

The Hope Project

THEME: Design for Crisis

Rebuild and heal the world with design

July - August 2022

Team 5th Dimension



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Problem Statement

How might we help people who are staying in shelters, which are overcrowded and have food/utility shortages, while fostering a peer-to-peer aid community?

During a time of crisis such as Ukraine war, people have to tackle the problem of shelters unequipped with basic needs, such as food, water, medicines, etc. Availability of data of the shelter homes in the vicinity with enough supply, and volunteer services, would leverage and help the people in need.

PERSONAL LEVEL

- 1. How could Nastya know exactly in which out of two shelters there is still place for her where she might find some food to eat as well?
- 2. How might Oleg discover what help others need if he doesn't know where to look for volunteer opportunities?



According to the International Organization for Migration, at least 7.1 million people have been displaced due to the violence in Ukraine, including children, elderly, and the disabled. We conducted surveys to understand the problem deeper, recognising the challenges faced by the people in Ukraine.

"There have been major attacks in Kiev that have created greater fear and panic among the population, with families really scared, moving alongside their children into subways and shelters, and this is clearly a terrifying moment for children across the country,"

Urgency/Importance

Why is it an urgent issue?

- 1. Some shelter homes are overcrowded, and relocation is unsafe.
- 2. Food, water, medicines, essential utilities, etc supply are not organised
- 3. Incohesive information spanning over different apps, social media platforms and different groups
- 4. People are willing to help others, but don't know where to seek out opportunities.

When a crisis like war hits a nation, the government of the country needs to defend the nation and also take care of its people. If the people could actively coordinate among themselves, they would be able to achieve a faster recovery cohesively along with government-aided schemes. The need for peer-to-peer systems would transform the way recovery occurs, uniting the people for a just cause.

-Afshan Khan, UN Children's Fund (UNICEF) Regional Director, Europe and Central Asia, speaking in Geneva

Image Source: https://sluga-narodu.com







A minor seeking shelter in a metro bunker

User Persona #1

PROFILE & DEMOGRAPHICS

Job Title: Child Gender: Male, 10 years old Family and Social Setting: a mum and a 3-year-old sister Income: N/A Education: Primary classes

FEELINGS

Worries: air alerts during night and day, to hide from danger, & about how much time they'll spend in the shelter Influences: shelling, cries of his little sister, inability to take enough food and water to her

GOALS & VALUES

Goals: be safe at home, have a happy childhood **Values**: family, safety **Motivations**: safe life with family, help with taking care of his little sister

PAIN POINTS

Fears: something might happen to his family, how to help his mum

Frustrations: spending nights on the floor instead of bed, starving in the shelter, inability to talk to his friends **Challenges**: entertaining his sister, being bored at the shelter



Darina Doroshenko

A careseeker in need of medicines at a shelter home

User Persona #2

PROFILE & DEMOGRAPHICS

Job Title: Retired Gender: Female, 61 years old Family and Social Setting: Lives alone Income: Pension Education: Higher Education

FEELINGS

Worries: inability to go far from her house to the shelter, can't leave her 2 cats at home alone, problems with health Influences: the absence of animal feed and medical health care in the hiding places

GOALS & VALUES

Goals: safe home, access to necessities like food, water and medicines

Values: cats, health, safety

Motivations: save her cats' lives, prevent health issues due to constant stress and anxiety, live happily in her old age

PAIN POINTS

Fears: having a heart attack in the shelter, losing her cats **Frustrations:** problem with calling doctors during the air alerts **Challenges:** difficult to take crucial medicines with her while relocating during sirens



Natasha Vasilenko

A mother with 3 children, including an infant, seeking refuge in an underground shelter

PROFILE & DEMOGRAPHICS

Job Title: HR Employee Gender: Female, 33 years old Family and Social Setting: Husband, who is protecting his country now, and 3 children Income: Average Education: Bachelors in Business Administration

GOALS & VALUES

Goals: to provide shelter and facility to her family during air alerts, access to necessities like food, water and fuel **Values:** family, safety, love **Motivations:** safe life with family, good mental health

FEELINGS

Worries: safety and well-being of her children, coping with financial losses **Influences:** caring for and protecting her children

PAIN POINTS

Fears: attacks, inability to help, safety of her kids
Frustrations: food scarcity, inadequate facility for kids, lack of the shelters where are plenty of food and water, overcrowded hiding places
Challenges: finding the nearest shelter home with vacant space and enough supplies, maintaining good mental health

User Persona #3

A peer connector

A network where people can host a person(s) temporarily with food and housing.

