



Impacting Thousands with Software Development



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Introduction

At the start of the Spring 2023 semester, I began my work with a group of 10 students as a software developer to continue development of a web application for student-run non-profit Combatting Overdoses in Rural Areas (CORA) at the University of Maryland, College Park (UMD). This opportunity was granted having been a member of Hack4Impact-UMD, a student organization empowering students to create an impact for local non-profits. Alongside coursework, I devoted at least 7 hours each week to meet with my team and complete tasks largely consisting of debugging and improving functionality of our application.

```
<div id={styles.textContent}>
  <h2 id={styles.subtitle}>Help us</h2>
  <h1 id={styles.title}>Fight for our Rural Communities</h1>

  <p id={styles.description}>
    We are committed to providing opioid education, resources,
    communities to reduce health disparities, thereby preventing
    to treatment. We envision a future where addiction does not
    community has access to quality care for opioid use disorders.
  </p>
</div>
```

A few lines of code from the entire codebase I worked on throughout my work

Site Information:

Hack4Impact-UMD

8125 Paint Branch Dr, College Park, MD 20742

Supervisor: Nelson Padua-Perez

Mission: “Building powerful nonprofit software as a tool for social good”

Goals: Collaborate with a team of 10 to develop a web application that allow for CORA@UMD to effectively pursue their mission of provide opioid education, resources, and harm reduction to rural communities

Issues Confronting Site:

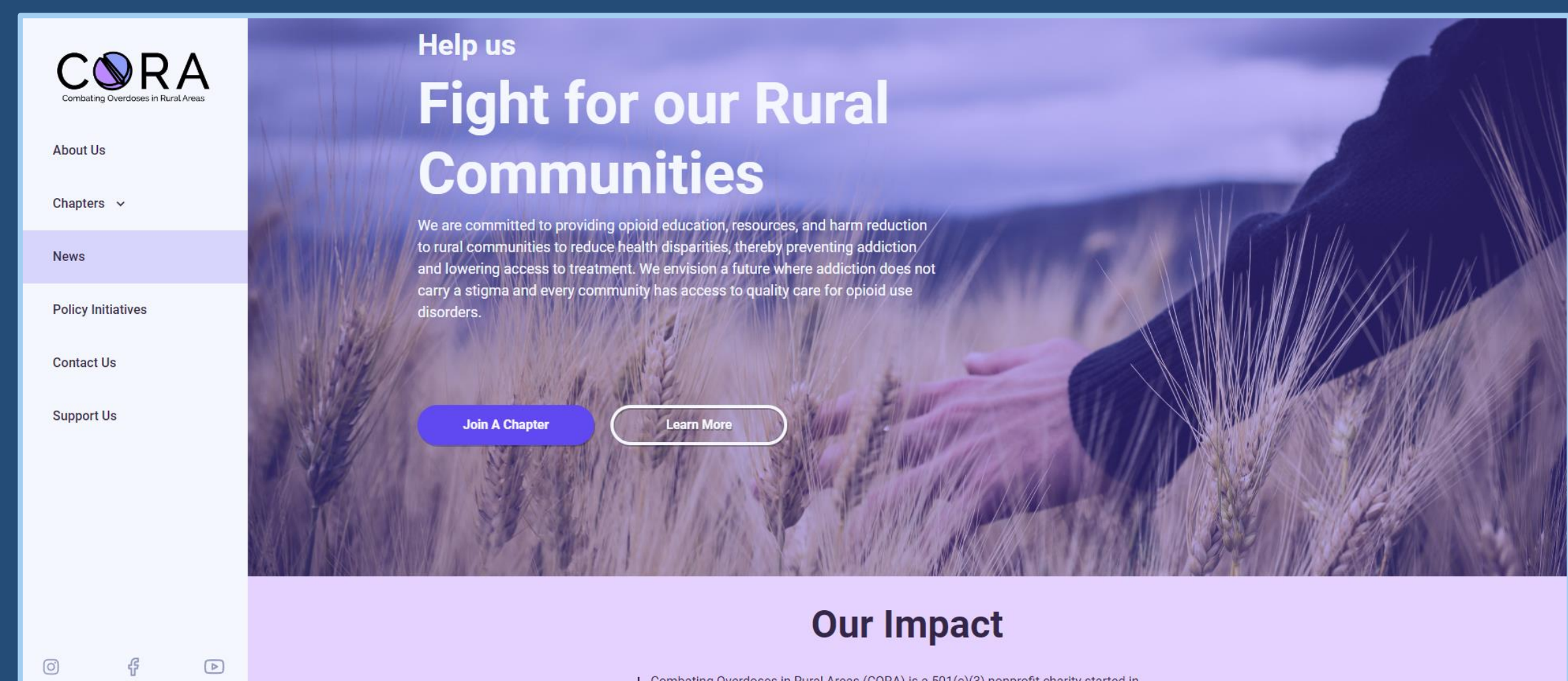
Prior to my development of our application to CORA, the organization had an unappealing, static page. It wasn't educational nor resourceful to those looking to become knowledgeable of opioid overdoses in rural areas. Moreover, there was no efficient way to add relevant news articles and enactments, as well as manage content on their previous web site. Improvements to such would be highly beneficial, so I worked on a continuing project addressing this issue.

Activities:

In my team, I used TypeScript, React, and CSS to improve accessibility of our application on mobile devices, as well as responsiveness of several webpages so that the displayed information was readable on various screen sizes. At our weekly team meetings, I'd discuss with my team issues I had with my duties, if any, and would render aid to fellow teammates as well

Impact:

During the 2020 COVID-19 Pandemic, fatal overdoses in rural areas increased 50-160% (CORA). It's imperative organizations like CORA exist because overdoses are an unfortunate occurrence in rural regions. And, with my contributions, I helped enhance their outreach efforts, so other chapters can launch in high schools and universities nationwide. CORA will also be able to educate others about initiatives and legislation enacted related to harm reduction and opioid awareness.



The Finished Product. Explore it yourself at combatoverdoses.org

Future Work:

I became more passionate about volunteering and creating social good with my time working at Hack4Impact-UMD. With software, some of humanity's biggest challenges can be overcome. And so, I plan on continuing my work at Hack4Impact-UMD by taking on a leadership role to hopefully empower driven non-profits globally!



A photo featuring the wonderful team I had the honor of working with at Hack4Impact-UMD's Spring 2023 Project Showcase

Acknowledgments:

I want to thank Hack4Impact-UMD for providing me an enriching experience, as well as my incredible teammates for working with me to deliver an incredible product. And lastly, Dr. Holtz and Dr. Merck for their guidance and instruction over the past two years.

