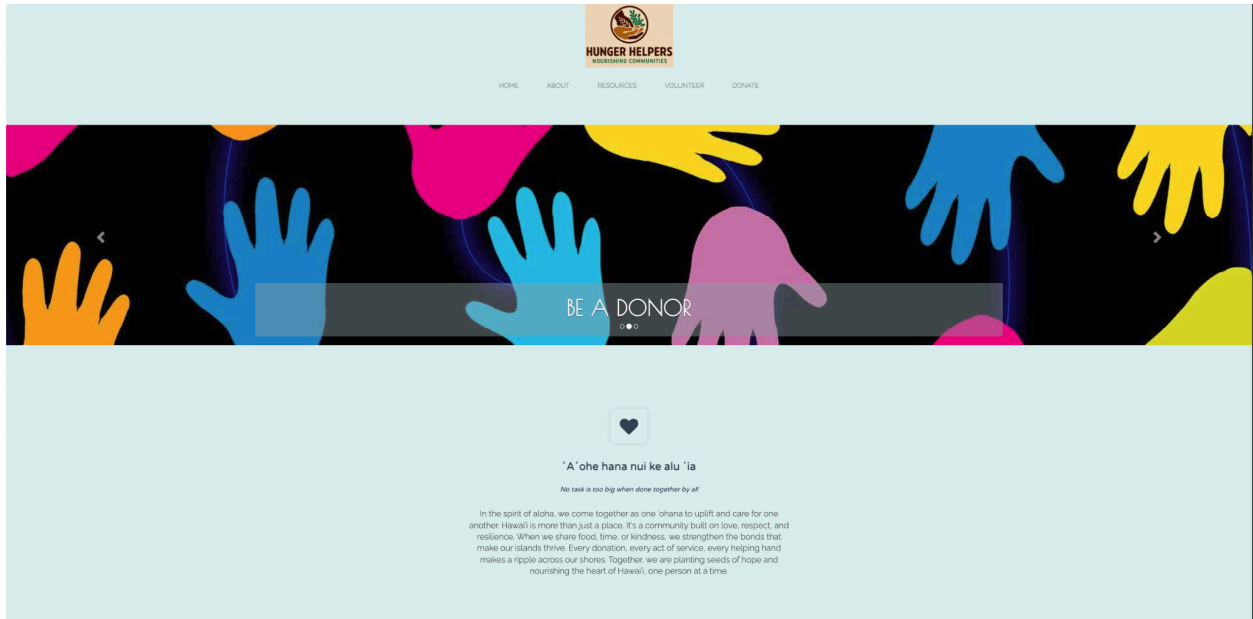


PDF Report

Introduction

Food insecurity continues to affect communities across Hawai'i, despite the deep-rooted values of aloha and 'ohana. Our team developed **Hunger Helpers**, a community-centered web application that connects users with resources to find food support, volunteer opportunities, and trusted organizations to donate to. The platform provides an accessible way for people to contribute to the betterment of their community and for those in need to find timely assistance.



API

This project utilizes Flask as the primary web framework. While the project does not interact with third-party REST APIs, we built internal routes to render HTML templates and organize the site navigation.

Each route corresponds to a major page:

