Crisis Connect

Team: Women of the West Coast (WWC)

Women Who Code Hackathon for Social Good 2023

Crisis Connect

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Meet the Team

Women of the West Coast (WWC)

We are a group of recent tech bootcamp graduates, **based in Vancouver, BC, Canada**, who have come together to build on our cross-functional collaboration skills and to advance our learning and growth within the tech industry

Amy Nagelberg

Web Developer

Grace Lee

UX Designer
(Team Lead)

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Rachel Liao

Data Scientist

Supreet Kaur

Web Developer

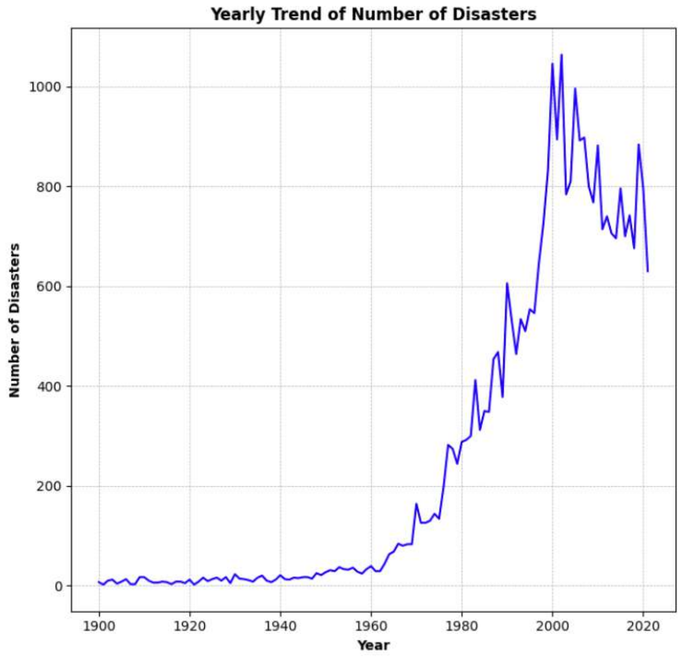
Challenge Statement

Natural disasters and extreme weather events are on the rise due to global warming, straining BC relief efforts. Our solution merges data science, UX design, and web development, ensuring instant access to crucial information for BC's affected.

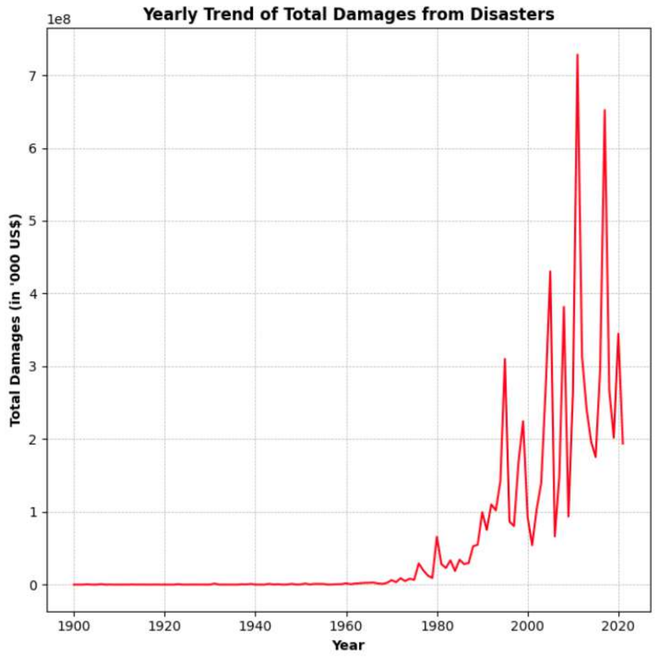
Through deep data analysis, our platform offers personalized real-time aid, differing from standard government relief programs.

Robust web development ensures user-friendly experience, enabling direct community links and informed decisions during crises.

Challenge Statement (cont'd)



Number of disasters have surged since the mid-1900s, peaking in the early 2000s



Economic damages fluctuated, hitting severe levels in the late 1900s and early 2000s

As part of our data science research, we analyzed datasets spanning from the 1900s to 2021 on natural disasters. Applying data processing and exploratory data analysis, we extracted key insights on global and Canada-specific trends.

All data processing, analysis steps, and visualizations are documented in the Jupyter Notebook (available on GitHub).

Challenge Statement (cont'd)

Our Goal

To ensure **impacted individuals within BC (our target user)** have immediate access to critical information during crises, helping them make informed decisions and obtain the urgent support they require.

Our Solution

We created an interactive platform for BC's natural disaster survivors, enabling direct connections with their community for personalized, **one-on-one support beyond governmental aid**.

Our platform encourages real-time interaction, firsthand information sharing, and **immediate access to tailored assistance, setting it apart from traditional relief programs**.

