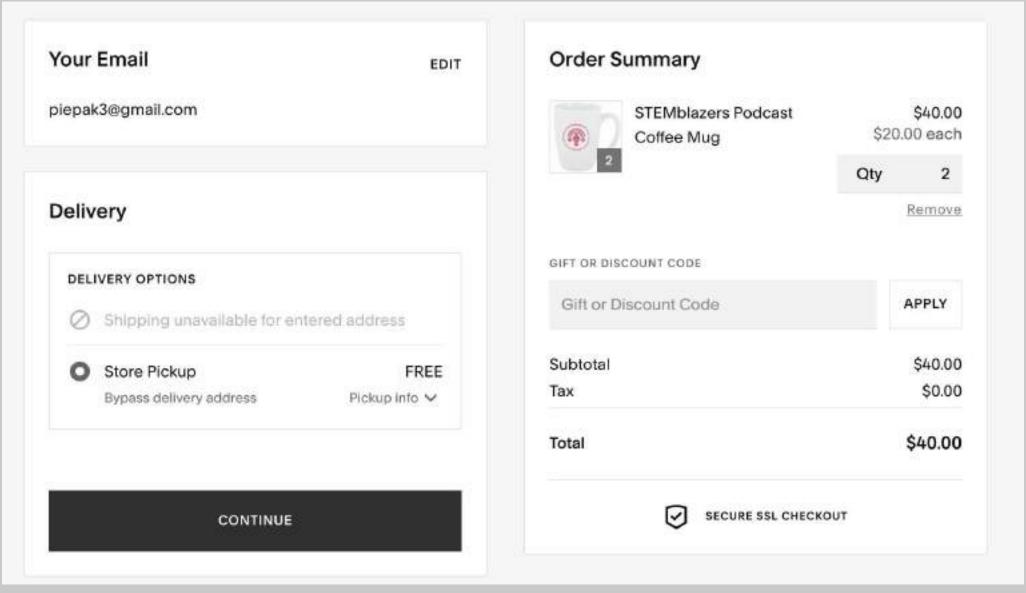




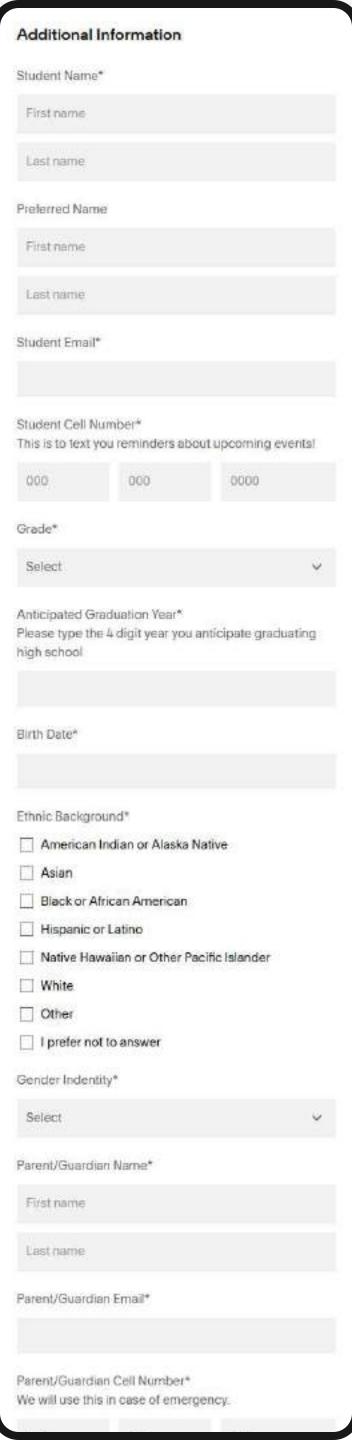


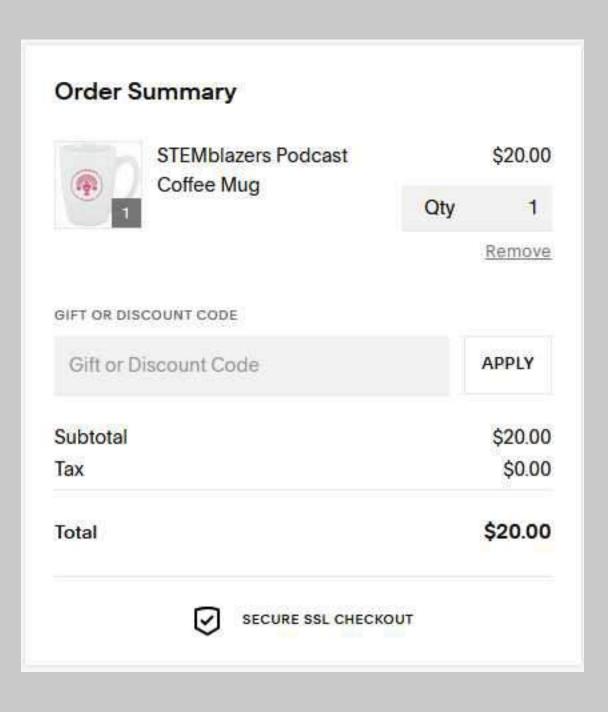
There is not a way to physically acquire any item that you purchase from the store page to our knowledge





All store items must have the full chapter form be filled out before purchase.





The color combination #DD4F62 (pinkish red) and #FFFFFF (white) has a very low contrast ratio, making it difficult to read for many users and not accessible according to WCAG standards. Consider using a darker shade or alternative color to improve legibility.

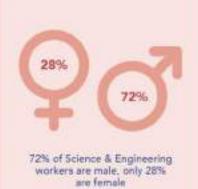
At STEMblazers, we are committed to fostering a culture of inclusivity and belonging. We actively cultivate an environment rooted in a culture of caring that prioritizes growth through listening, learning, and feedback. We recognize that true empowerment comes from taking action, and we strive to ensure that everyone feels valued and heard. As an organization, we believe it is a moral imperative to empower women in STEM and to create spaces where everyone can find their unique role in this mission.

Gender Gap in STEM

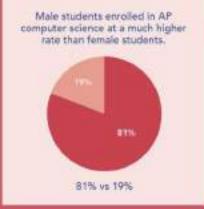
Warnen remain underrepresented in the science and engineering workforce, although to a lesser degree than in the past, with the greatest disparities occurring in engineering, computer science, and the physical sciences (NSF, Science & Engineering Indicators, 2018).