CONS: Homes heighten the risk during an air alert, endangering both the host and the refugee.

A centralised food supply

A cloud kitchen serving centralised meals for the people at shelters could be set up, serving healthy meals to the people.

CONS: A centralised kitchen management amidst a crisis is unwieldy and complex. It further imposes the risk of singular dependency in the supply chain.

Explorations

SOLUTIONS & IDEAS

Creating different types of medical/utility kits

Many types of kits can be created for people in shelters, ie. kids will get some toys, games; women reproductive health items, etc.

CONS: This would include multiple sourcing channels and volatile demands, creating a cumbersome network that would be difficult to function in a crisis.

Targeting low shelf life products

Low shelf life products can be bought at a highly discounted rate from grocers and distributed at the shelter homes.

CONS: It is difficult to have a database of the low shelf life products available during a crisis. Also, perishable food could be potentially dangerous for people who consume ignoring the expiry dates, due to dire hunger.

Existing Methods



Messaging Apps

People chat in the messaging apps and can get their needs from others. The most popular groups in these messaging apps are КМДА – офіційний канал, Ukraine NOW, Україна 24/7, etc.

CONS: It is difficult to have concise information on the groups, as the information spans across various groups in different apps, and important ones (such as volunteers' contacts, locations of the NGOs, etc.) may be lost in chats quickly.



Self preparation

Most people go back to their homes and try to get as much food and supplies as they can.

CONS: This can be extremely unsafe, and people may not be able to bring rations for a longer stay.

Existing Methods

Food Delivery Apps

People order from the regular food delivery apps for their meals. In Ukraine the most popular are: Glovo, Rocket and Bolt food.

CONS: Delivery services aren't reliable during the war time. In some cities, they simply don't work now because of the danger and the fact that a lot of workers are on the front line. Also, prices rase, so it's not that cheap to use delivery services every day.







We asked 10 people from Kyiv, 1 from Kharkiv and 2 from Zhytomyr in Ukraine about the experiences they had in shelter homes.



Have you been in the shelters?

When you were in the shelters, did you like the environment there?

Yes No

environment there? Not really No If "No", would you change your mind if there were enough food and water and basic medicines?

Yes No

Were you provided sanitary products during your stay?



Do you think an app with a volunteer service that provides meals to the shelters would be helpful?

No

Yes

Final Solution

The app works by creating a robust volunteer collaboration system. Through the app, volunteers can sign up to make & deliver food kits and essentials to the shelter homes, and the kits would be be made in surplus using food that is non perishable or have a longer shelf life.

Furthermore, the public can make monetary donations or buy "meal tokens' for the people, which can be used to buy the grocery items. Also, individuals/organizations willing to donate have the opportunity to do it through the app.

• The app helps volunteers create meal kits that are a **fundamental need** during dire threats and air alerts.

Help offered through the app:

- 1. Meal kit
- 2. Volunteer Request

How our solution addresses the problem:

This solution helps people in unequipped shelters overcome food and water shortages and provides a safe and comfortable stay in hiding places during air alerts.

Our app becomes **a platform for volunteers** to cooperate with each other, **empowers** department/grocery stores to aid community shelters, and helps **save people** from starvation.

Innovation Brief

Final Solution

- Crucial needs addressed meal kit & essentials
- Volunteer collaboration system
- Grocery/Departmental stores' surplus → discounted products

How it addresses the problem

- Alleviates food and water shortages in shelters, providing a more comfortable stay
- Makes the shelters equipped during high alerts, hence ensuring safety