- `/index.html` – Home page with message and carousel
- `/about.html` – Team info and group mottos
- `/resources.html` – Food support organizations
- `/volunteer.html` – Volunteer opportunities
- `/donate.html` – Donation support

```

101 resource_data = [
102     {"name": "Aloha Harvest", "image": "img/alohaharvest.jpg", "url": "https://www.alohaharvest.org/", "description": "Aloha Harvest is a Hawaii-based nonprofit that rescues quality excess food and delivers it free of charge to organizations feeding the community."},
103     {"name": "The Pantry", "image": "img/pantry.png", "url": "https://www.thepantry.org/", "description": "The Pantry is a food distribution service by Feeding Hawaii. Together, offering a grocery-style experience where individuals and families can select from a variety of food items."},
104     {"name": "Hawaii Food Bank", "image": "img/foodbank.jpg", "url": "https://hawaiifoodbank.org/", "description": "Hawaii Foodbank provides food assistance to families, keiki, and kupa across the islands, working with a network of partners to ensure food security for all."},
105     {"name": "Angel Network Charities", "image": "img/angelnetwork.png", "url": "https://www.angelnetworkcharities.org/", "description": "Angel Network Charities provides food, basic necessities, and supportive services to individuals and families in need."},
106     {"name": "River of Life Mission", "image": "img/riveroflife.png", "url": "https://www.riveroflifemission.org/", "description": "River of Life Mission provides meals, essentials, and hope to homeless community, helping people move toward a better future."},
107     {"name": "Living Hope Hawaii", "image": "img/livinghopehawaii.png", "url": "https://www.livinghopehawaii.org/", "description": "Living Hope Hawaii supports those in crisis by offering resources and services that restore dignity and inspire lasting change."},
108     {"name": "Aloha United Way", "image": "img/auw.png", "url": "https://www.auw.org/", "description": "Aloha United Way connects people and resources to improve lives, supporting programs that build a stronger, healthier Hawaii."},
109     {"name": "Hawaii Meals on Wheels", "image": "img/mow.png", "url": "https://mow.org/", "description": "Hawaii Meals on Wheels delivers meals and care to homebound seniors, helping them stay nourished, independent, and connected."}
110 ]
111
112 @app.route('/resource_data', methods=['GET'])
113 def get_resource_data():
114     return resource_data
115
116 @app.route('/index.html', methods=['GET'])
117 def index():
118     return render_template('index.html')
119
120 @app.route('/about.html', methods=['GET'])
121 def about():
122     return render_template('about.html')
123
124 @app.route('/donate.html', methods=['POST', 'GET'])
125 def donate():
126     return render_template('donate.html')
127
128 @app.route('/volunteer.html')
129 def volunteer():
130     return render_template(
131         'volunteer.html',
132         organizations=volunteer_data["organizations"],
133         upcoming_events=volunteer_data["upcoming_events"]
134     )
135
136 @app.route('/register', methods=['POST'])
137 def register():
138     data = request.get_json()
139     name = data.get('name')
140     org_name = data.get('organization')
141
142     for org in volunteer_data["organizations"]:
143         if org["name"] == org_name:
144             if "members" not in org:
145                 org["members"] = []
146             org["members"].append(name)
147             return jsonify({"message": f'({name}) added to {org_name}'}, 201)
148     return jsonify({"error": "Organization not found"}, 404)
149
150 @app.route('/remove_member', methods=['DELETE'])
151 def remove_member():
152     data = request.get_json()
153     name = data.get('name')
154     org_name = data.get('organization')
155
156     for org in volunteer_data["organizations"]:
157         if org["name"] == org_name:
158             if "members" in org:
159                 if name in org["members"]:
160                     org["members"].remove(name)
161                     return jsonify({"message": f'({name}) removed from {org_name}'}, 200)
162     return jsonify({"error": "Organization not found"}, 404)

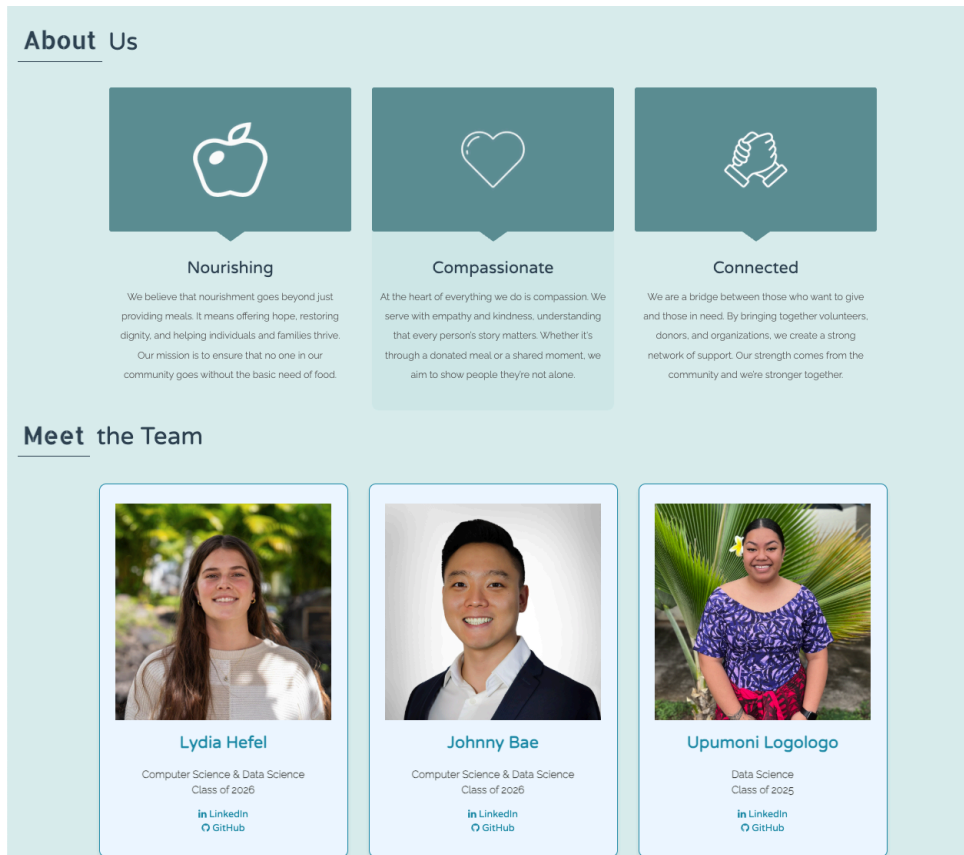
```

Front-End Design

Our front-end was built using HTML5, CSS3, and Bootstrap for a responsive and intuitive experience. We used Font Awesome for icons and emphasized a layout that feels warm and welcoming, rooted in the culture and community of Hawai'i.