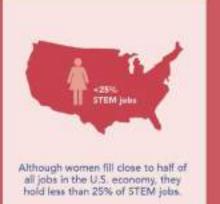
On the other hand, it has been found that as early as 13 years of age, girls have determined if they will pursue careers in STEM based on believing if they can do it. This correlates to a key developmental time in adolescence of self-confidence building and one of the reasons why STEMblazers targets middle school and high school girls with its programming. Take a look at these facts and click if you want to know more.

Explore the Gender Gap in STEM









Key Takeaways

Key areas for opportunity

- On the home page make clear what you provide to students (ie. after school programs, mentorship).
- Add additional pathways for stakeholders such as teachers and parents to help start chapters.
- Stronger consistency between different form experiences for all stakeholders.

Thank you!

Critical user journeys for STEMblazers students, as well as for Girls Who Code users such as teachers, donors, partners, and students. Introduction

Improve Usability

Understand Audience Needs

Website Audit

Appendix

Appendix

Benchmark best practices

Similar Organization User Journeys

- Goal: Analyzed different stakeholder experiences on STEMBlazers website & compared it to Girls Who Code.
- Compares students, teachers, parents, and donors user experiences with a similar nonprofit organization.



VS



Similar Organizations

1

Girls Who Code

Mission: To close the gender gap

in technology.

