



STEMblazers

May 2025



Meet the team, define UX
research, and project overview

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.
- 3 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.

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

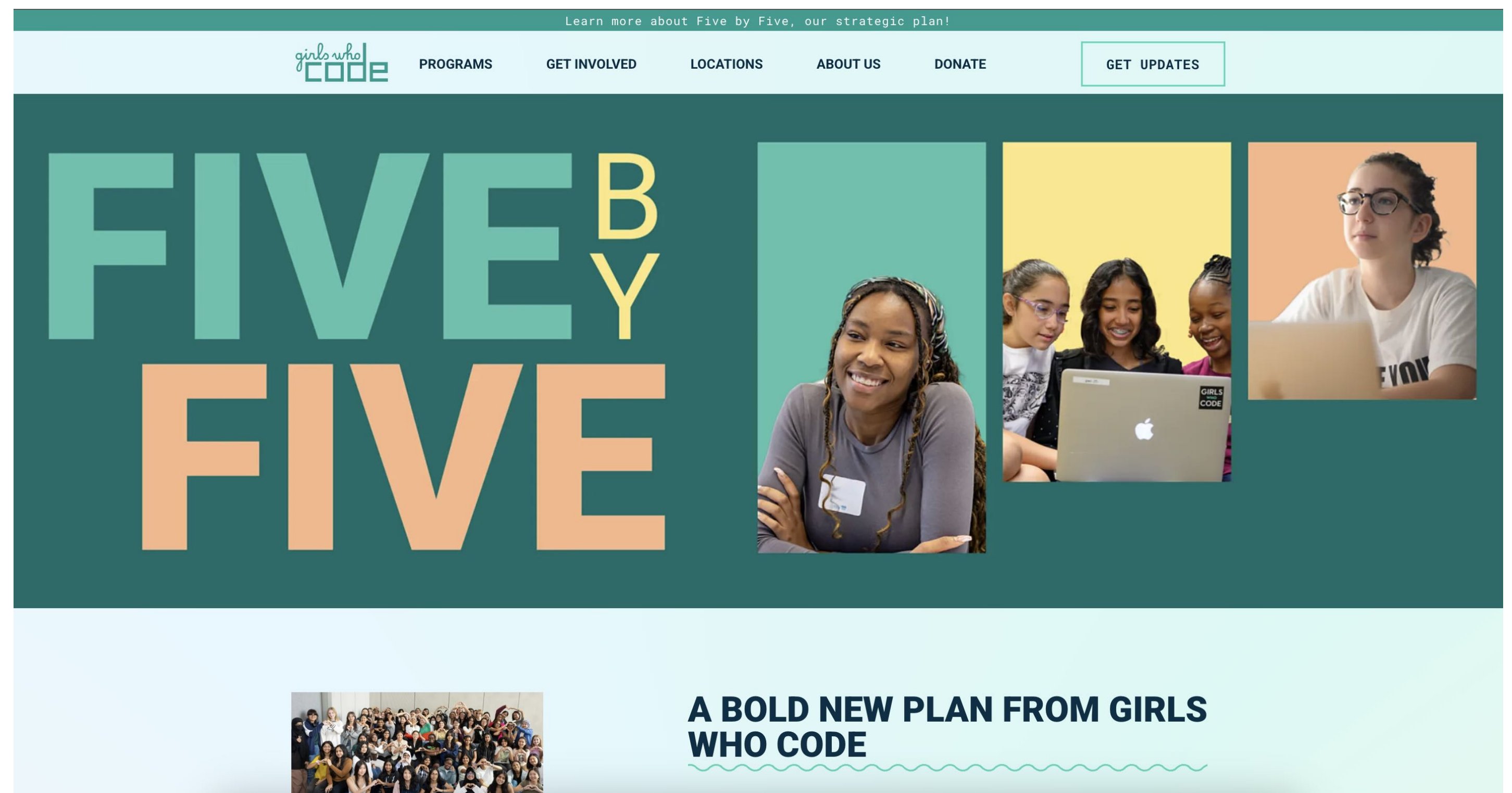
Mission: To close the gender gap in technology.

Founded: 2012

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

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

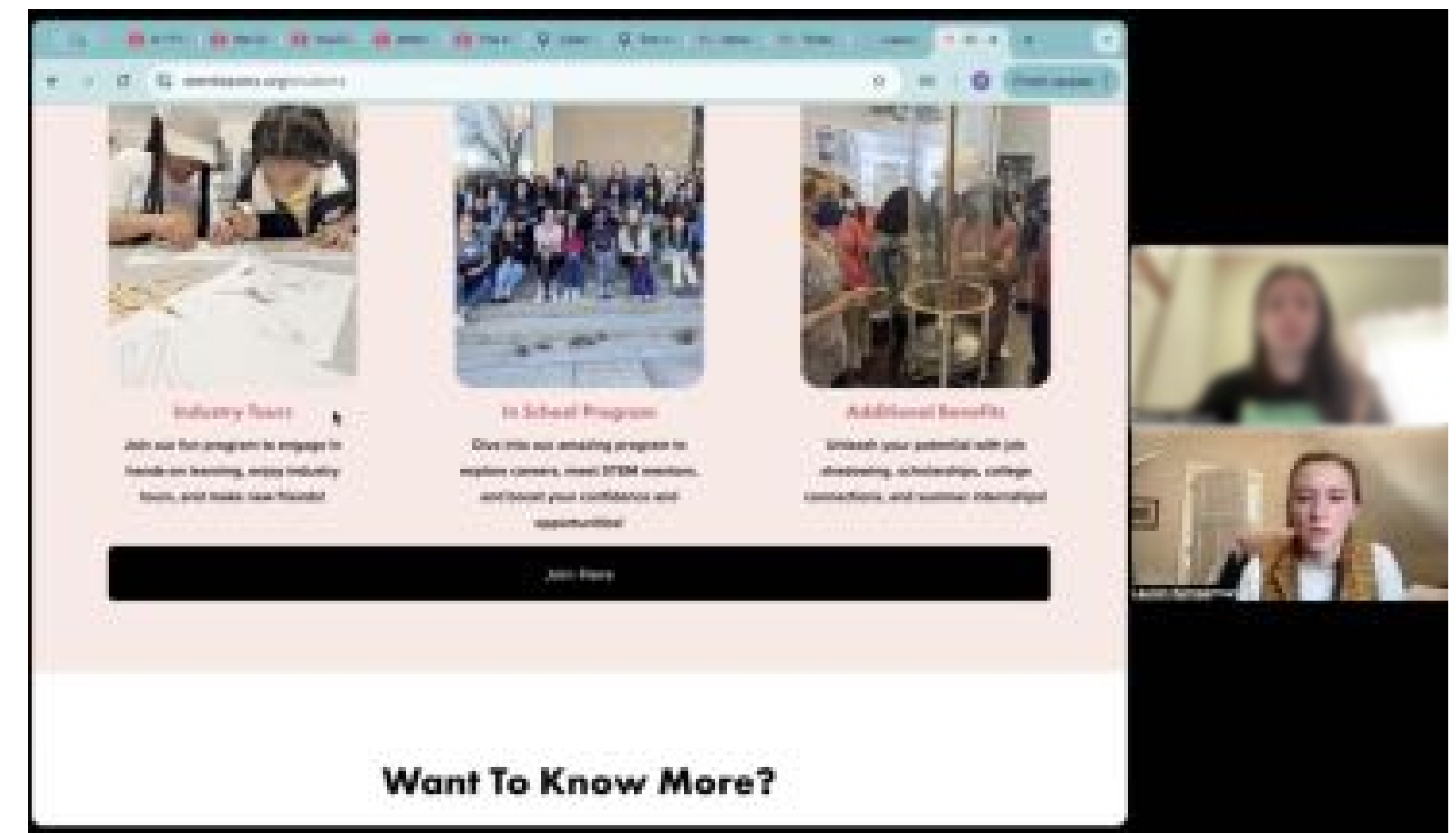
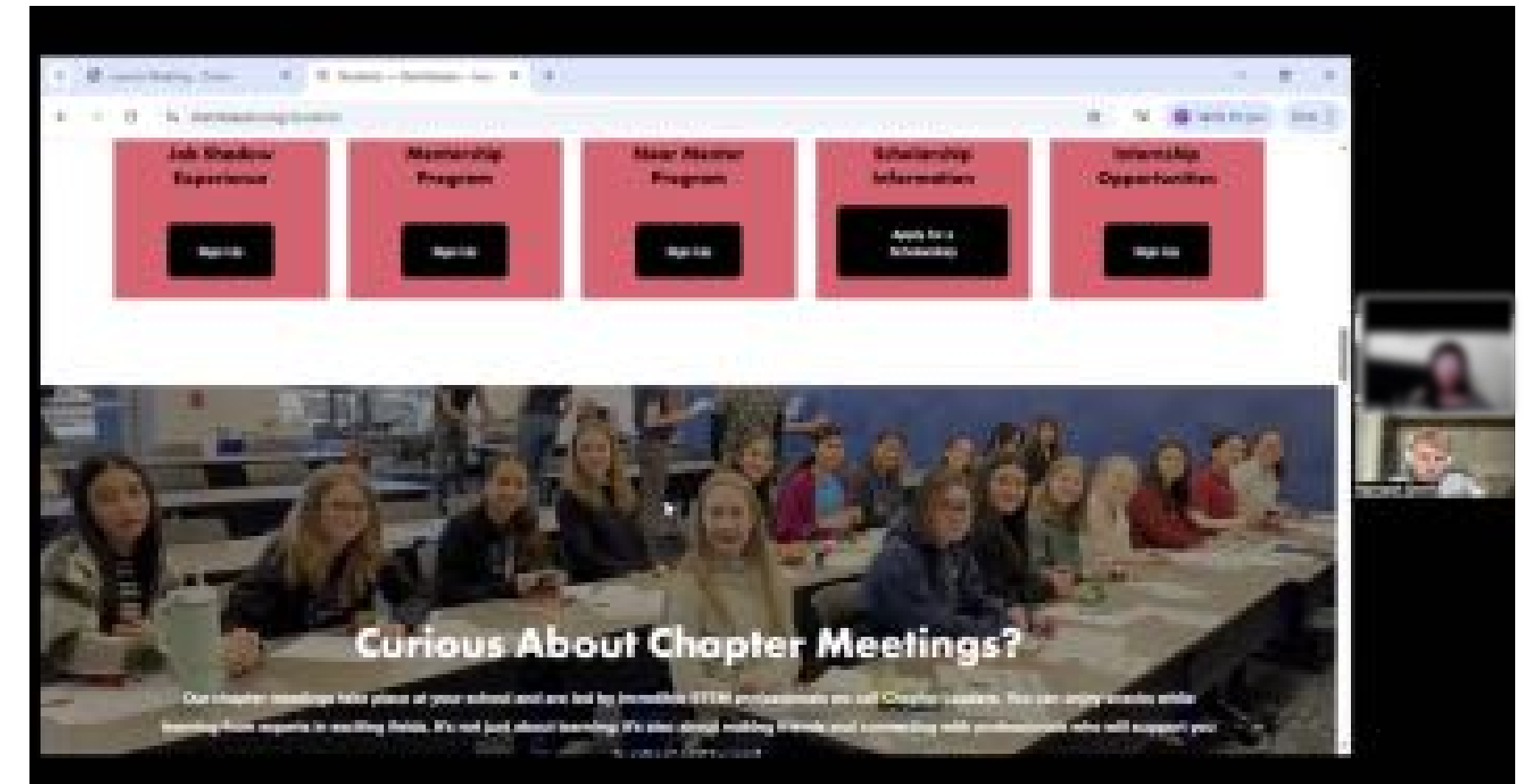
Understand Audience Needs

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

1

**Explore the website
and give initial
thoughts**

2

**Discover how to get
involved through
the site**

3

**Register for a new
or existing school
program**

Interview Plan

1

**Explore the website
and give initial
thoughts**

2

Discover how to get
involved through
the site

3

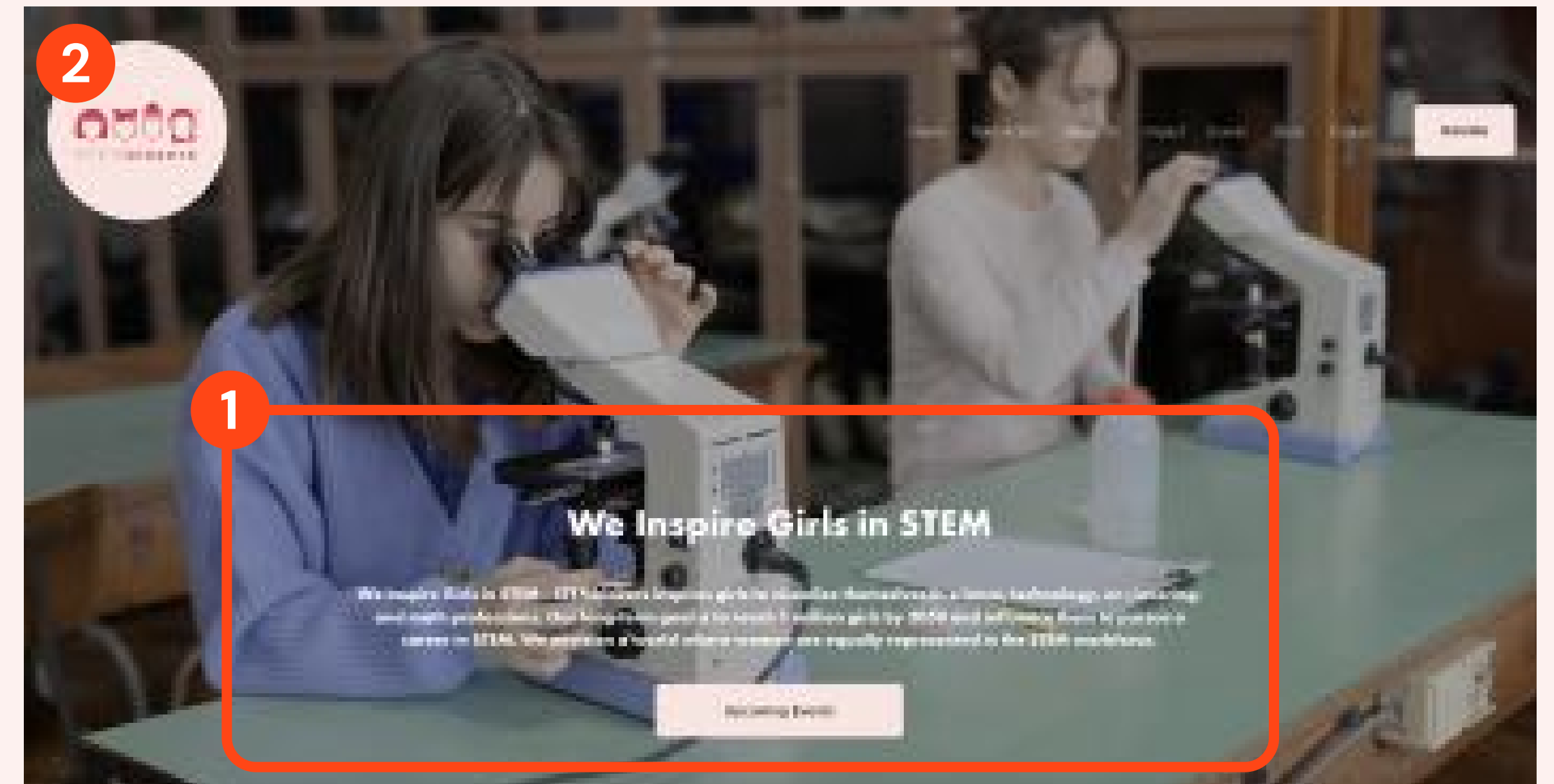
Register for a new
or existing school
program

01 Explore the website and give initial thoughts

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).