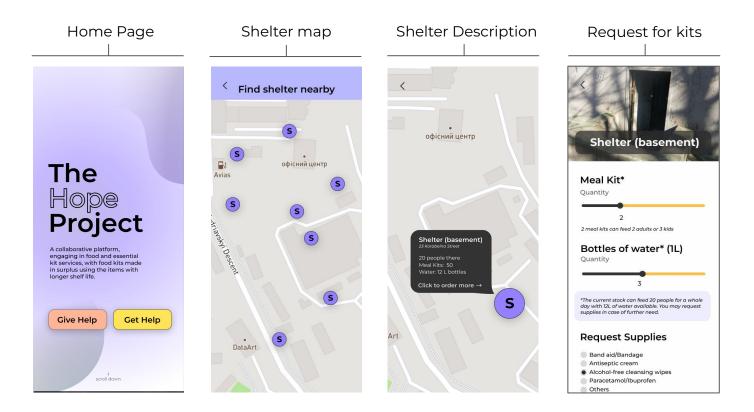
Innovation

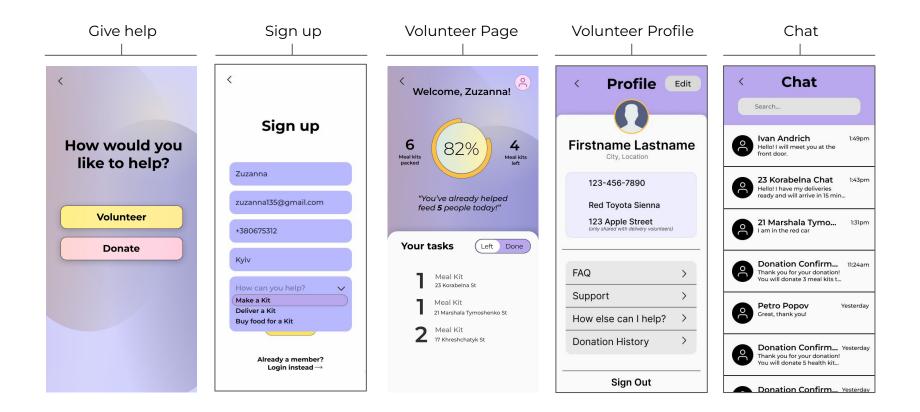
- The meal kits are made of non perishable/long shelf life food items, hence,
 - can be stored
 - consumed at any time
 - kept for a longer duration
- Relies on peer-to-peer network
- Fosters community engagement and support



User Experience

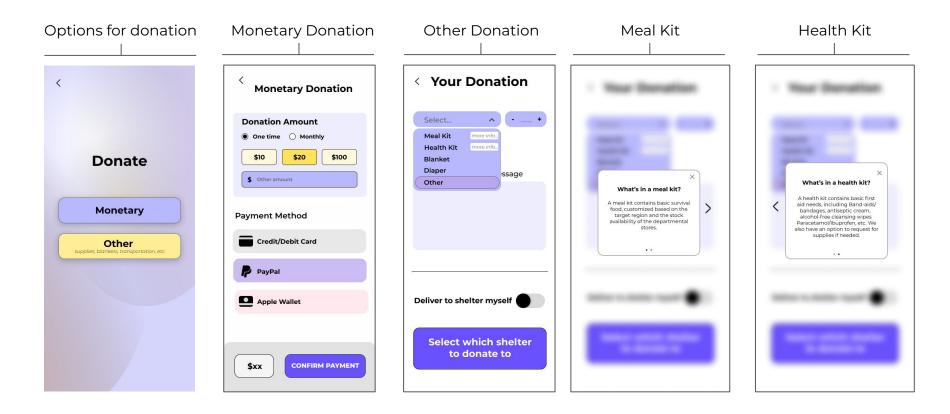
Our design has calm pastel colors and 1-2 colors for calls for action. The interface is responsive and comfortable to use as well.





Volunteer system

The volunteers can chose the type of work they want to do, and keep their work updated through the app and the group chat



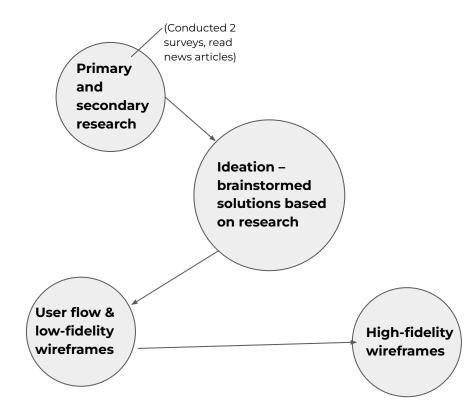
Donor system

Donors can either lend monetary donations or donate in the form of kits, blankets etc or with an option to write personalised message

You can test our prototype with this link

https://www.figma.com/proto/niGuHkuVAAEFK2sfdLFatH/The-Ho pe-Project?node-id=147%3A169&scaling=scale-down&page-id=0%3 A1&starting-point-node-id=147%3A169

Design Process



After choosing the topic we wanted to focus on, we then conducted primary and secondary research to better understand current problems that are affecting people in Ukraine.