Founded: 2012

Functionality: Provides coding clubs (3rd–12th grade), summer

programs, college support,

curriculum resources, and alumni

network.

2

Techbridge Girls

Mission: To empower girls of color (ages 7–17) through coding and

tech education.

Founded: 2011

Functionality: Offers workshops, hackathons, and tech events

focused on coding, robotics, and

app design.

3

Black Girls CODE

Mission: To re-engineer STEM education for girls from

marginalized communities.

Founded: 2000

Functionality: Delivers afterschool STEM programs, educator training, and culturally relevant curriculum for underrepresented girls.



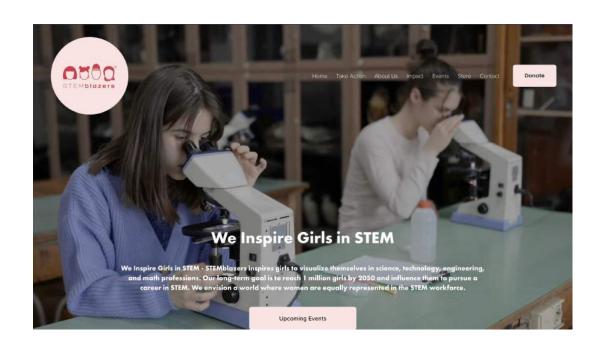
Students

Existing Strengths:

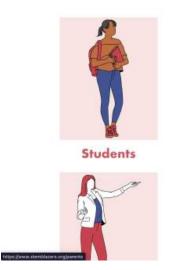
- Clear path for registration
- Shows multiple ways to get involved
- Consistent color scheme

Areas for Opportunity:

- Communicate to students what STEMblazers provides earlier
- Make clear it is a school program

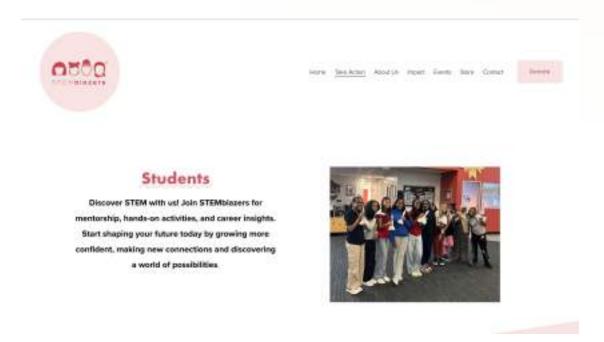








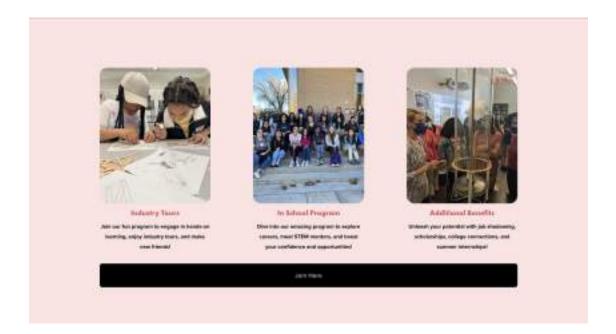




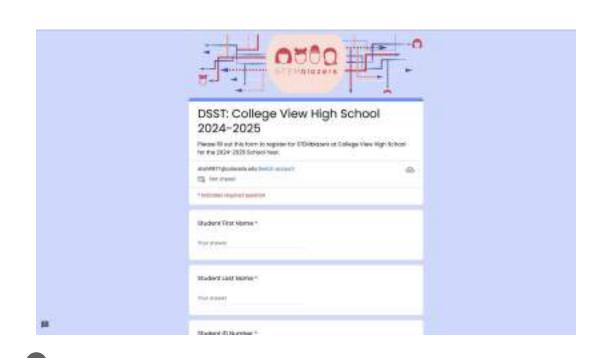
Home











Scroll to "Join Here"