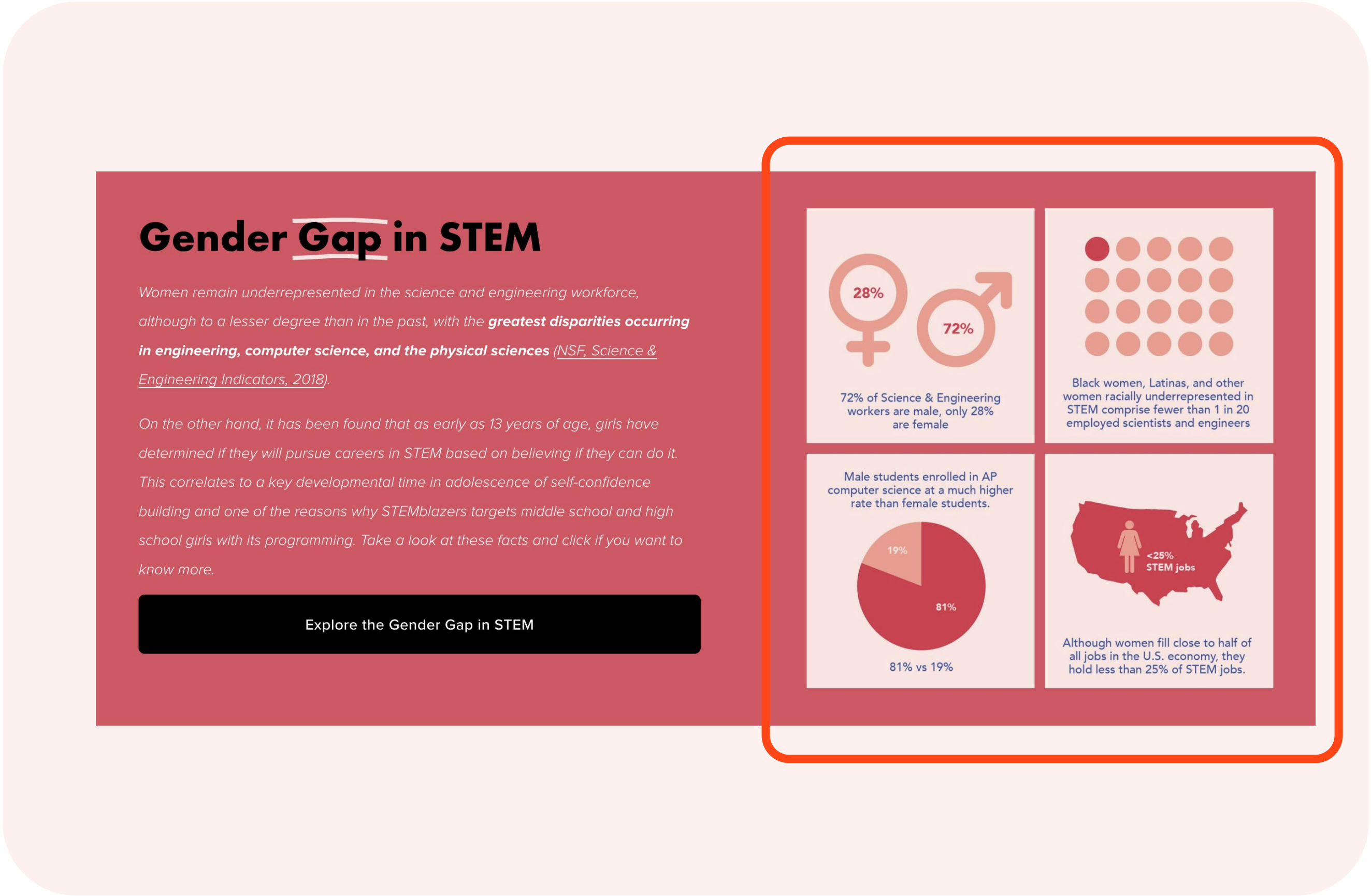


01

Explore the website and give initial thoughts

Successes:

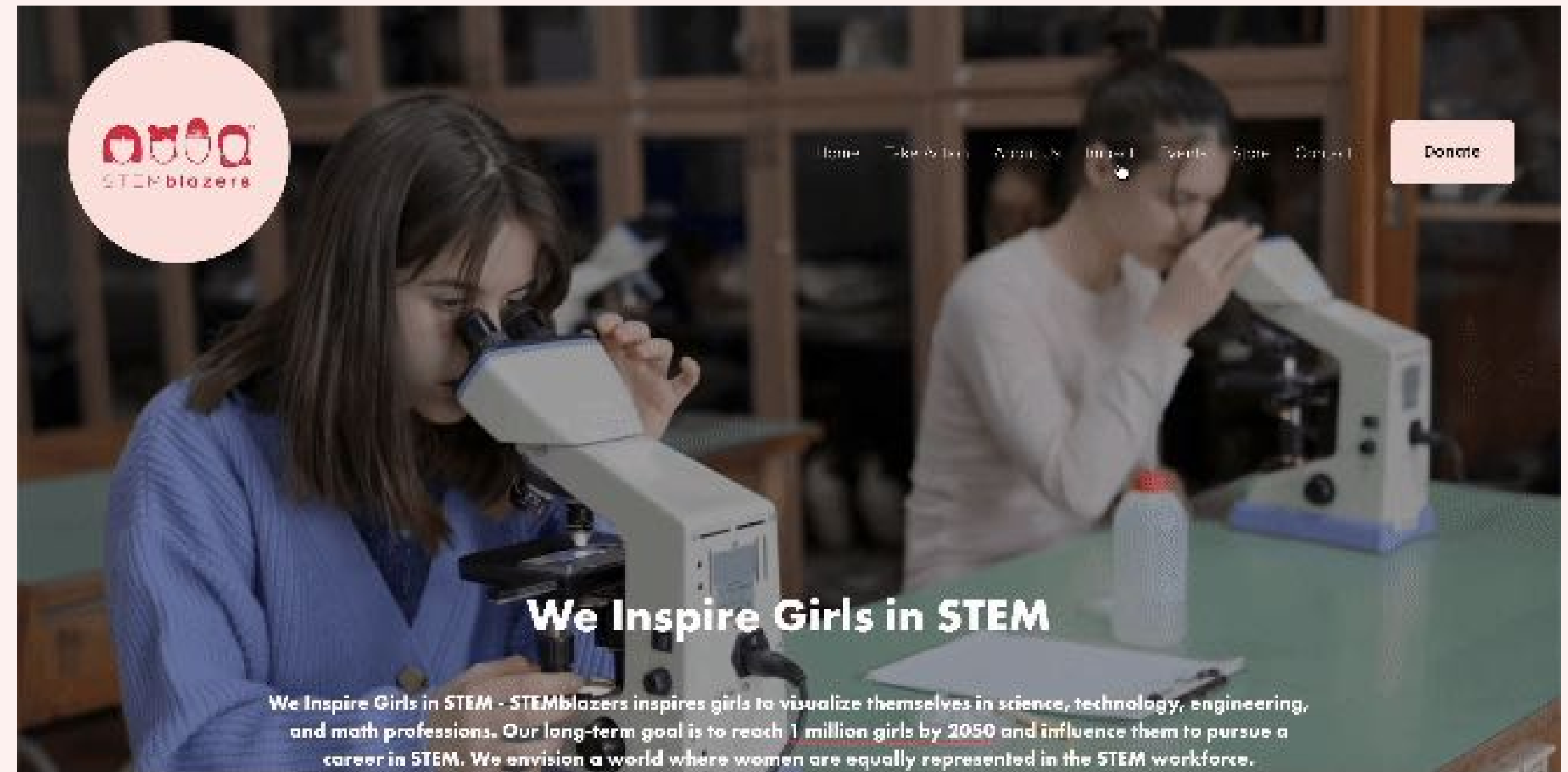
Statistics-driven mission generated empathy with the users by visually quantifying the problem for anyone to understand.



01 Explore the website and give initial thoughts

Successes:

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



01 Explore the website and give initial thoughts

Insights:

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



01

Explore the website and give initial thoughts

“ 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

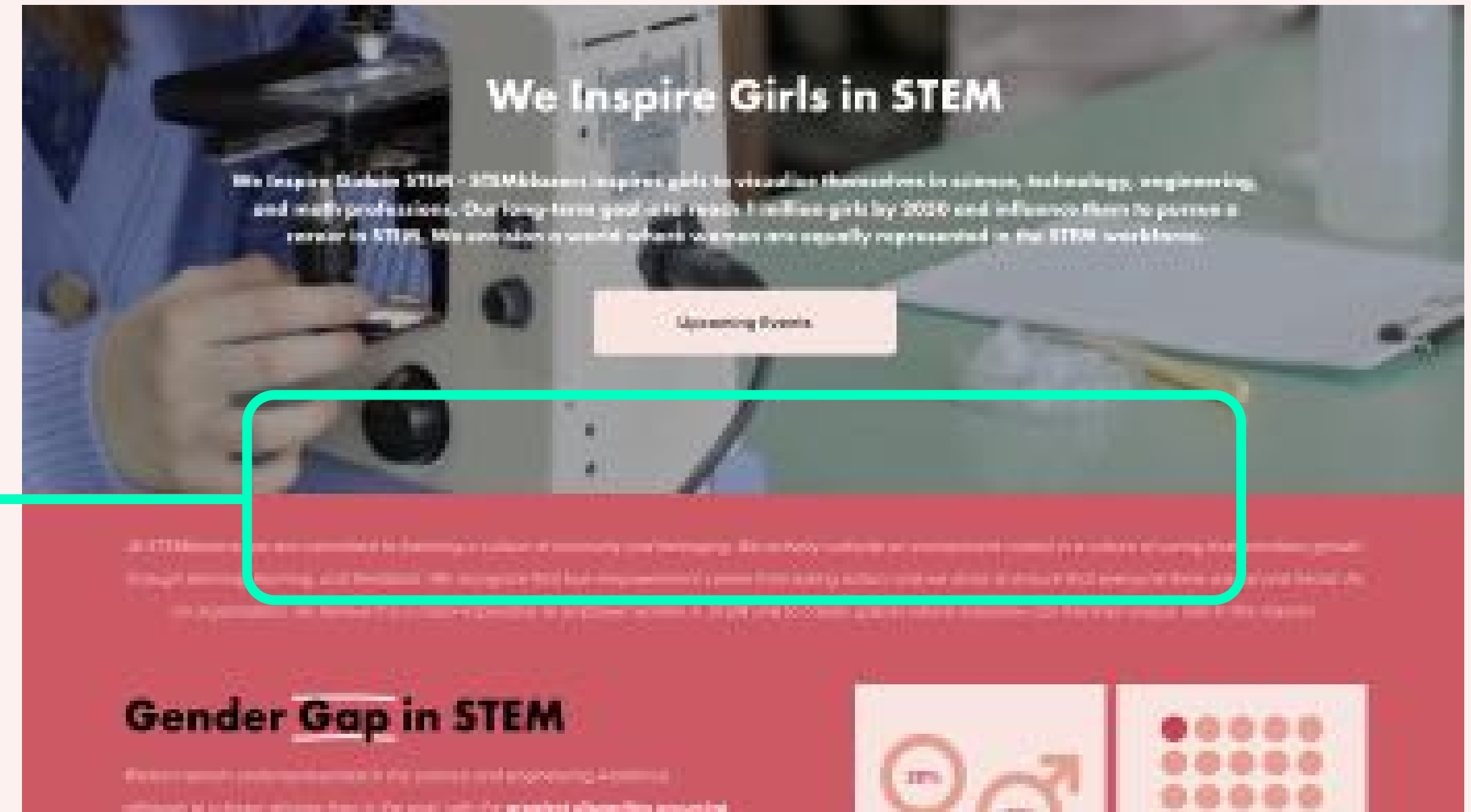


01 Explore the website and give initial thoughts

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

1

Explore the website
and give initial
thoughts

2

**Discover how to get
involved through
the site**

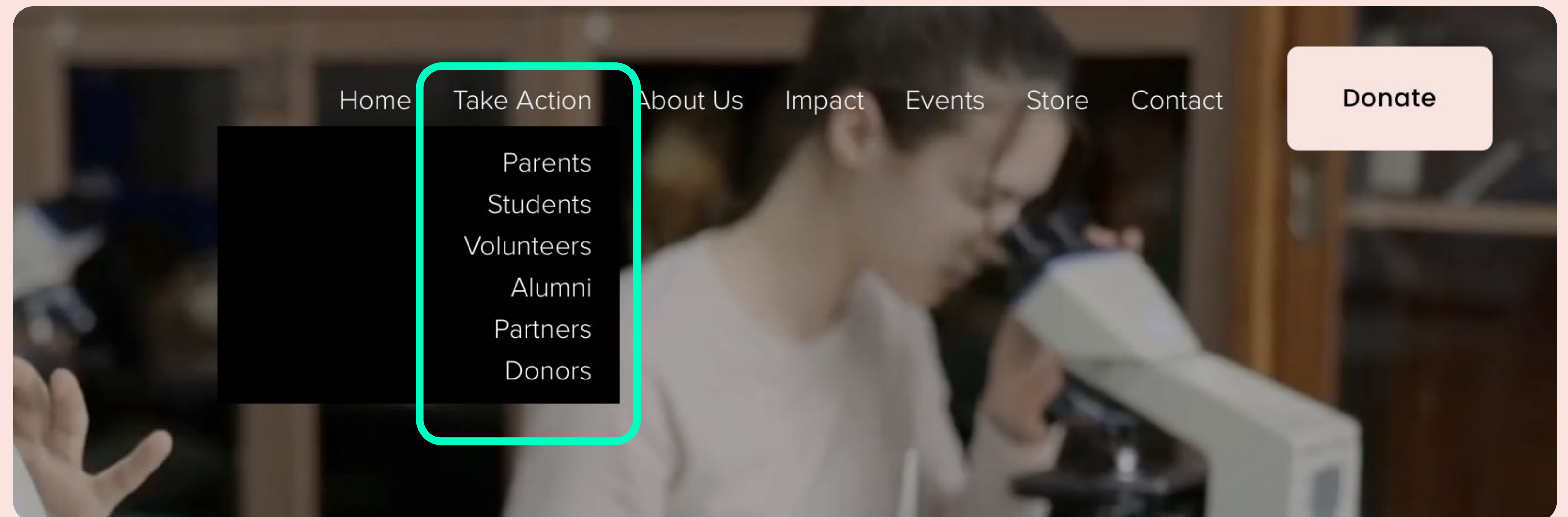
3

Register for a new
or existing school
program

Discover How to Get Involved

Successes:

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



Discover How to Get Involved

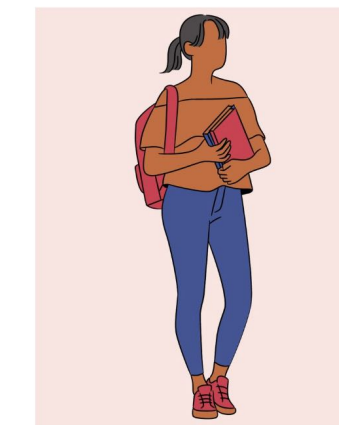
Successes:

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

“it 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

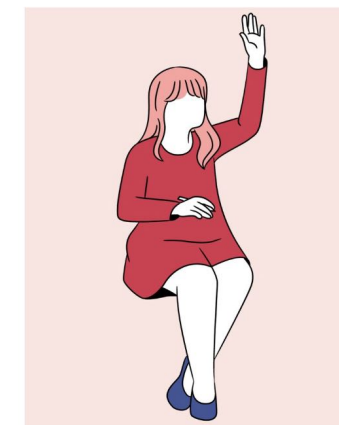
Opportunities for Engagement



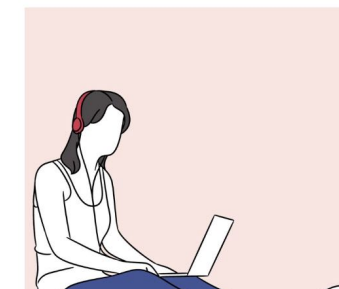
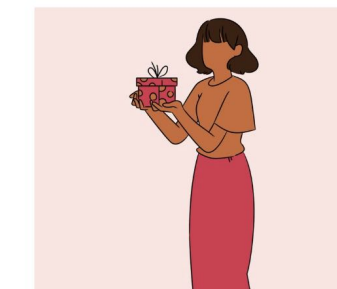
Students



Parents



Alumni



Discover How to Get Involved

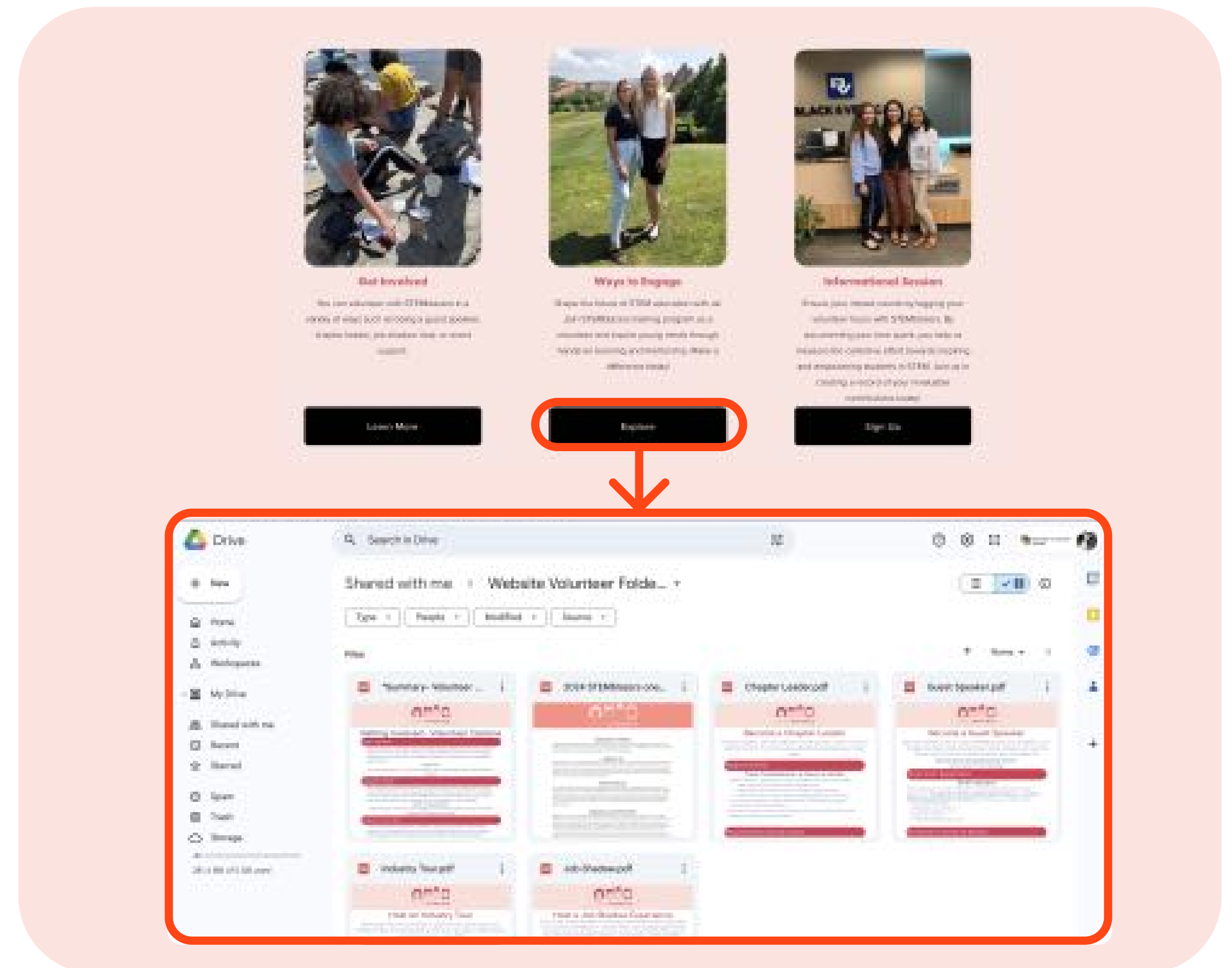
Insights:

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



Discover How to Get Involved

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.