Design Elements:

- Header navbar with five main pages
- Carousel on the home page with overlay captions
- “Meet the Team” section with bios displayed in image cards
- Resource and Volunteer pages using a grid layout



Database

While the current version of Hunger Helpers does not utilize a live database, it is structured to support one in future iterations. We plan to use SQLAlchemy with Flask to store information dynamically.

Example Model (future):

```
python
CopyEdit
class Organization(db.Model):
    id = db.Column(db.Integer, primary_key=True)
    name = db.Column(db.String(100))
    category = db.Column(db.String(50)) # e.g., 'Food Support'
    website = db.Column(db.String(200))
```

Challenges

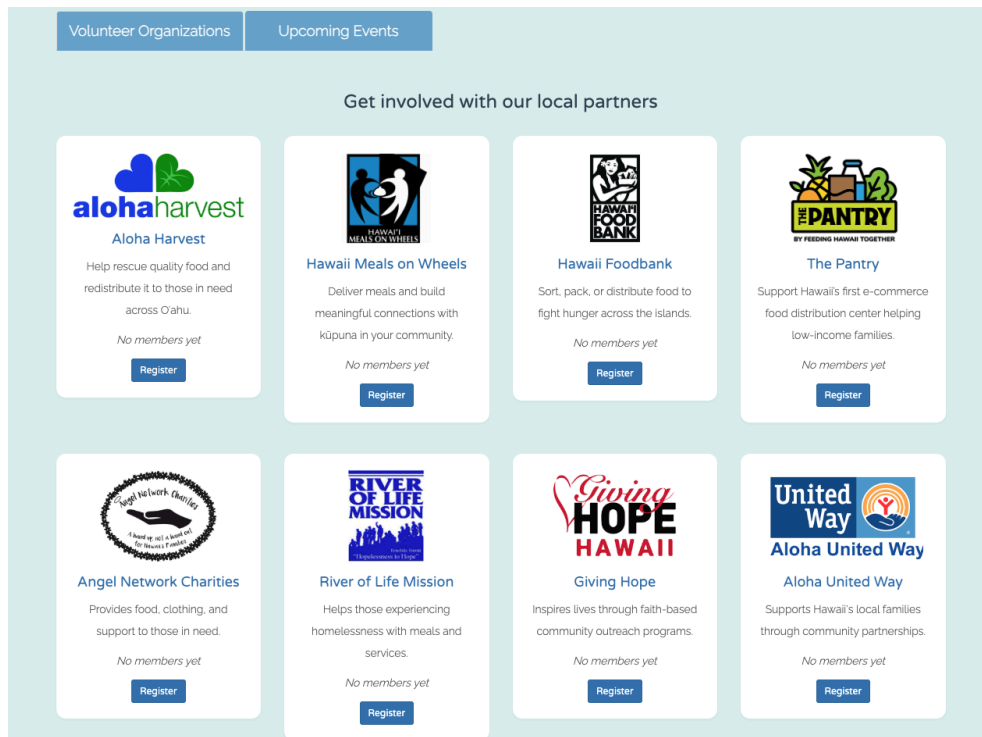
Some of the biggest challenges we faced included:

- **Image Formatting:** Getting different-sized images (especially logos and team photos) to display consistently.

- **Mobile Responsiveness:** Ensuring the site looked good on smaller screens using Bootstrap grid classes.
- **Code Collaboration:** Learning how to push/pull from GitHub and avoid merge conflicts while working as a team.

Successes & Learning:

- Used Bootstrap effectively for responsive layouts
- Gained practical experience with Flask routing
- Built team workflow using GitHub



Future Improvements

In future development, we plan to:

- Add form functionality for users to sign up to volunteer or request food help
- Create a login system with user authentication
- Implement a database to store and dynamically render organization and event data
- Add an interactive calendar or RSVP system for community events

Conclusion

The Hunger Helpers website showcases how code can build community. Through this project, we learned new technical skills, collaborated effectively as a team, and created something meaningful. We're proud of the foundation we've built and are excited to keep improving it for the people of Hawai'i.