Find my school

Register on separate Google Form



Students

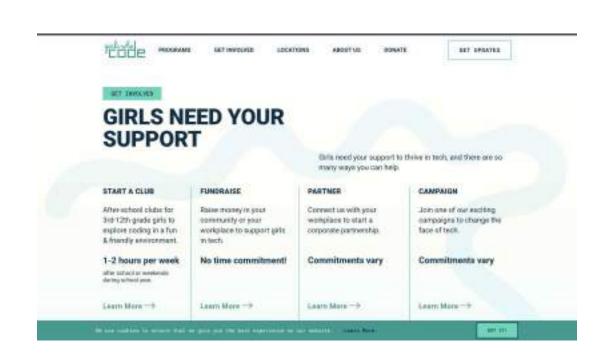
Existing Strengths:

- Clearly advertises the programs & features they offer
- Stats build rapport & trust
- Focused UX for adults, not students

Areas for Opportunity:

- No user experience for students who want to get involved
- Need to give students info on how to get a teacher / adult to register for org







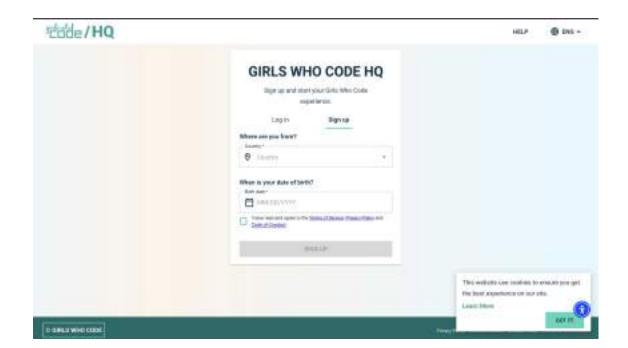
Home



Nav > "Programs"







"Programs" > Sub-Nav > "Club Programs"

"Locations" > Colorado

Apply to start a club (not for students)



Teachers

Existing Strengths:

- Visually appealing



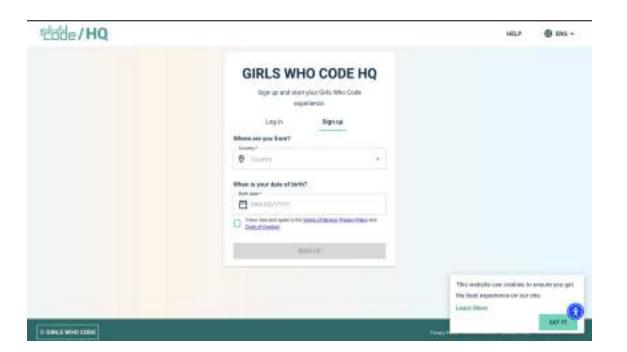
- No user experience for Teachers
- It could have more clear path