Don't See Your School?

Contact Us about how to bring STEMblazers to your school.

Contact Us



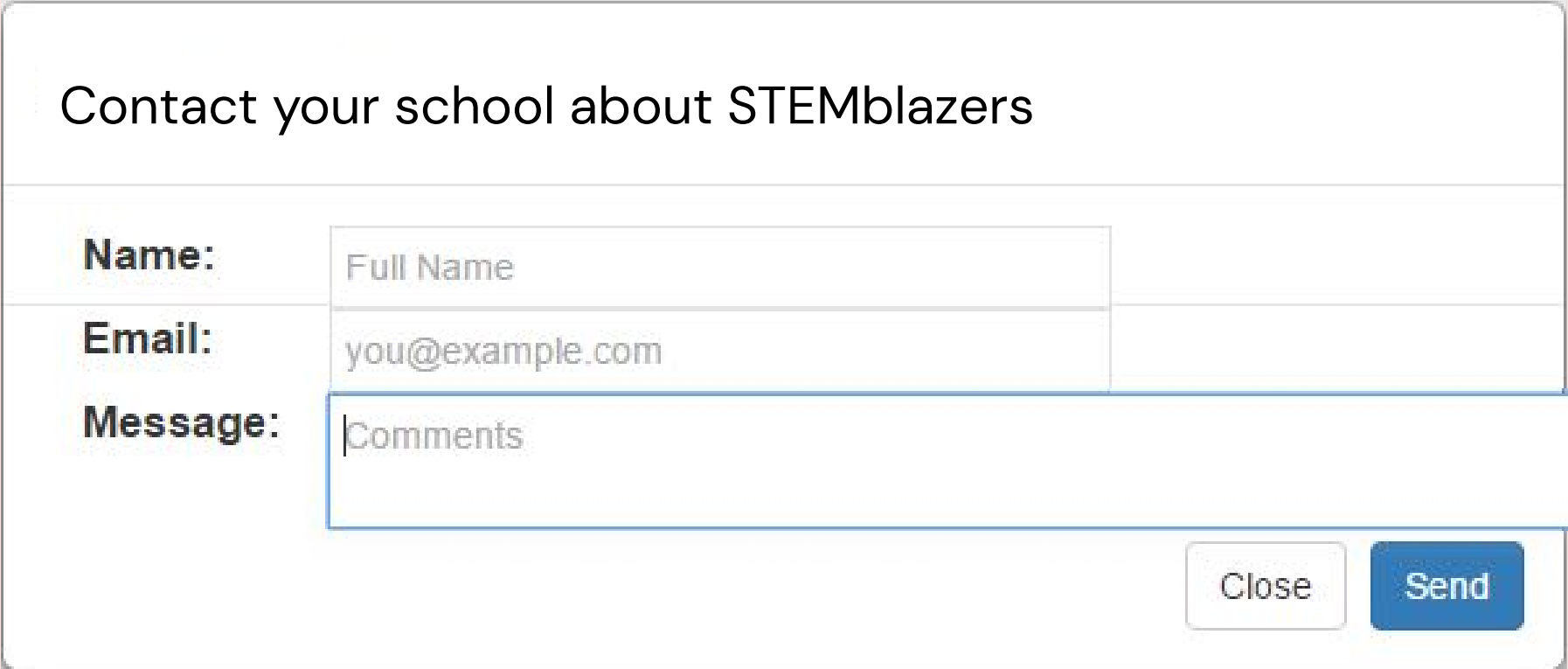
[Home](#) [Take Action](#) [About Us](#) [Impact](#) [Events](#) [Store](#) [Contact](#)

Discover How to Get Involved

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.*



Contact your school about STEMblazers

Name:	Full Name
Email:	you@example.com
Message:	Comments

Discover How to Get Involved

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.

STEMblazers

Host an Industry Tour

An industry tour of your office or place of work gives a group of Middle or High School students a chance to see what it really means to pursue a career in your field.

Impact

Provide a tour to a group of students (middle or high school) to give them a "behind the scenes" look into your industry. Tours are also a great way to engage students and generate excitement about both your industry and your company. You get to introduce your company to prospective future employees and inspire the next generation!

Typical Tour - What to expect

Time Commitment: 2-3 hours

Tours can be of office spaces or job sites, and can include hands on activities or demonstrations. We are happy to help you craft the perfect visit! Some of our tour highlights include a construction site for a hospital expansion, visits to engineering offices featuring product demonstrations and hands on activities, and manufacturing facility visits.

- Most tours are afternoons - often starting around noon or 1.
- Middle School tours are best on Saturdays.
- High school tours are best on Saturdays.

All details are subject to change.

For more information or to sign up, click here.

Get Involved

Whether you are a STEM professional or a student, you can get involved with STEMblazers. We are looking for people who are passionate about STEM and want to help inspire the next generation.

[Learn More](#)

Become a Sponsor

Whether you are a STEM professional or a student, you can get involved with STEMblazers. We are looking for people who are passionate about STEM and want to help inspire the next generation.

[Sponsor](#)

Informational Session

Whether you are a STEM professional or a student, you can get involved with STEMblazers. We are looking for people who are passionate about STEM and want to help inspire the next generation.

[Sign Up](#)

Interview Plan

1

Explore the website
and give initial
thoughts

2

Discover how to get
involved through
the site

3

**Register for a new
or existing school
program**

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



Register for a new or existing school program

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
2. Guest speakers: professional women working in STEM industries
3. Interactive hands-on activities
4. Professional mentoring
5. Industry Tours around the Denver Metro area
6. Job shadow experiences

Register for a new or existing school program

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

“Oh shoot, I wasn’t expecting a google doc out of it”

K - college freshman



Register for a new or existing school program

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

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
5. 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.

Quantity:

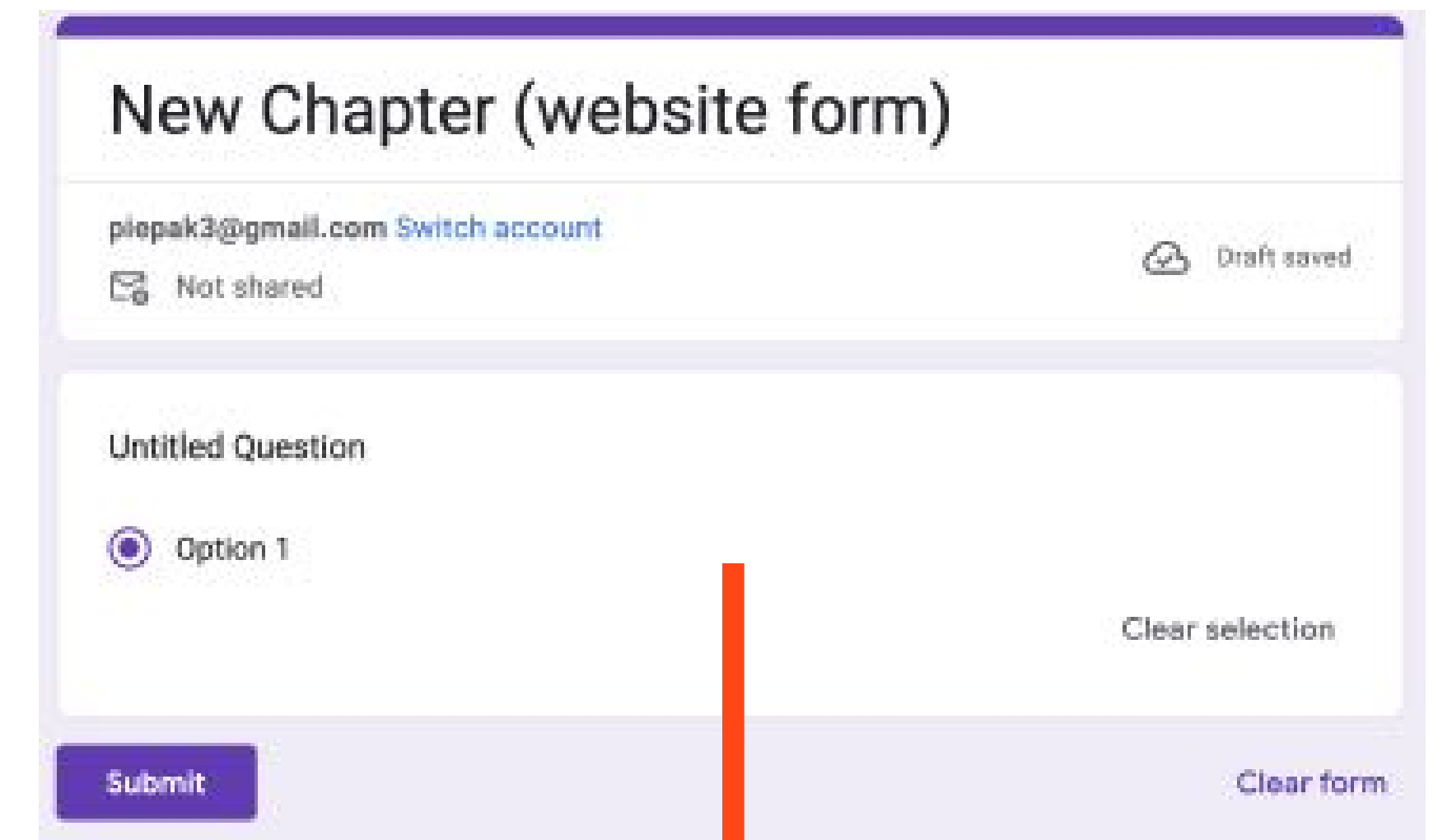
Register

Register for a new or existing school program

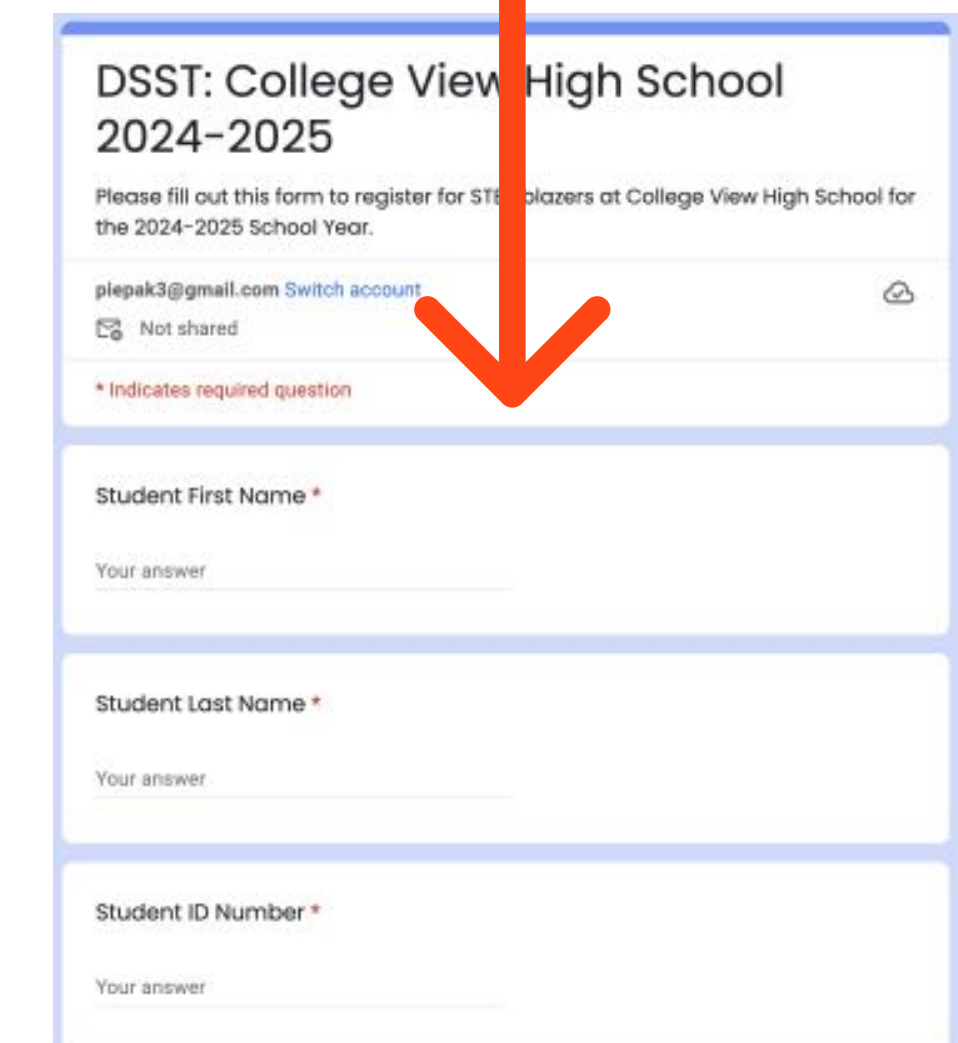
Areas for Opportunity:

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



This screenshot shows a Google Form titled "New Chapter (website form)". The form is in a draft state, saved by the user "piepak3@gmail.com". It features a single question titled "Untitled Question" with a radio button option labeled "Option 1". A "Clear selection" link is visible next to the option. At the bottom of the form, there is a "Submit" button and a "Clear form" link. The form is displayed in a light purple theme.



This screenshot shows a functional Google Form titled "DSST: College View High School 2024-2025". The form is for registering for STS plazers at College View High School for the 2024-2025 School Year. It is saved by the user "piepak3@gmail.com". The form includes a legend indicating that red asterisks denote required questions. There are three required text input fields: "Student First Name", "Student Last Name", and "Student ID Number". Each field has a "Your answer" label and a text input area. A large red arrow points from the "Submit" button in the top screenshot to the "Student First Name" field in this screenshot.

Register for a new or existing school program

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
5. 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.

Quantity:

1

+

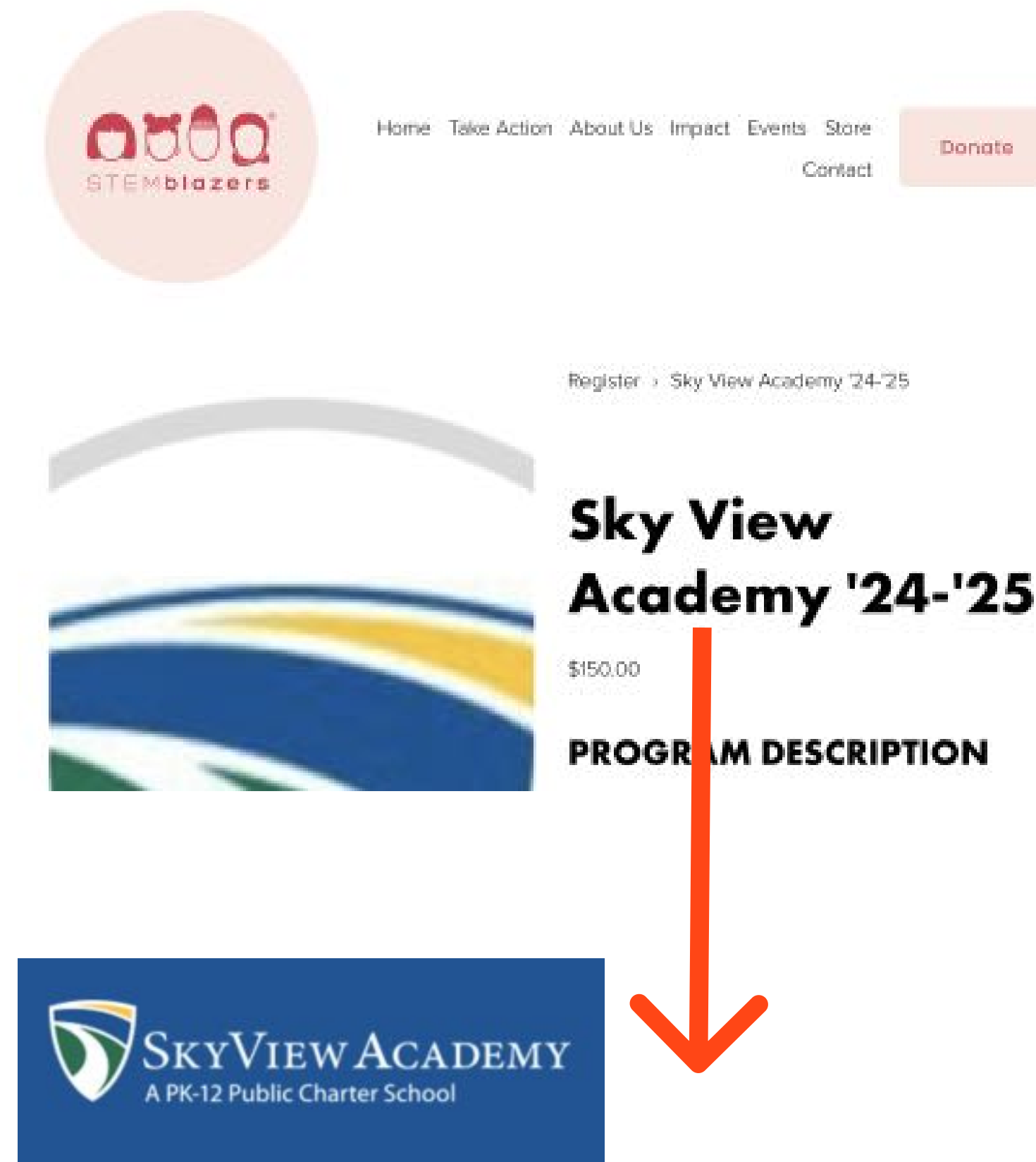
-

Register

Register for a new or existing school program

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

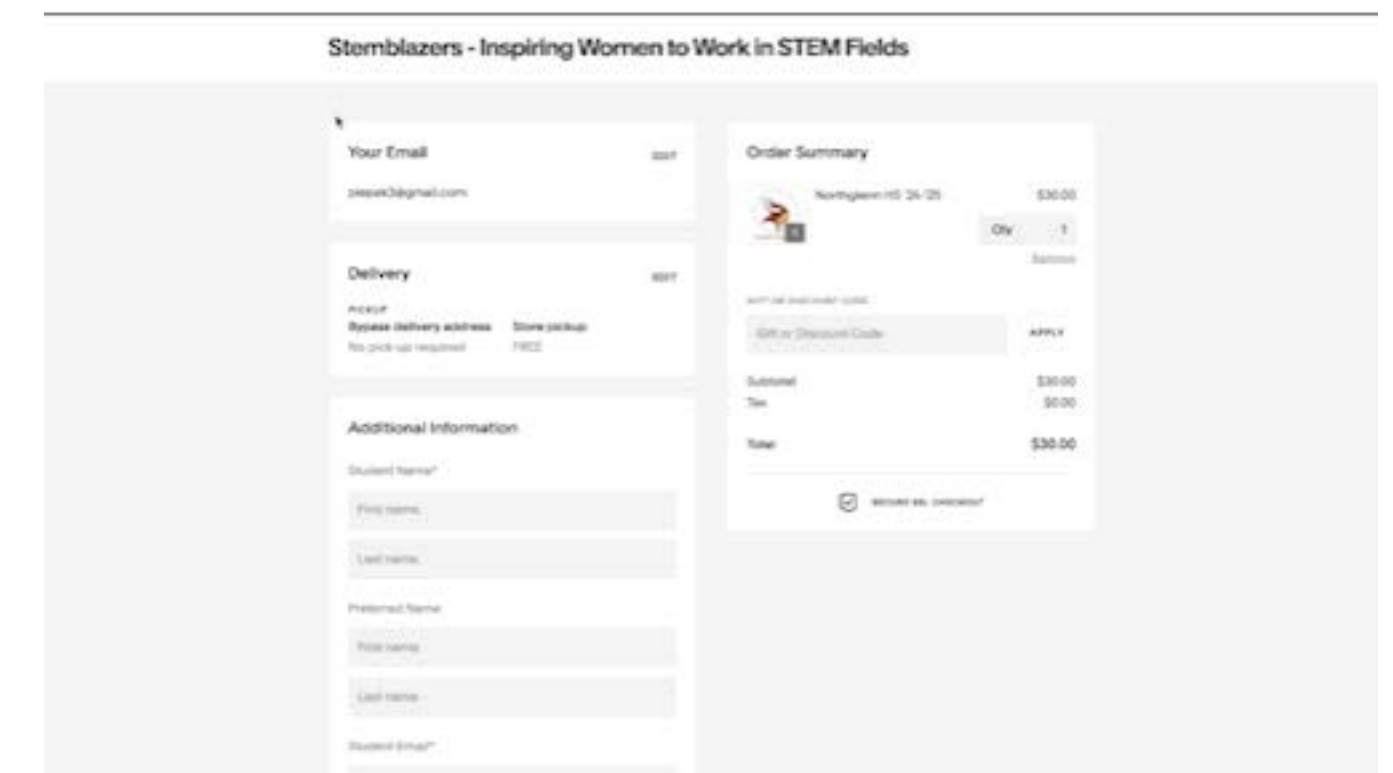
Registration for STEMblazers is now open to students in grades 8-12. In Douglas County, this unique opportunity is only available at our campus. Join students, teachers, and professionals who work in the STEM industry for afternoon meetings centered on career exploration, preparation for college and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

[SkyView Academy](#)

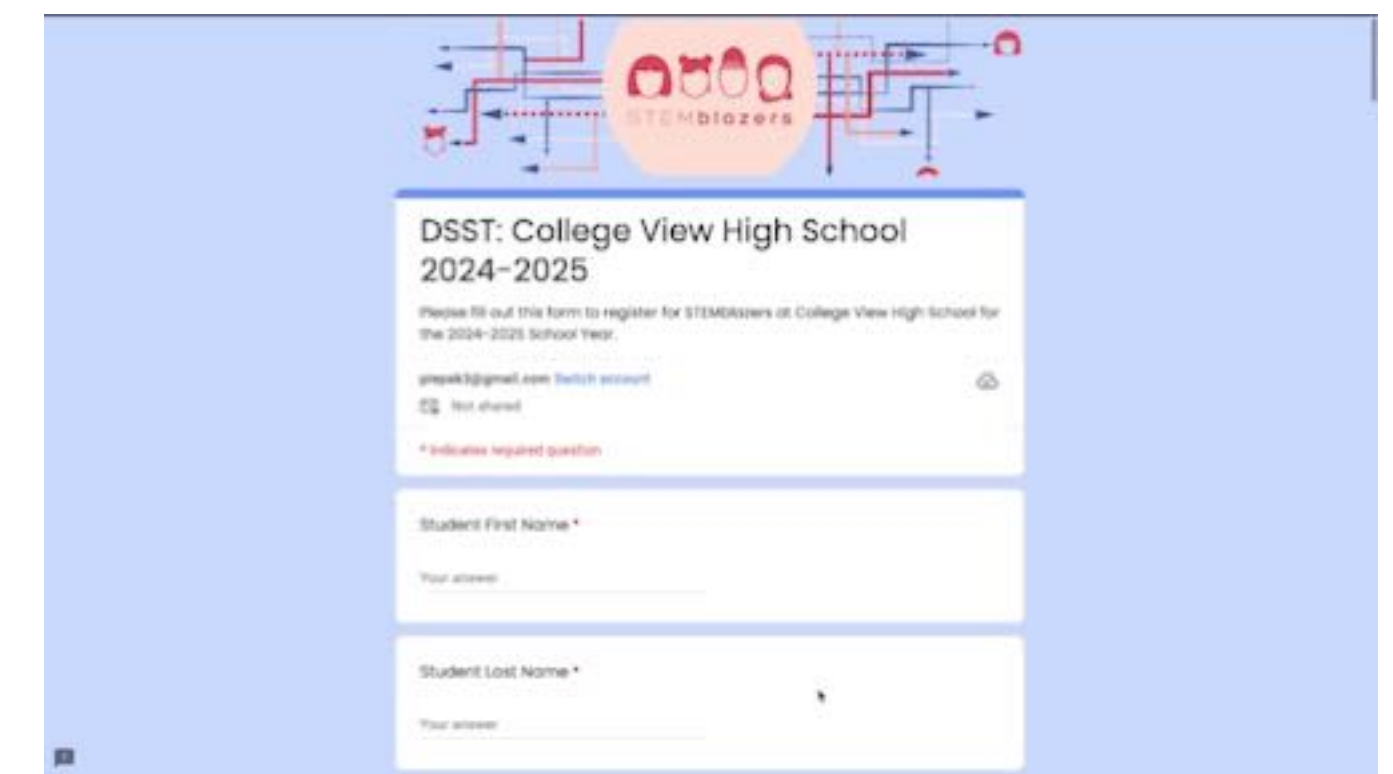
Register for a new or existing school program

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



The screenshot shows the 'STEMblazers - Inspiring Women to Work in STEM Fields' checkout page. It is divided into two main sections: 'Your Information' and 'Order Summary'. The 'Your Information' section includes fields for 'Your Email' (pre-filled with 'jessica@gmail.com'), 'Delivery' (with a 'Reveal delivery address' button), and 'Additional Information' (with fields for 'Student Name' and 'Student Email'). The 'Order Summary' section shows a total of '\$30.00' and a 'Checkout' button.



The screenshot shows a registration form for 'DSST: College View High School 2024-2025'. The form is titled 'Please fill out this form to register for STEMblazers at College View High School for the 2024-2025 School Year.' It includes a 'Switch account' link and a 'Text shared' button. The form has two main sections: 'Student First Name' and 'Student Last Name', each with a 'Your answer' field. A red asterisk indicates a required question.

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

Introduction

Improve Usability

Understand Audience Needs

Website Audit

Appendix

Understanding Audience Needs



Teachers



Parents



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.



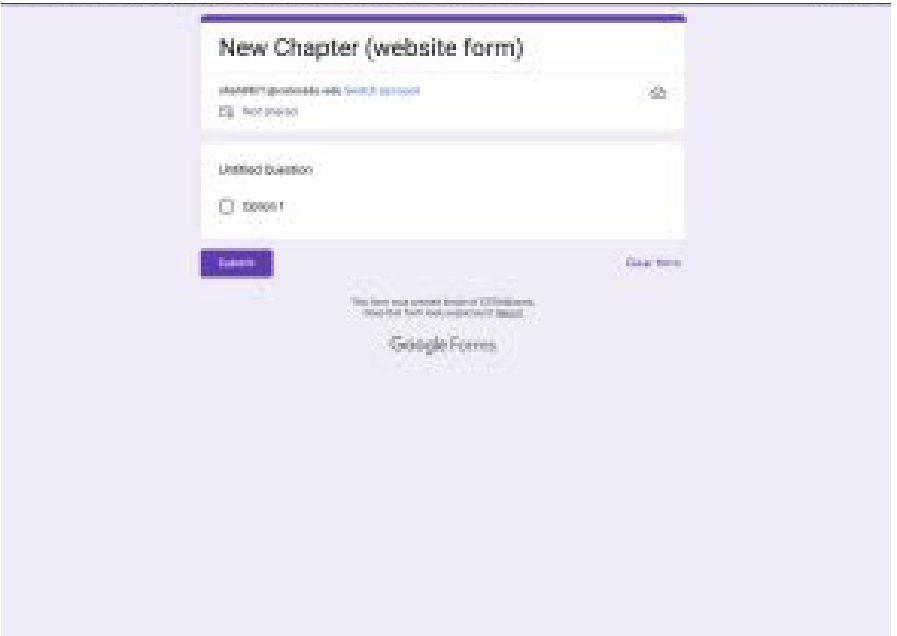
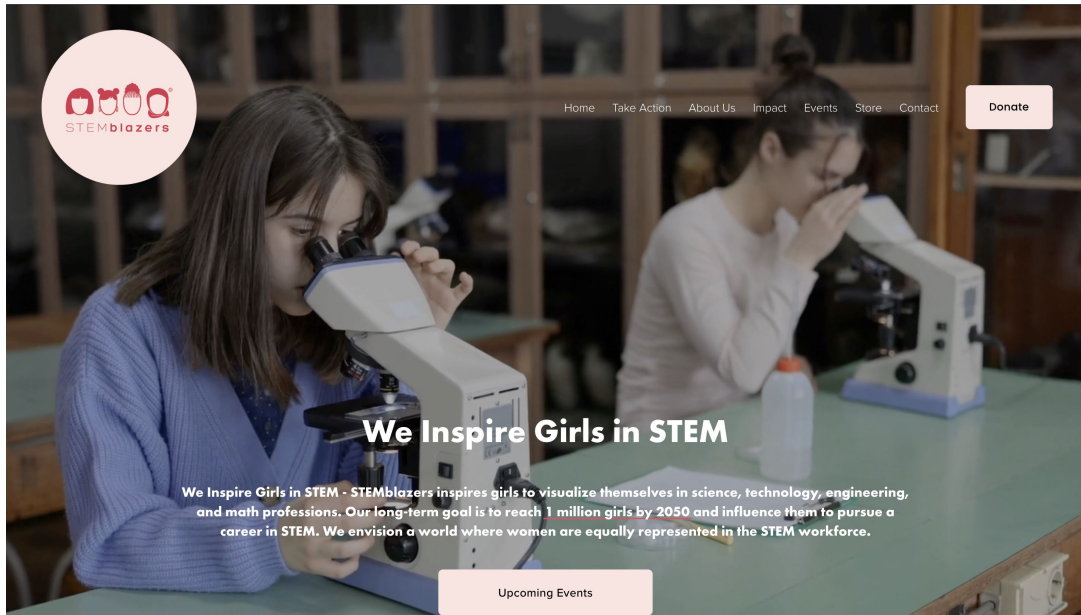


Competitive Teardown: Teachers

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.

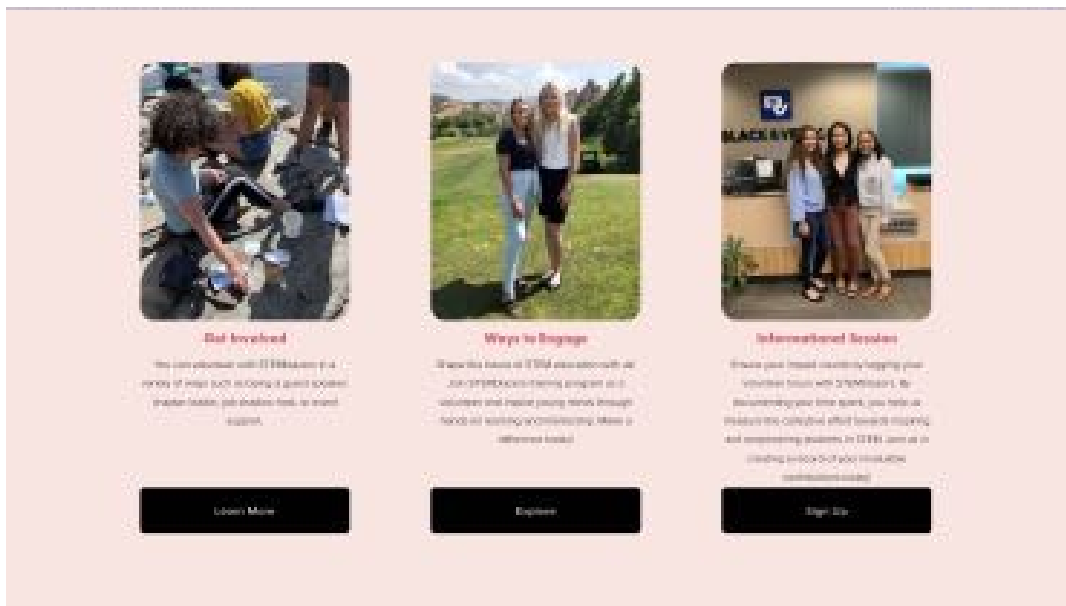
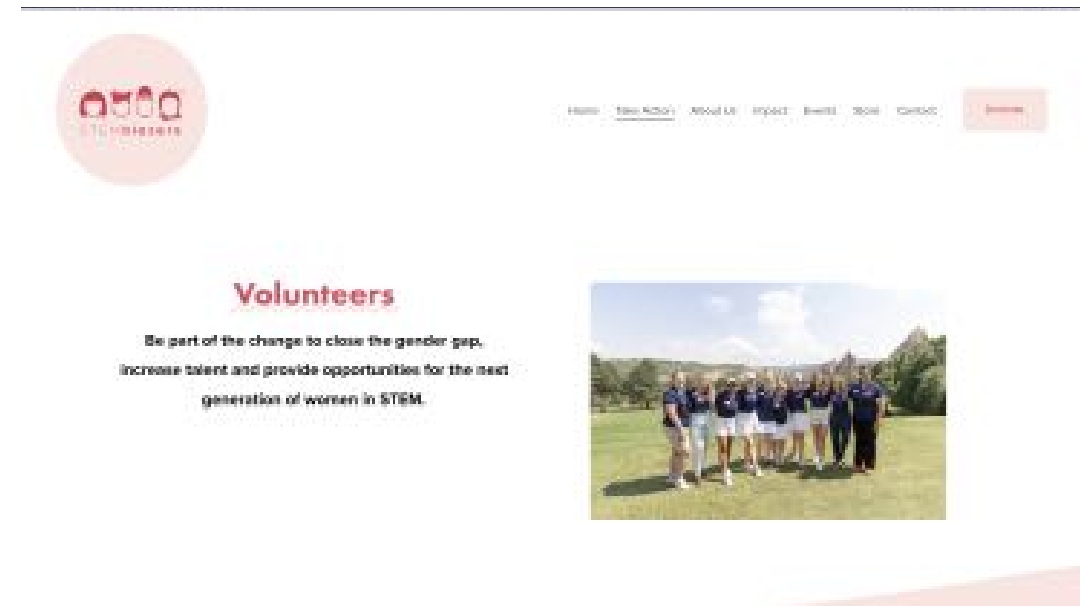


Home

Opportunities for Engagement

Go to Students page & scroll down

Contact form



Or join as a volunteer

Different ways to get involved

Scroll down, Become part of community

Parents User Journey

Their Goals:

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





Competitive Teardown: Parents

Existing Strengths:

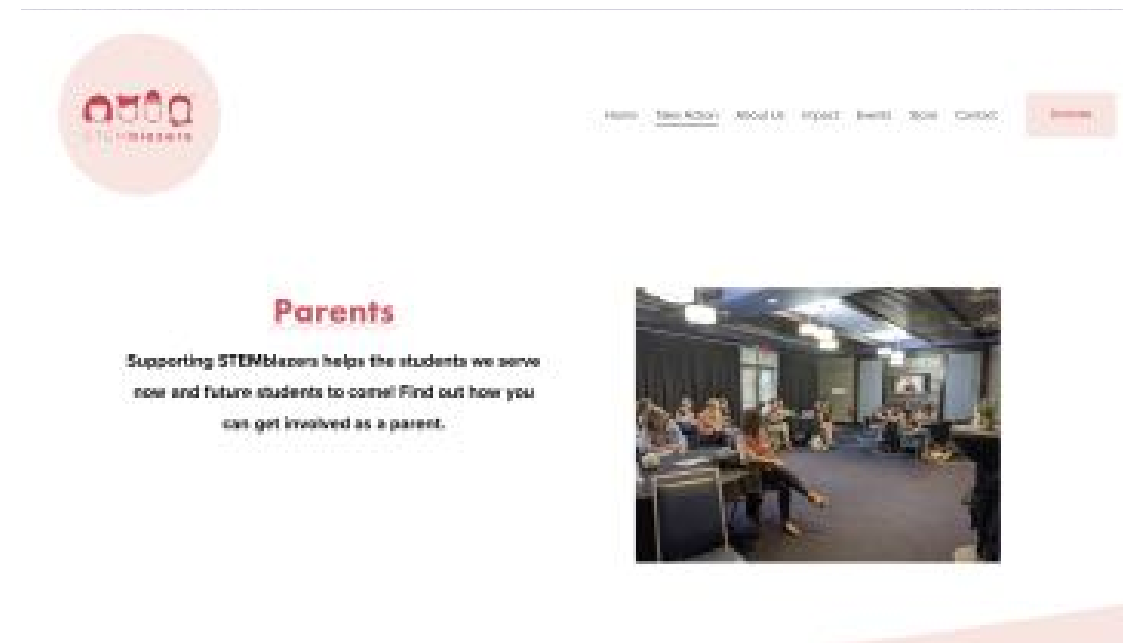
- Targeted resources for parents
- Clear engagement paths

Areas for Opportunity:

- Inconsistent experiences for forms
- Lack of details about opportunities



Take action: parent resources



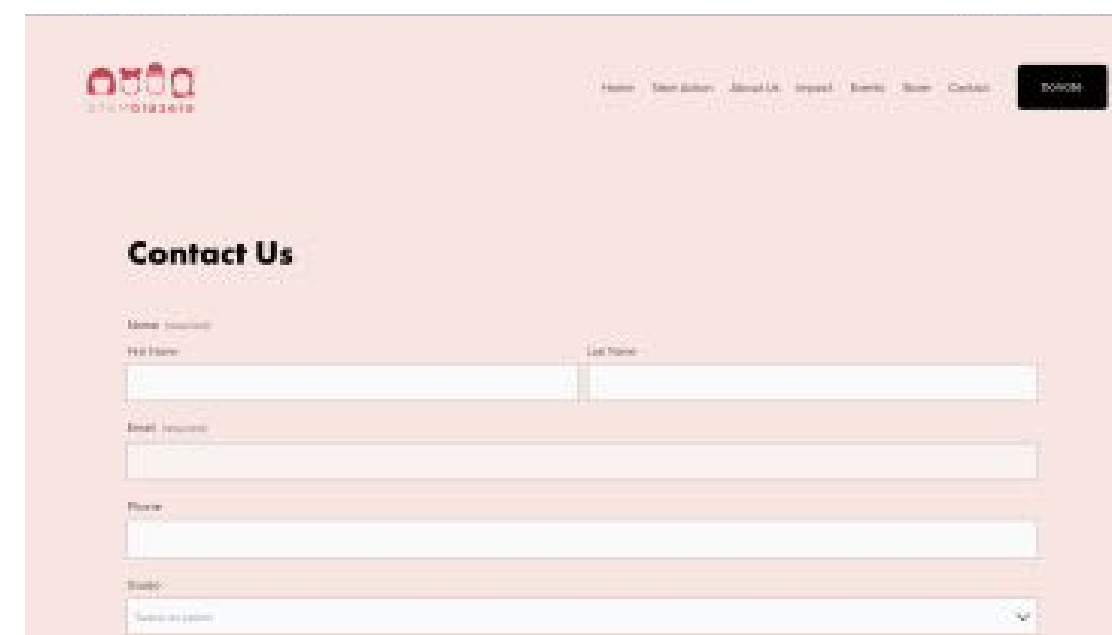
Call to action: get involved



Opportunities for parents



Employer partnerships



Contact form

Donors & Partners User Journey

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.



[link](#)





Competitive Teardown: Donors & Partners

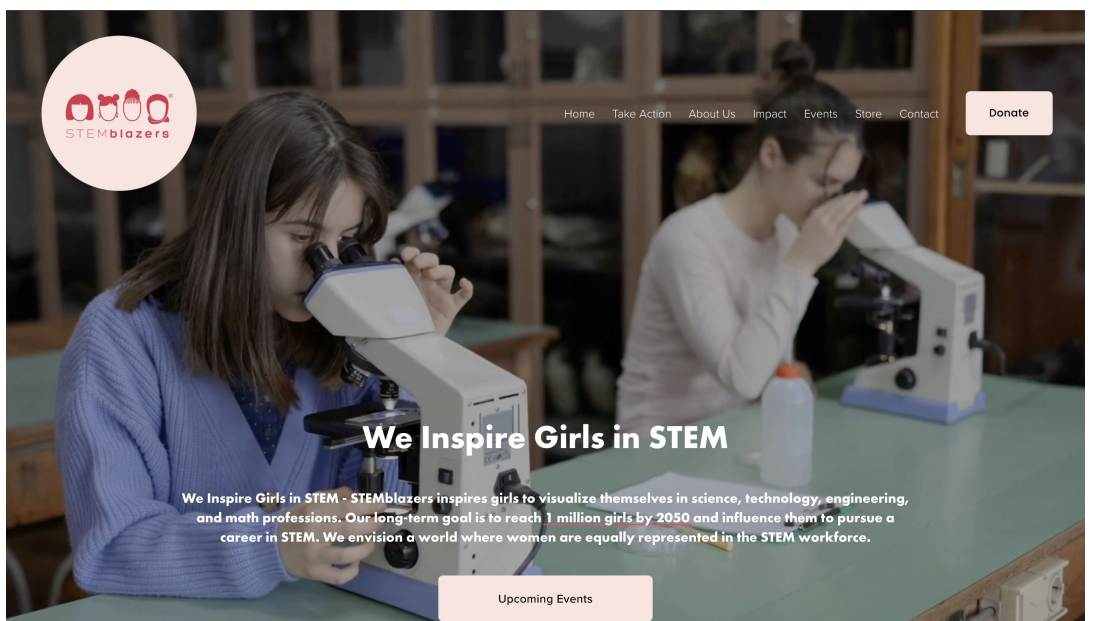
Existing Strengths:

- Clear donation and partnership opportunities
- website includes partner and donor testimonials

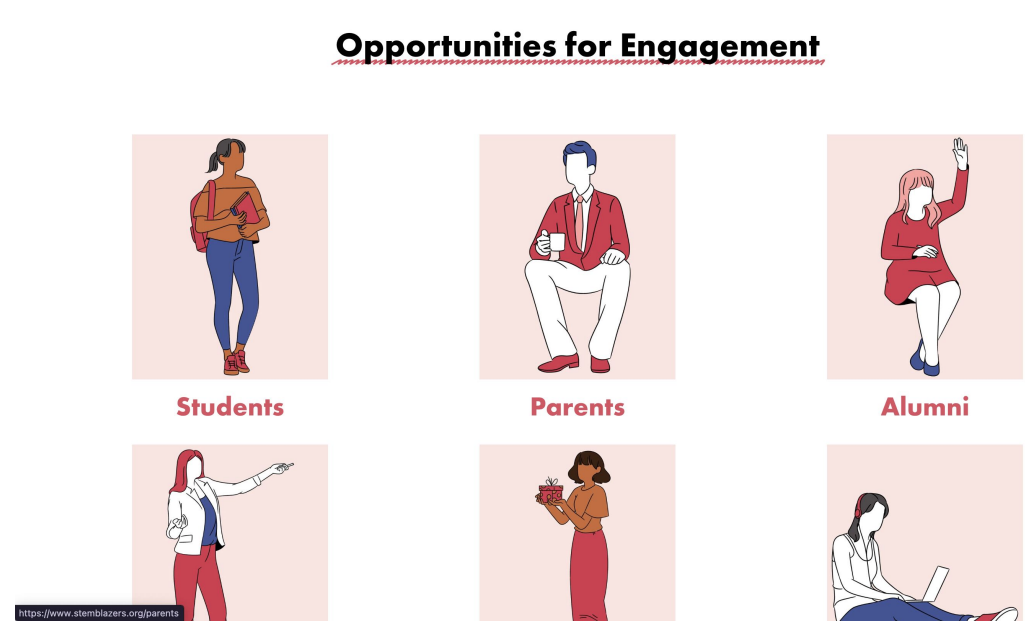
Areas for Opportunity:

- Adding transparent impact data

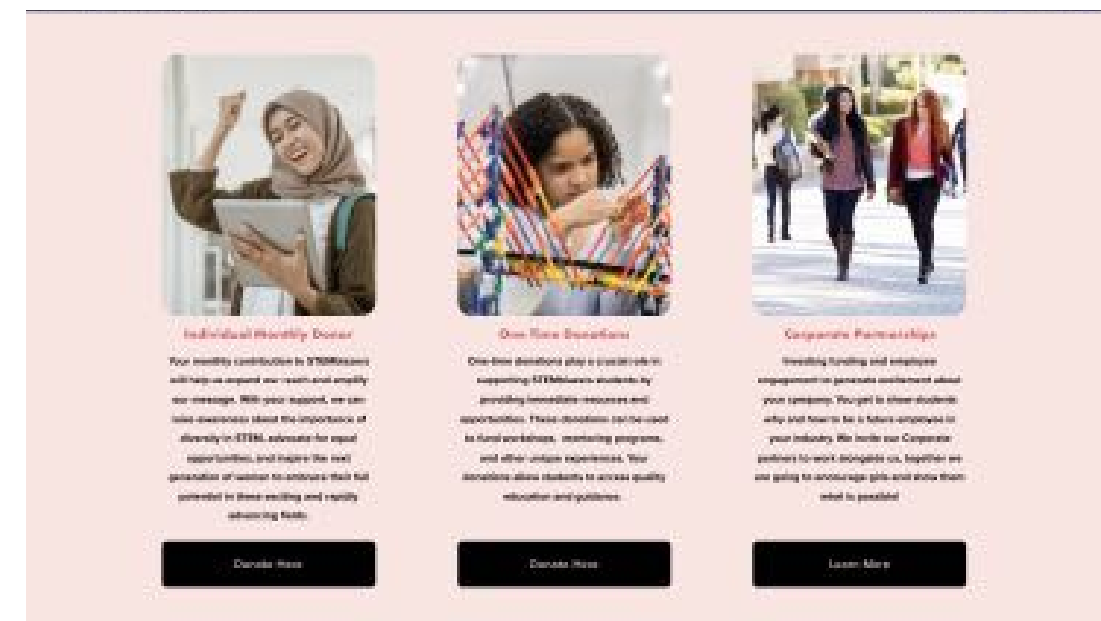
Donors



Home



Selecting the role

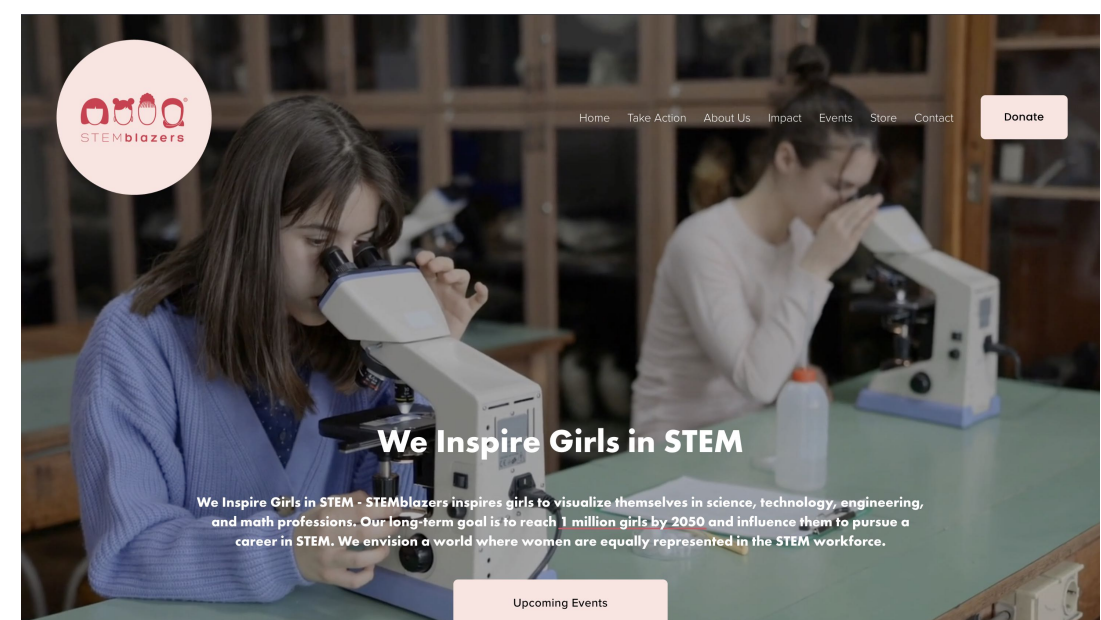


Exploring Donation Options



Making a Donation

Partners



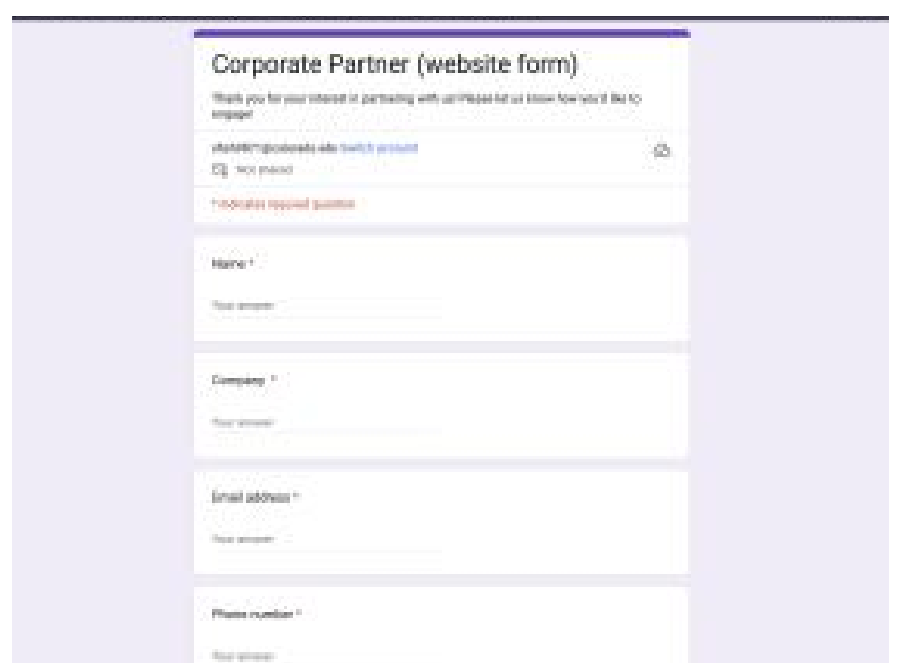
Home



Selecting the role



Exploring Options



Contact Form

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

Introduction

Improve Usability

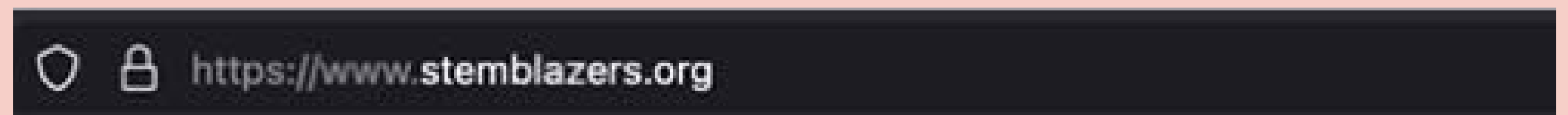
Understand Audience Needs

Website Audit

Appendix

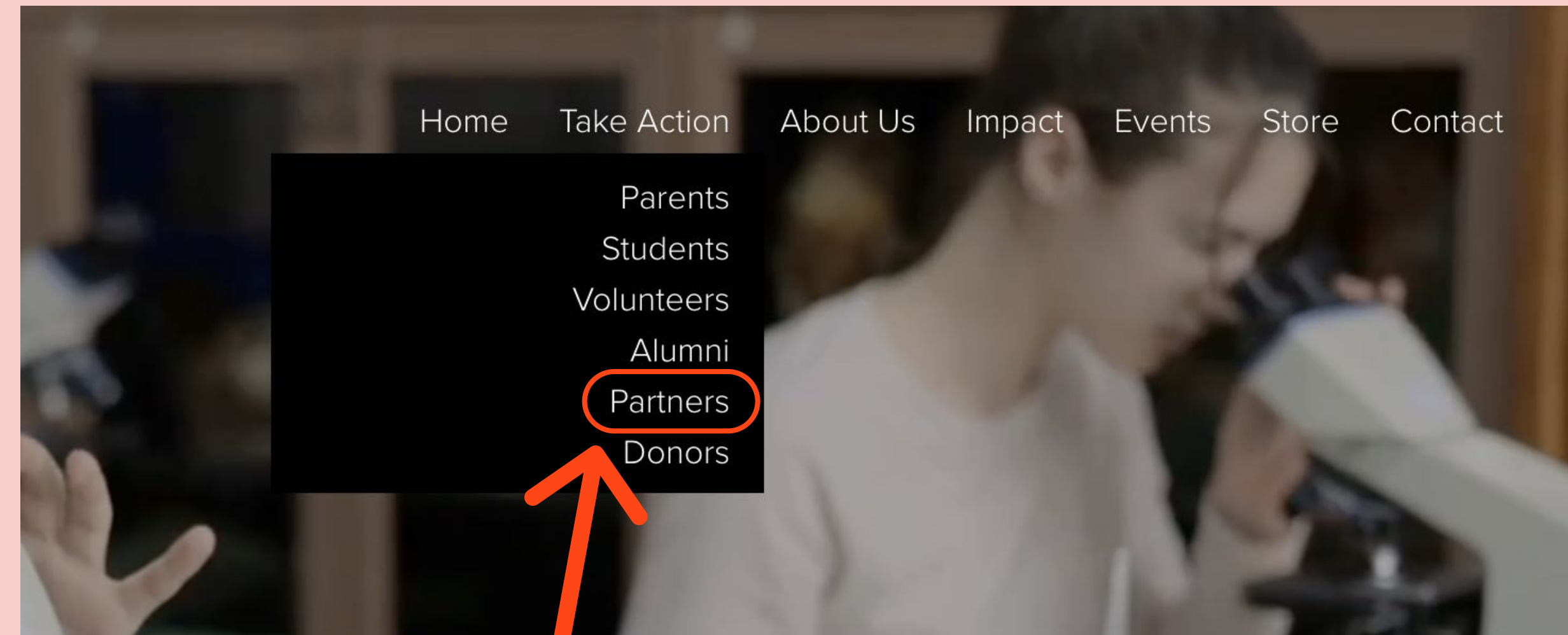
01

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.