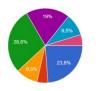
We conducted 2 surveys on people living in Ukraine to identify problems they are facing, and reviewed many news articles. We used insights from our research to guide us through the ideation process, where we narrowed down specific problems and how we would tackle these with our app. Afterwards, we created a user flow diagram and wireframes, followed by a final prototype.



Results of the questionnaire

21 answers have been received.

1. What is your age category? (where red and pink - only 1 answer)



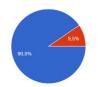


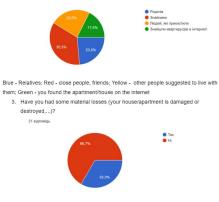
• Так

Hi

Did you have to change your place of living during the war? (90,5% - Yes; 9,5% - No)

21 відповідь





66,7% - No; 33,3% - Yes 4. Have you had any difficulties in finding...



30% - Relatives; 50% - close people, friends; 40% - No, no one hasn't

7. If you have/had some pets and you decided to change the place of living because of

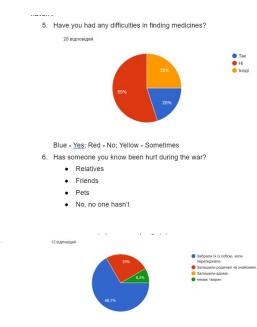
 Забрали їх із собою, коли переїжджали.

Запишили родинам чи знайомим
 Запишили вдома.
 немає тварин

- the war, what did you do?
- Left them at home.
- Gave them to relatives or friends.
- Took them with you.
- Other: (explain in small paragraph)



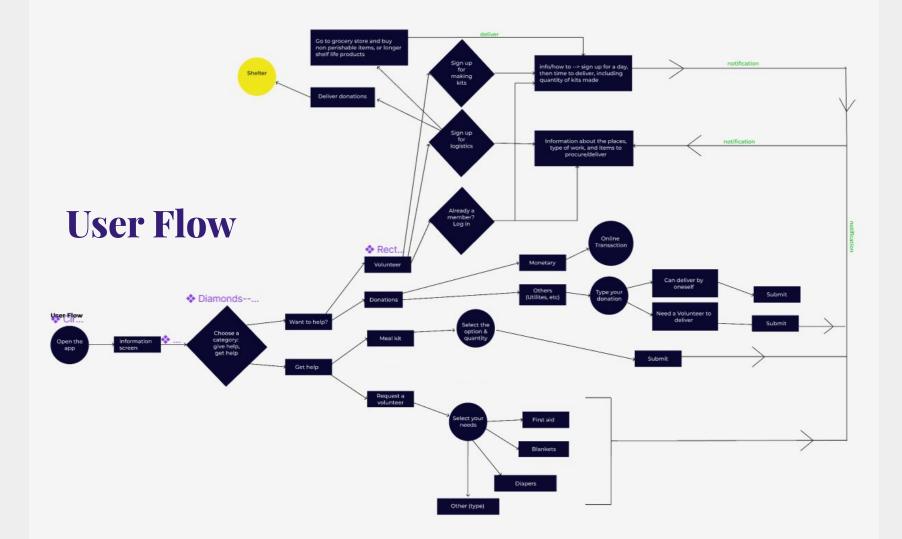
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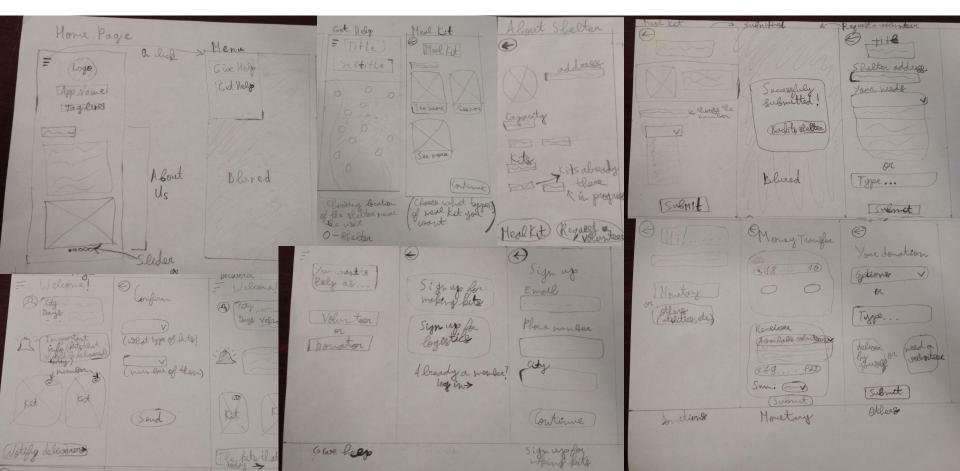
Blue - Took them with you; Red - Gave them to relatives or friends; Green - Left them at home.