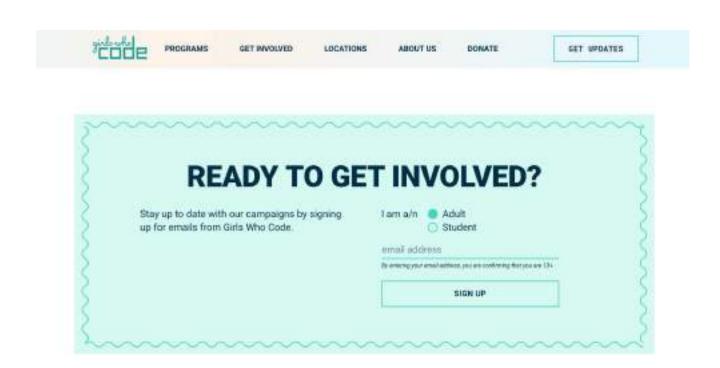




Home



Nav > "Get Involved" > Start a club



Start a club

Nav > "Get Involved" > Campaign



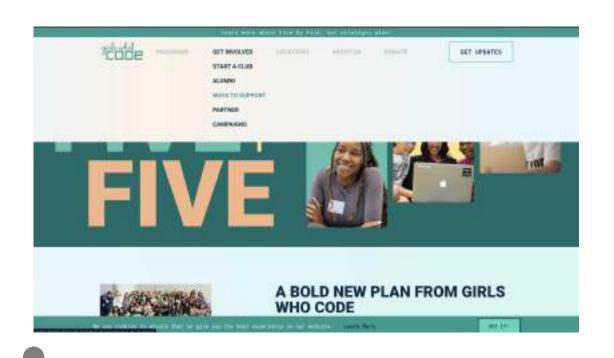
Donors & Partners

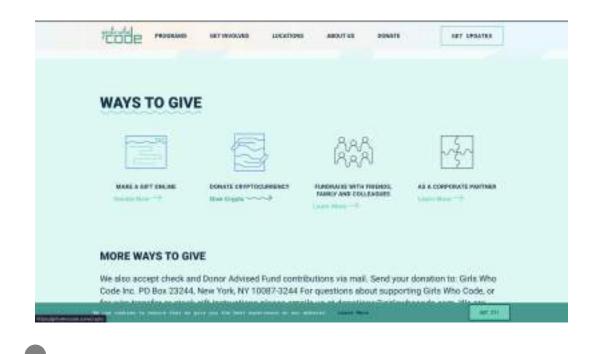
Existing Strengths:

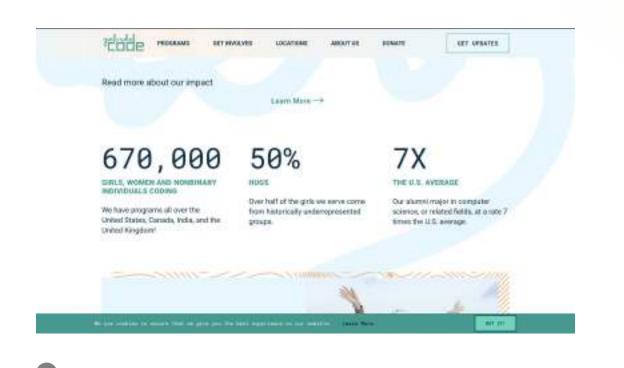
- Annual report access: Shows the impact and outcomes of donations

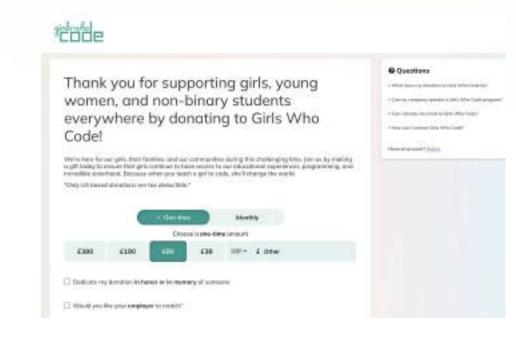
Areas for Opportunity:

- several donation methods









Home > Navigating to ways to support Opportunities



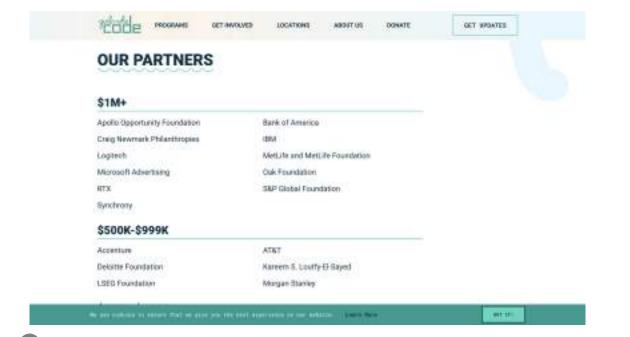
Seeking Detailed Information

Making a Donation









Contact

Get to know about existing partners