02

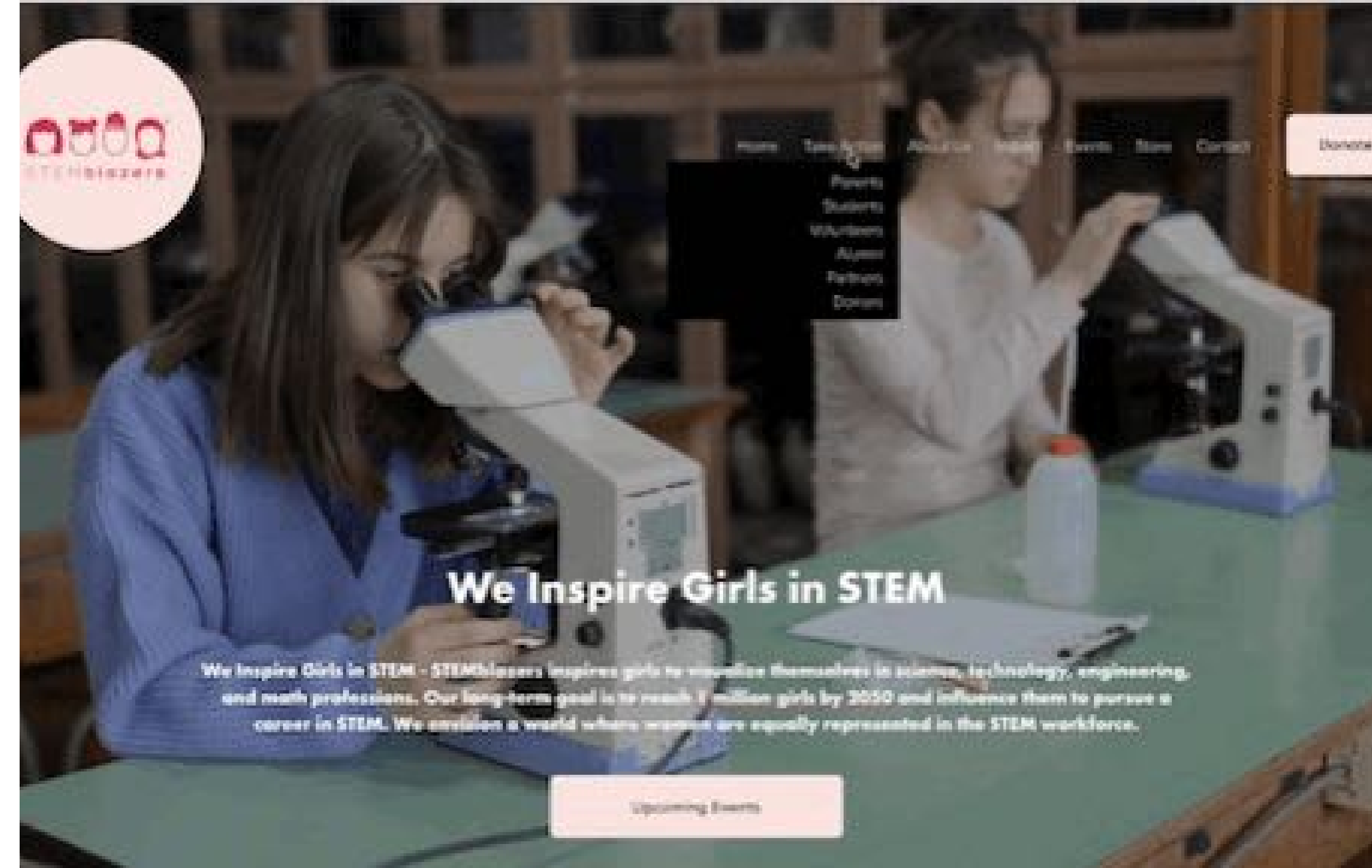
List of engagement options is different on the home page and on the “take action” sub menu – namely “Corporate” and “Partners” both lead to the “Partners” page.



03

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

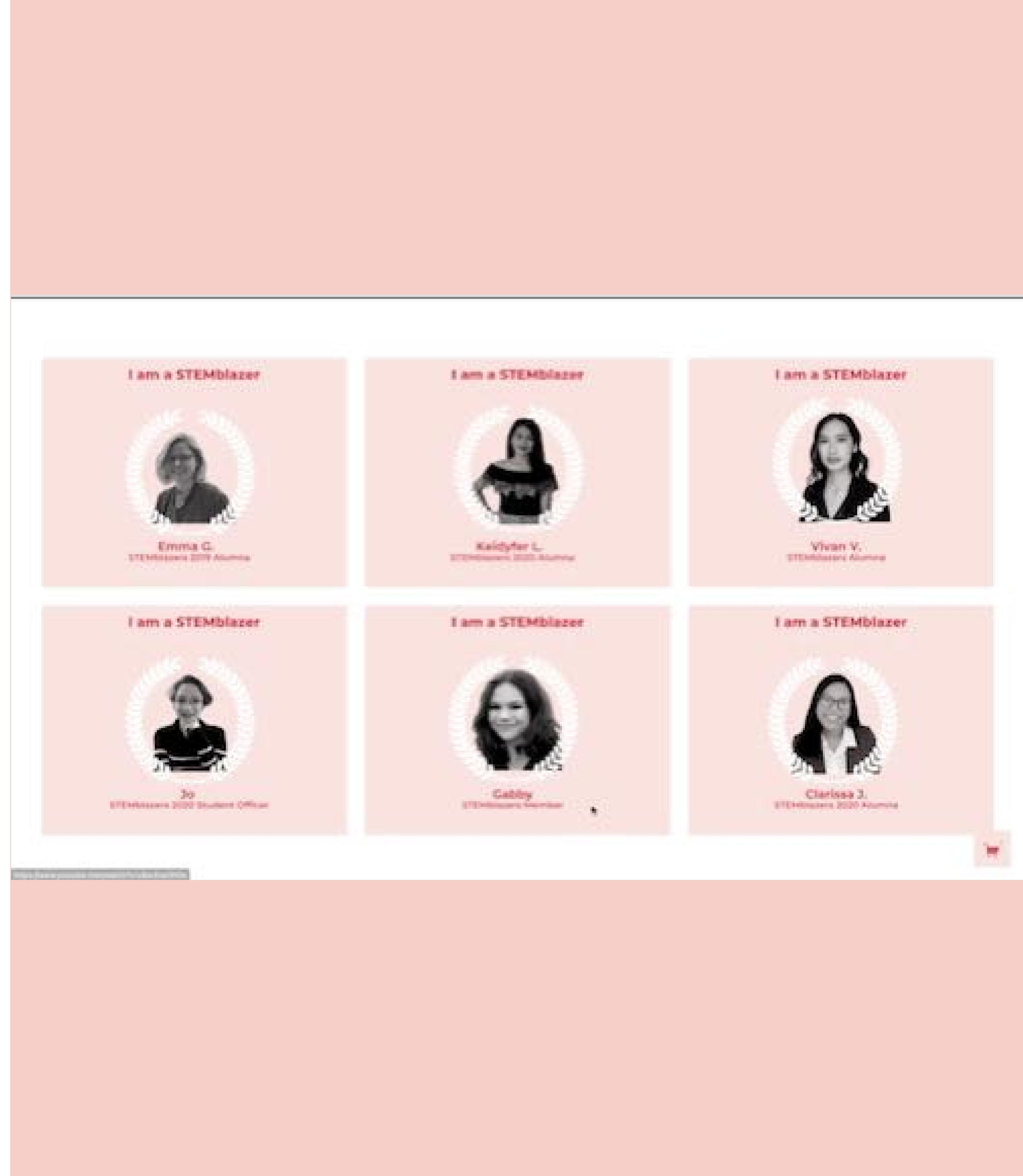
04

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.



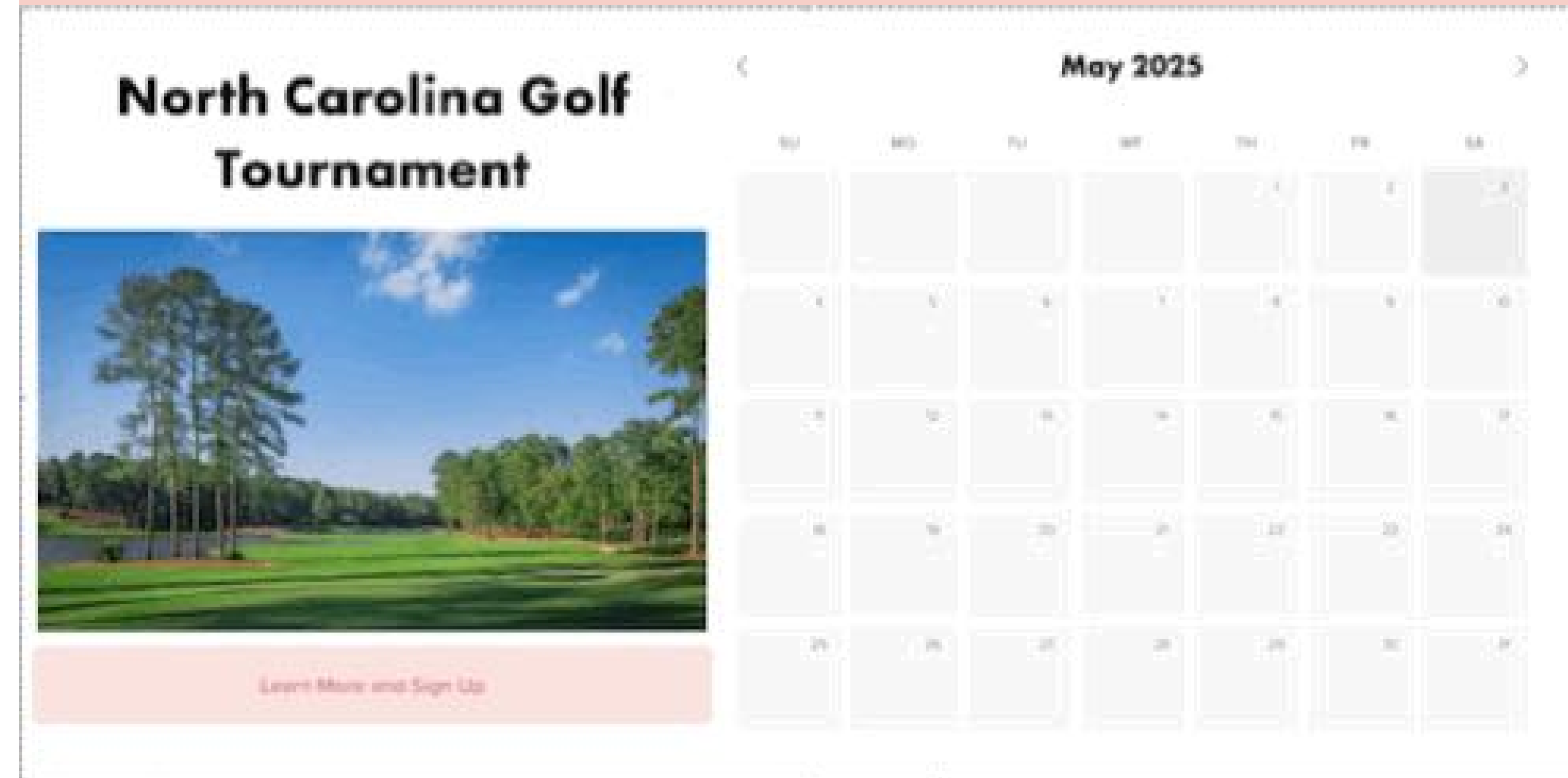
05

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



06

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.



07

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



STEMblazers Podcast Coffee Mug

\$20.00 ~~\$25.00~~

Challenger Grande Mug - White - 14 oz with STEMblazers podcast logo

Order now for only \$20

Quantity:

1

⌵

Purchase

08

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

Your Email

EMAIL

Email address

You'll receive receipts and notifications at this email

☐ Sign up to receive news and updates

CONTINUE

Delivery

Additional Information

Order Summary



STEMblazers Podcast
Coffee Mug

Qty1

\$20.00

Remove

GIFT OR DISCOUNT CODE

Gift or Discount Code

APPLY

Subtotal

\$20.00

Tax

\$0.00

Total

\$20.00

☒ SECURE SSL CHECKOUT

09

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

Delivery

DELIVERY OPTIONS

☐ Shipping unavailable for entered address

☒ Store Pickup **FREE**

Bypass delivery address

Pickup info 

CONTINUE

Your Email

EDIT

piepak3@gmail.com

Delivery

DELIVERY OPTIONS

☐ Shipping unavailable for entered address

☒ Store Pickup **FREE**

Bypass delivery address

Pickup info 

CONTINUE

Order Summary



STEMblazers Podcast
Coffee Mug

\$40.00
\$20.00 each

Qty 2

[Remove](#)

GIFT OR DISCOUNT CODE

Gift or Discount Code

APPLY

Subtotal \$40.00

Tax \$0.00

Total \$40.00

 **SECURE SSL CHECKOUT**

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

Additional Information

Student Name*

First name _____

Last name _____

Preferred Name:

Preferred name _____

Last name _____

Student Email*

Student Cell Number*

We'll contact you if needed about upcoming events!

(00) _____ (00) _____ (0000)

Gender*

Female ☐ Male ☐

Anticipated Graduation Year*

Please type the 4 digit year you anticipate graduating high school.

Birth Date*

Ethnic Background*

☐ American Indian or Alaska Native

☐ Asian

☐ Black or African American

☐ Hispanic or Latino

☐ Native Hawaiian or Other Pacific Islander

☐ White

☐ Other

☐ I prefer not to answer

Gender Identity*

Female ☐ Male ☐

Parent/Guardian Name*

First Name _____

Last Name _____

Parent/Guardian Email*

Parent/Guardian Cell Number*

We will contact you in case of emergency.