Challenge Statement (cont'd)

Societal Impact

- Bridging the gap between those affected and the help they need
- Encouraging community-driven support for greater social good
- Enabling quick responses with real-time information exchange

Tech Advantages

- Efficient data processing through data science
- User-friendly interface via UX/UI design
- Advanced web development for seamless user experience

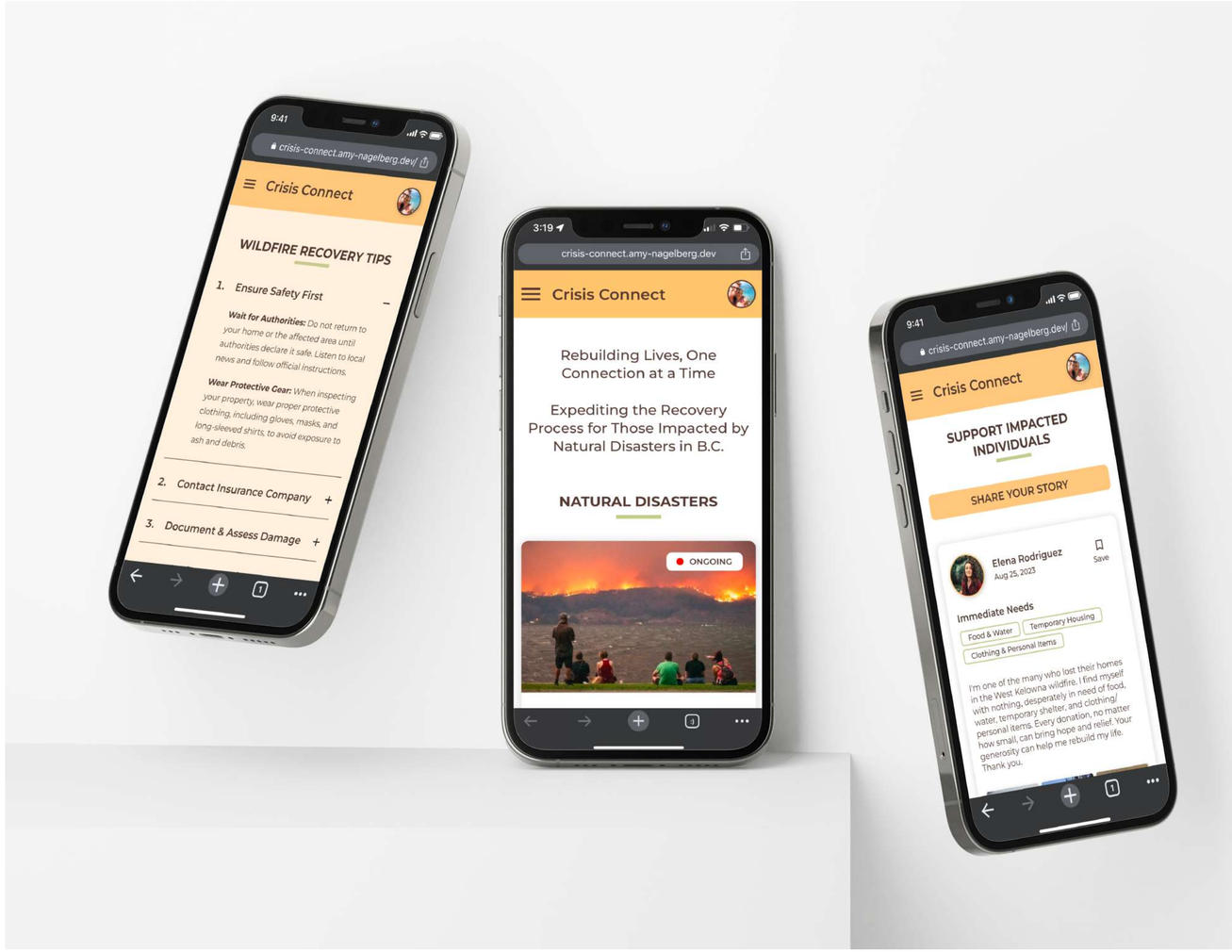
Demo & Full Code Set

We have created a web-platform prototype for our project, tailored for mobile devices (430px x 932px) due to the time constraints of this hackathon.

Live Prototype (Webpage):
https://crisis-connect.amy-nagelberg.dev/

GitHub:
https://github.com/anagelberg/crisis-response

Figma Prototype:
Click here



Key Learnings

As recent bootcamp graduates, this experience provided us with a valuable opportunity to delve deeper into cross-functional collaboration. Here are some key insights we gained from this hackathon:

1. **Team Dynamics:** Understanding the collaboration between data scientists, UX designers, and web developers.

2. **Effective Communication:** Emphasizing clear communication, especially during iterations.

3. **Balancing Time:** Highlighting the importance of quality work under time constraints

Next Steps

Given the time constraints, our prototype is not fully functional. Our next steps involve:

1. Implementing a reporting function, allowing users to report natural disasters for a more **community-built and interactive platform**

2. **Developing essential features:** Login system, Donation Transaction Form, Chat Function, and other Menu Pages to enhance user experience and functionality

3. Translate our current mobile design into **desktop web view**

References

WEB DEVELOPMENT

Live Prototype (Webpage):
> https://crisis-connect.amy-nagelberg.dev/

GitHub
> https://github.com/anagelberg/crisis-response

DATA SCIENCE

GitHub (Data Science Jupyter Notebooks available on GitHub as well)
> https://github.com/anagelberg/crisis-response/tree/main/public/data-analysis

1. **All Natural Disasters (1900-2021):**
   - > https://crisis-connect.amy-nagelberg.dev/data-analysis/yearly-trends
   - Original Data Source: Our World in Data
2. **Decadal Average Natural Disasters Data (1900-2010)**
   - > https://crisis-connect.amy-nagelberg.dev/data-analysis/people-affected
   - Original Data Source: Our World in Data
3. **Global Disaster Risk Index Time Series Dataset**
   - > https://crisis-connect.amy-nagelberg.dev/data-analysis/world-risk-index-natural-disasters.html
   - Original Data Source: WorldRiskReport

UX DESIGN

Figma Prototype:
> Click here