8. (If you have children or you are yourself a kid/teenager)

- You chose to study abroad.
- You continue to study in your school/university online.
- You didn't have the opportunity to finish the school year.
- You were looking for another institution as yours was destroyed or damaged or you moved to another city/village.
- Other: (explain in small paragraph)

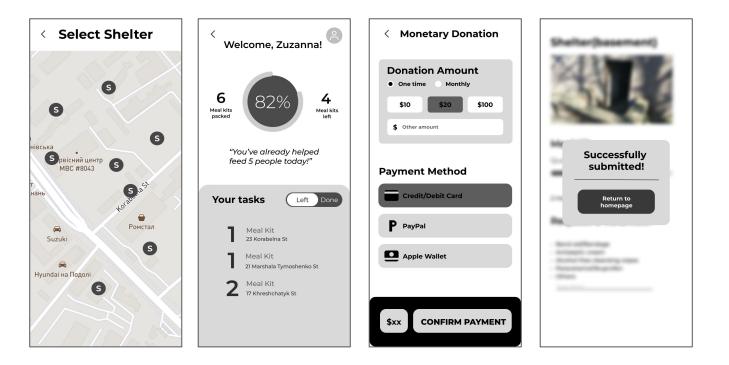


Low Fidelity Wireframes



High Fidelity Wireframes

(some examples)



Impact on the Society

In the survey we conducted, 75% of respondents said they did not like the environment of the shelter, but 89% said if there was enough food, water, and medicine, their stay would be significantly more comfortable. Through our app, these necessary supplies can be provided to people staying in shelters. They already have to worry about their and their loved ones' safety, but with our solution that supplies basic essentials, they won't have to worry about whether they will have a meal on the table. Additionally, volunteers can feel more connected to their **community** and be **empowered** to continue to help, while those in shelters feel supported during difficult times.



Sustainability

Our app focuses on providing **non-perishable** meals to shelters. These non-perishable meals can be stored for long periods of time before going to use, which is useful for shelters that have a varying capacity of residents. This reduces food waste, as the food goes directly to people instead of becoming spoiled and going to the landfill.

This **unique system** can be incorporated in any war crisis, anywhere in the world. The ecosystem enables people to manage crises themselves, enabling a sense of **companionship** and **unity**.



Practicality and Business Viability

Our app aims to provide a seamless connection between volunteers and those in need of supplies. In our survey, respondents said they would like to help others by volunteering or donating, and our app allows them this opportunity by notifying them of shelters that are in need. The volunteers can easily identify which shelter locations are suitable for them to donate to, and then can set up a time to deliver. This accommodates the volunteer's schedule and abilities, and ensures the shelter is receiving a steady flow of supplies when needed. The app is also accessible to everyone, as there are no costs to using it, unless desired through donations.

Video link

https://drive.google.com/file/d/1GzsJwWe7Wzf5Ivwv8gaE-u_OjbIF LOnL/view?usp=sharing





From Team 5th Dimension: The only limit is your imagination...