(0000000000) (0000000000) (0000000000)

Order Summary



1

STEMblazers Podcast
Coffee Mug

Qty1

\$20.00

[Remove](#)

GIFT OR DISCOUNT CODE

Gift or Discount Code

APPLY

Subtotal

\$20.00

Tax

\$0.00

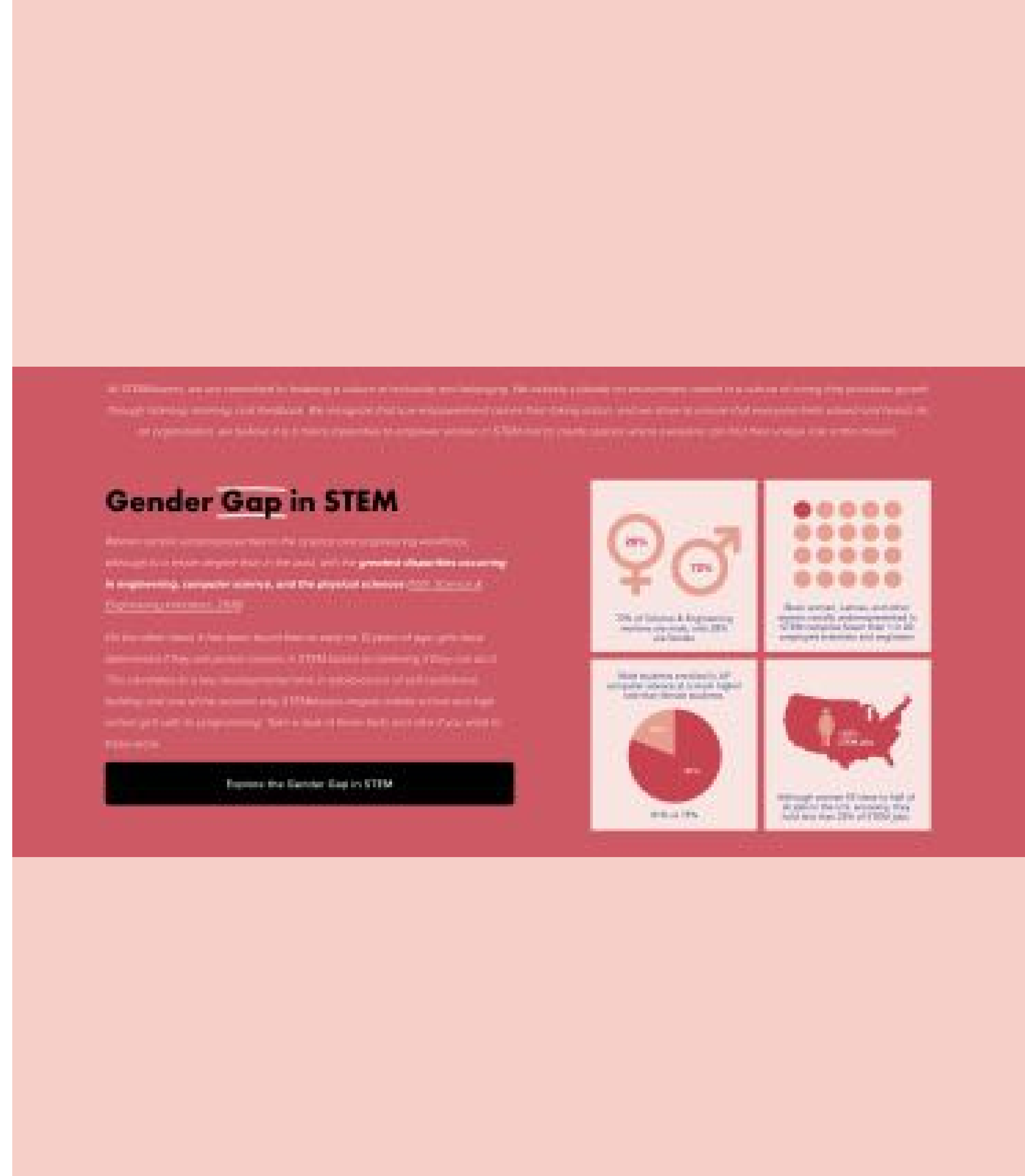
Total

\$20.00

 SECURE SSL CHECKOUT

11

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.



Key Takeaways

Key areas for opportunity

- ① On the home page make clear what you provide to students (ie. after school programs, mentorship).
- ② Add additional pathways for stakeholders such as teachers and parents to help start chapters.
- ③ Stronger consistency between different form experiences for all stakeholders.

Thank you!

APPENDIX BEYOND HERE

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.

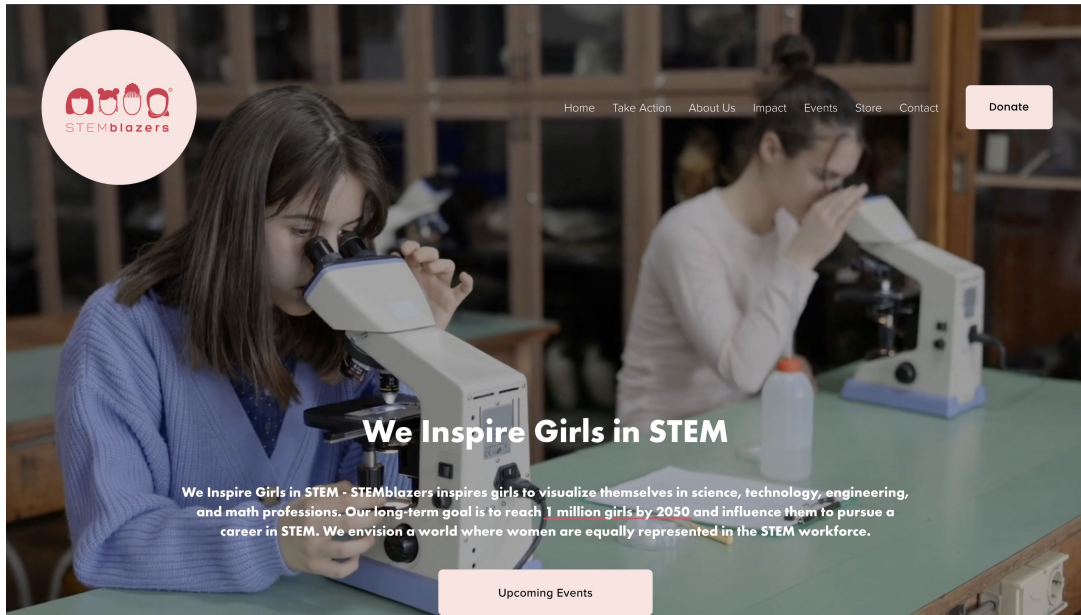
Founded: 2000

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



Competitive Teardown: Students

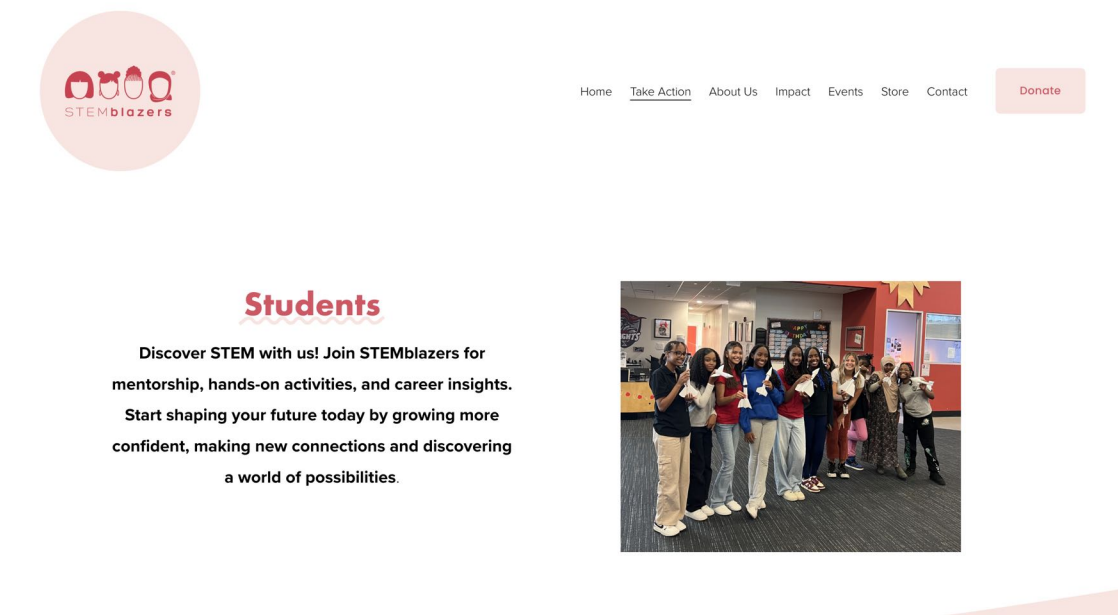
- Existing Strengths:**
 - Clear path for registration
 - Shows multiple ways to get involved
 - Consistent color scheme
- Areas for Opportunity:**
 - Communicate to students what STEMblazers provides earlier
 - Make clear it is a school program



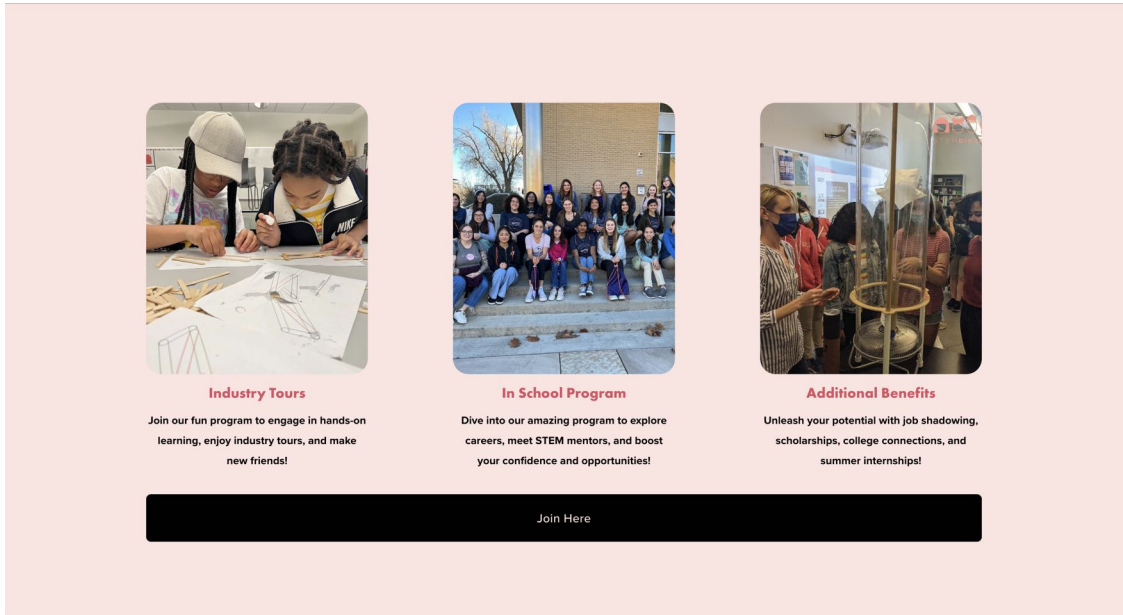
Home



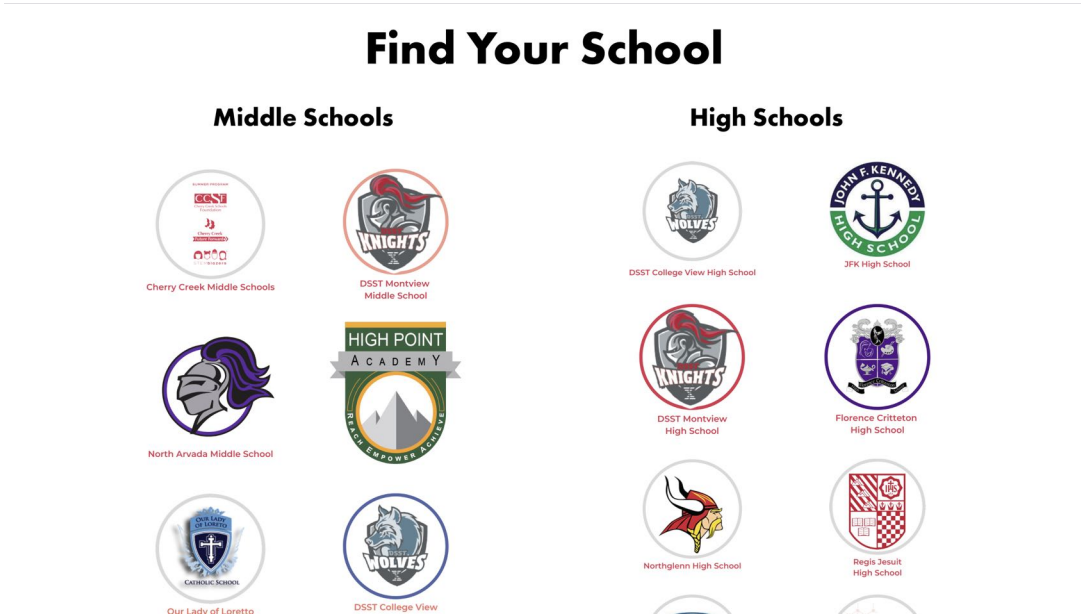
Student Engagement



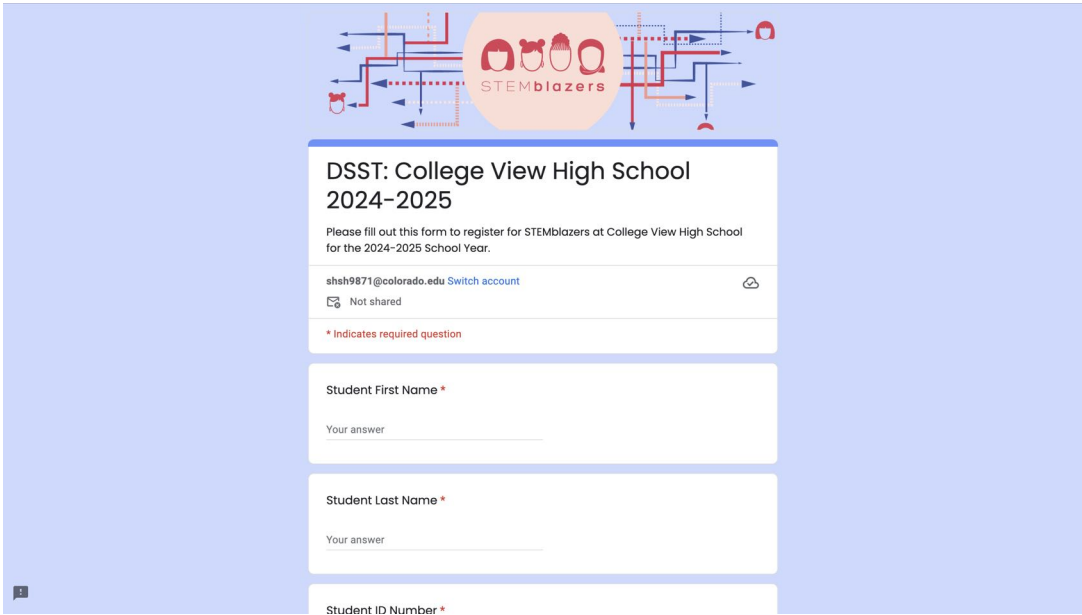
Students page



Scroll to “Join Here”



Find my school



Register on separate Google Form



Competitive Teardown: 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



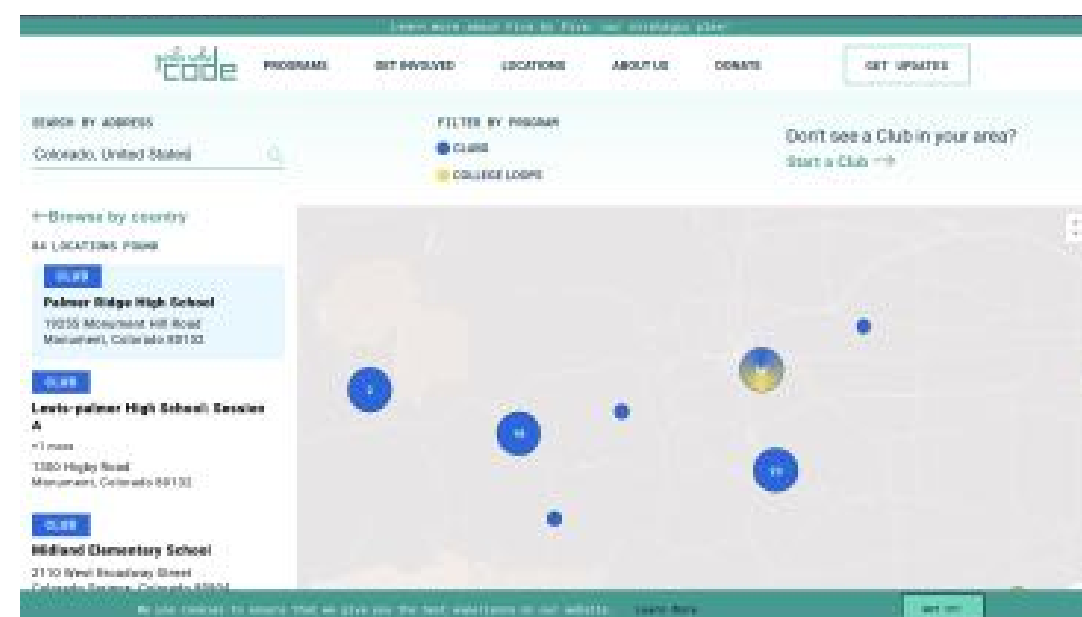
Nav > “Get Involved”



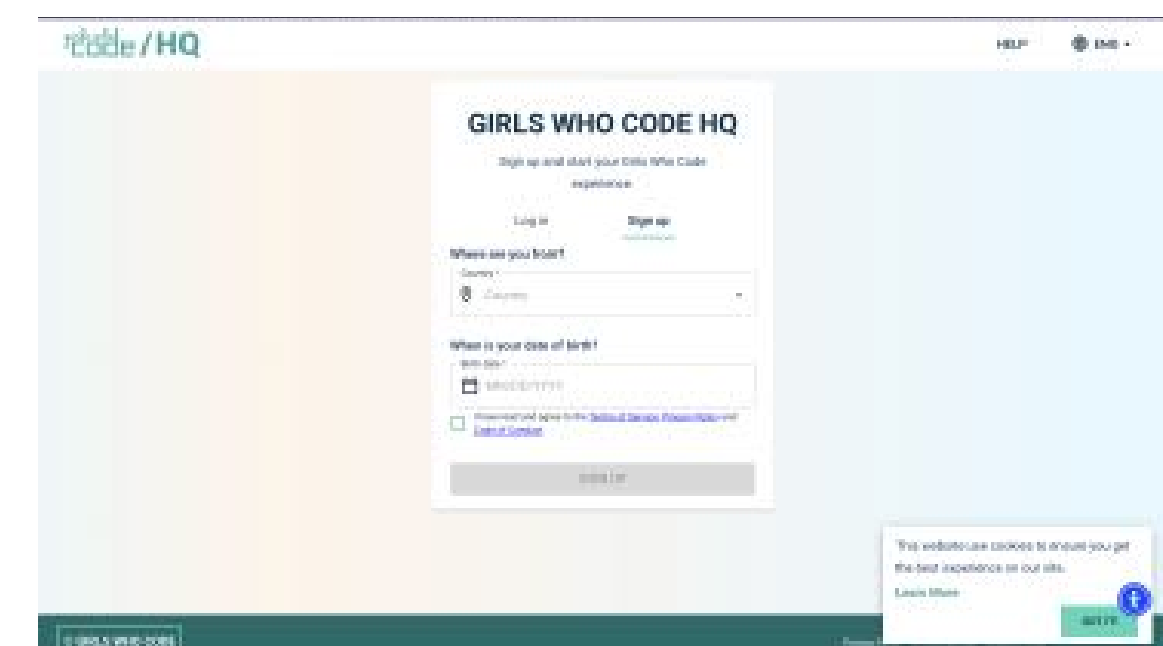
Nav > “Programs”



“Programs” > Sub-Nav > “Club Programs”



“Locations” > Colorado



Apply to start a club (not for students)



Competitive Teardown: Teachers

Existing Strengths:

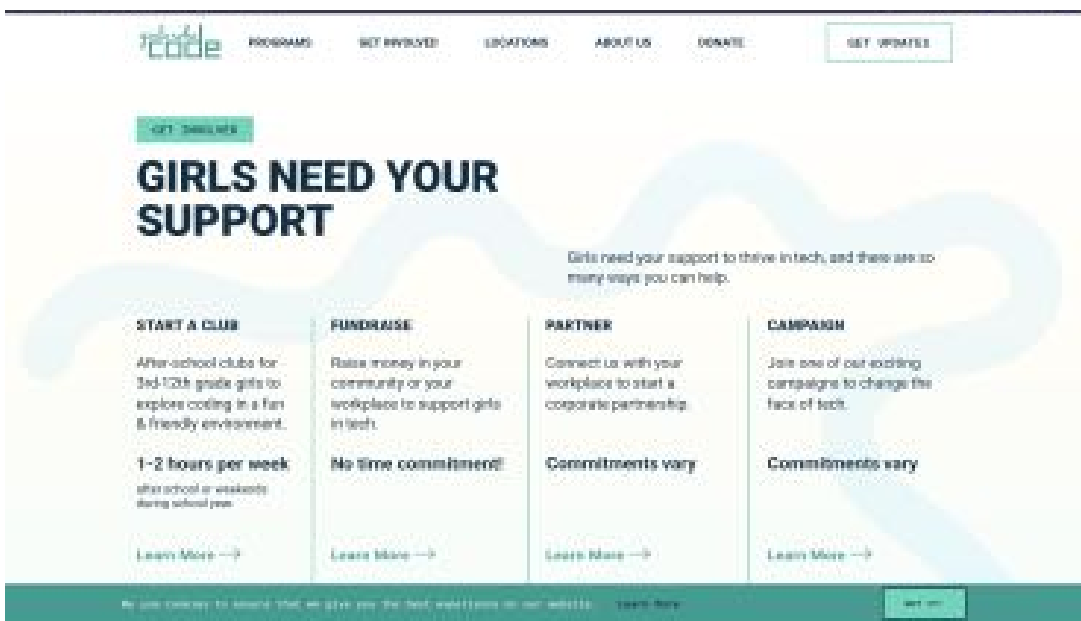
- Visually appealing

Areas for Opportunity:

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



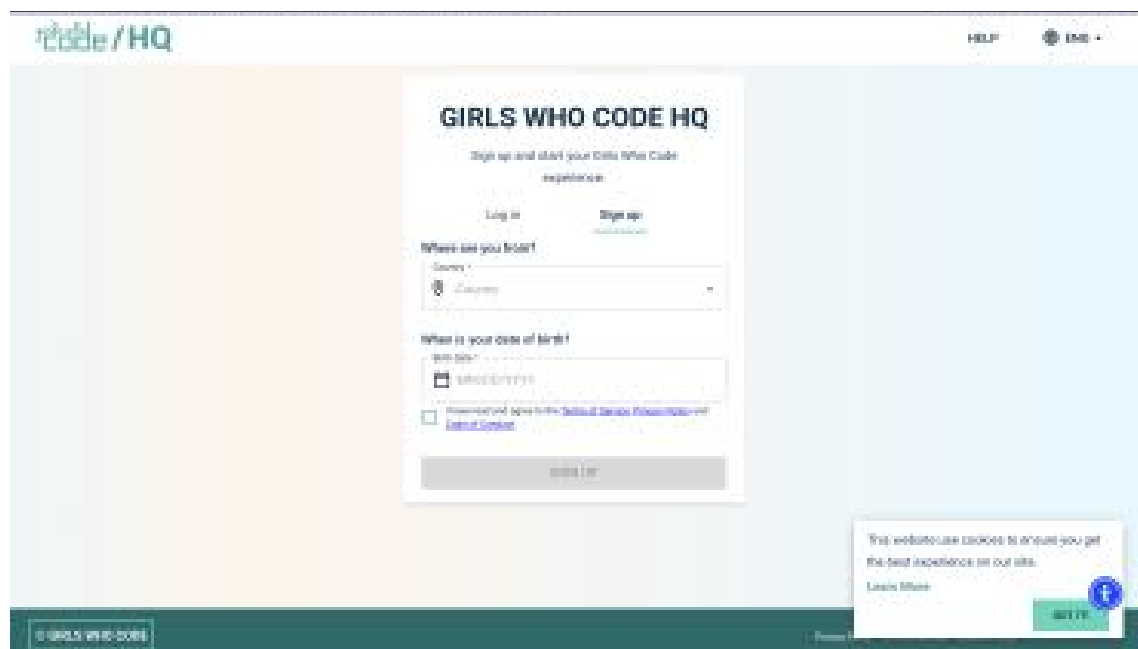
Home



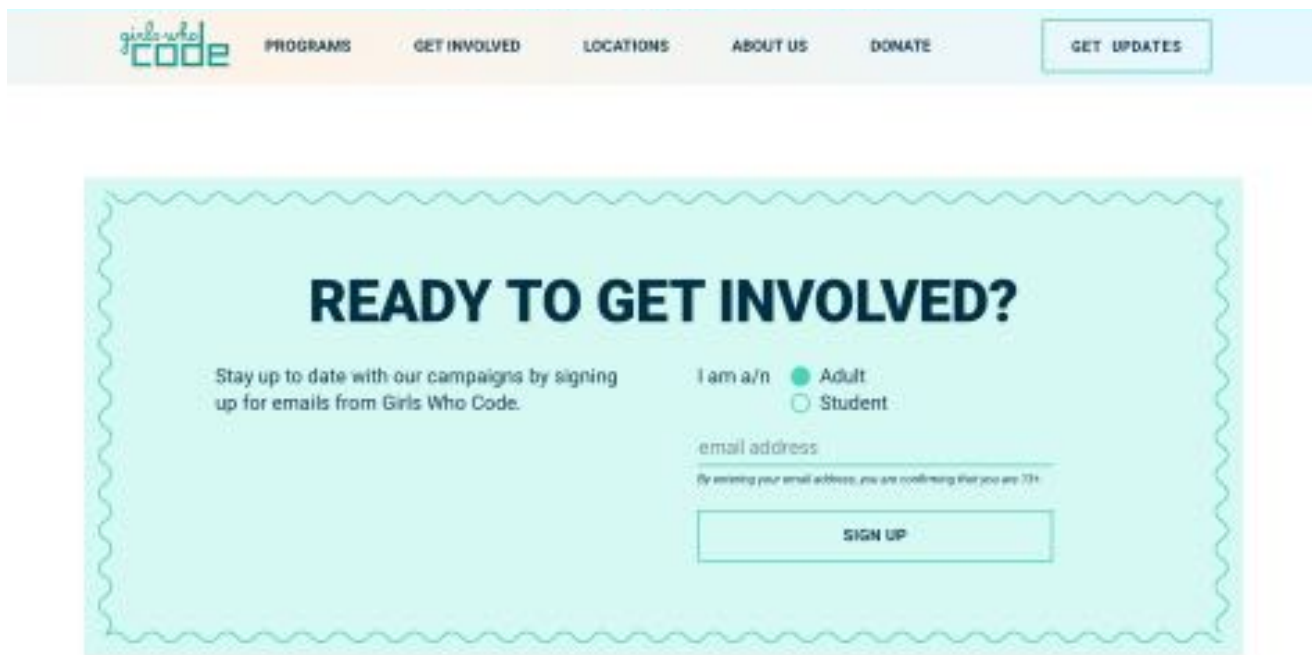
Nav > "Get Involved" > Start a club



Start a club



Signing up



Nav > "Get Involved" > Campaign



Competitive Teardown: Donors & Partners

Existing Strengths:

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

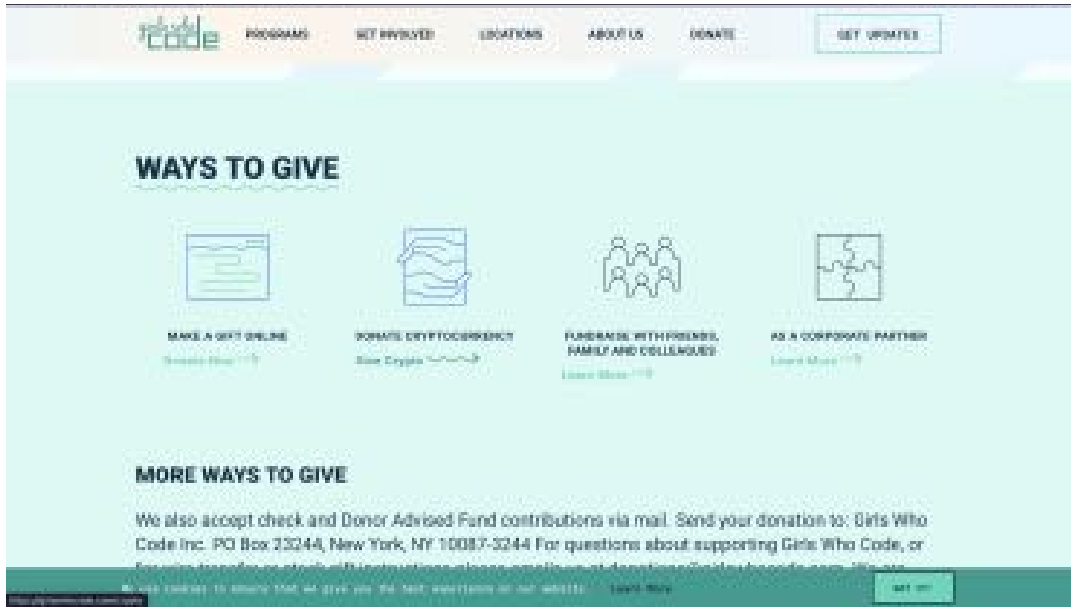
Areas for Opportunity:

- several donation methods

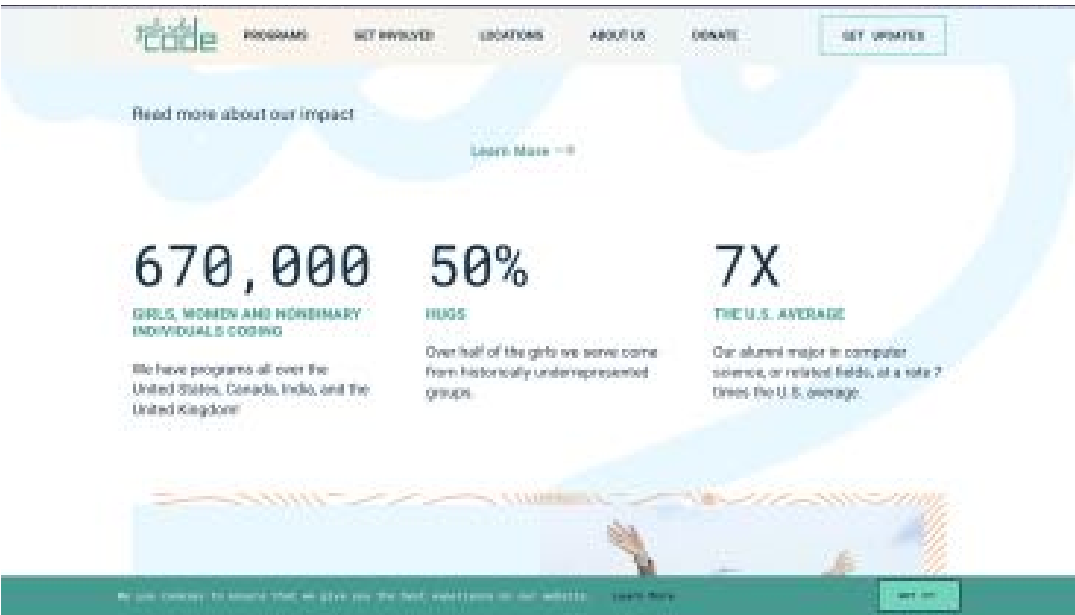
Donors



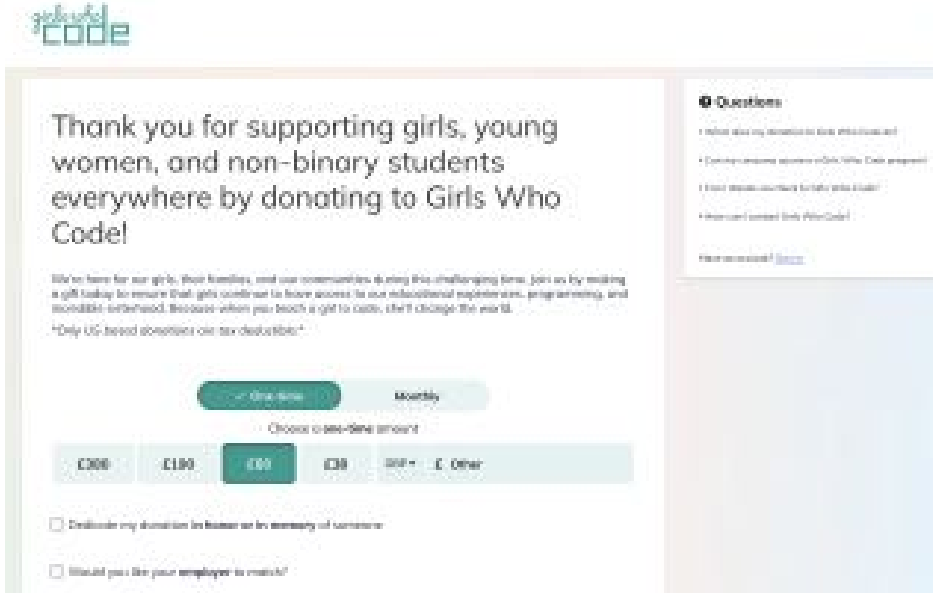
Home > Navigating to ways to support Opportunities



Exploring Ways to Support



Seeking Detailed Information



Making a Donation

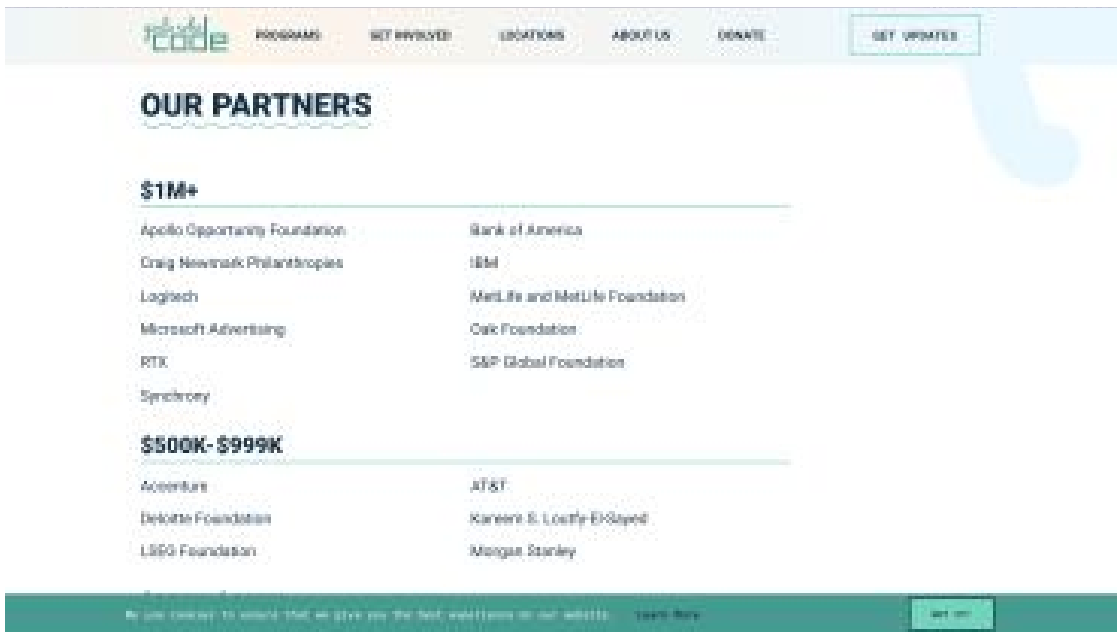
Partners



Home > Navigating to partnership Opportunities



Contact



Get to know about existing partners