Winter-semester 2023/24

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MVP "Helping Hands"

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Introduction

For my tech basics II project, I followed up on my idea and my prototype from tech basics I. My idea revolves around creating a community-oriented app that facilitates the borrowing of tools and equipment among neighbors while also helping with various tasks and projects. Key features and benefits include:

1. Tool sharing: Users can borrow tools they need from nearby neighbors, promoting cost savings, access to a wider range of tools, and sustainability through resource efficiency.
2. Community sharing: The app fosters sharing, collaboration, and community cohesion by encouraging neighbors to help each other with tasks, repairs, and projects.
3. Expertise Exchange: Users can offer and seek help based on their skills and knowledge, enabling the exchange of expertise, and learning within the community.
4. Safety and Trust: Safety measures such as user verification, rating systems, and privacy settings are implemented to ensure a safe and trustworthy environment, particularly for women and vulnerable individuals.
5. Convenience and Efficiency: The app provides a convenient platform for finding tools and assistance quickly, saving time and money compared to traditional methods such as hiring professionals or purchasing tools.

Overall, my idea aims to strengthen community ties, promote resource sharing and sustainability, and provide a safe and reliable platform for neighbors to support each other in various aspects of daily life.

Methodology

I have indeed adopted my idea from tech basics I, but I started the implementation from scratch. I began with the 'Homepage,' then developed the 'Looking for Help' page and the 'Offering Help' page. Finally, I created the 'My Profile' page and the 'Code of Conduct.' To enhance user flow, I concluded with the 'Your Offered Items' and 'Your Borrowed Items' pages. I mostly used the concepts from Tech Basics I and II, with a few exceptions listed below. My goal was to ensure that the GUI stands on its own, is clearly structured, and represents my idea very well. As Sarah Haq suggested in the README document, I started simple and then built on it.

To make sure my code is clean, I adhered to the "Clean Code" guidelines mentioned in the README file.

Design

The GUI design looks clean, intuitive, and visually appealing. When I created the GUI design the following aspects were important for me:

1. Color Scheme: The choice of background color (#F0F8FF) provides a soft and welcoming backdrop, making the interface easy on the eyes. The contrast between the background and text colors ensures readability and enhances visual clarity.

2. Layout: The layout is well-structured, with elements positioned logically throughout the interface. Each page (Homepage, Looking for Help, Offering Help, My Profile, Code of Conduct) is clearly delineated, making navigation intuitive for users.

3. Buttons: Buttons are prominently displayed with clear labels, making it easy for users to understand their functions immediately. The use of contrasting colors and borders enhances their visibility and distinguishes them from other elements on the page.

4. Text: Text elements, such as labels and instructions, are presented in a legible font (Arial) with appropriate font sizes and styles. Important information is emphasized using bold larger fonts, drawing attention to key messages.

5. Images: The conclusion of the background image ("hands.jpeg") adds visual interest to the interface without overwhelming the content. The image complements the theme of community and assistance, reinforcing the app`s purpose.

6. User Input: Entry fields and dropdown menus for user input are clearly labeled and positioned adjacent to relevant questions or prompts, facilitating seamless interaction with the interface.
7. Consistency: the design maintains consistency in terms of color scheme, font usage, and layout across different pages, providing a cohesive user experience throughout the app

Overall, the GUI design effectively communicates the app`s purpose and functionality while prioritizing user-friendliness and aesthetic appeal.

Limitations

Unfortunately, I couldn't address the Safety and Trust aspect as effectively in developing my GUI: User verification, rating systems, and privacy settings were not integrated. However, I included the Code of Conduct. It also would have been nice to have real examples of borrowed items or user profiles.

References

Line 138, 149, 160, 171, 336, 342, 431, 437, 471, 482 and 493:

Even though I used the "absolute positioning" in the GUI, I used the "anchor" positioning in these lines because I found it easier to place the buttons in the center. I found this in the TKinter tutorial referenced in the exam slides: https://www.pythontutorial.net/tkinter/tkinter-place/

Line 19:

I used the "def set_background" definition, suggested for us on Sarah Haqs GitHub. The function was inspired by Robin Paul.

Line 56 - 82:

Chatgpt helped me to create the frame for the code of conduct with the scrollbar.

143-147, 154-158, 165-169, 197-200, 235-238, 331-334, 426-429, 465-469, 476-480 and 487 – 491:

Chatgpt helped me in parts to create this button style, but I adjusted the width and font.

272-275, 286-288, 368-371 and 382-384:

Chatgpt helped me to create the option selection.

300, 305, 396 and 401:

The python tutorial helped me to create the Radiobuttons:

https://www.pythontutorial.net/tkinter/tkinter-radio-button/

Screenshots

Helping Hands!

What do you want to do?

Which tools do you need for that?

Do you need a helping hand?   ◯ Yes   ◯ No

Where is your neighbourhood?

Search

🏠   CLOSE THE APP

Helping Hands!

What do you want to do?   **Build something**

Which tools do you need for that?   **Hammer**

Do you need a helping hand?   ◯ Yes   🔘 No

Where is your neighbourhood?   Lüneburg

Search

We will search a HelpingHand for: Build something

🏠   CLOSE THE APP

Helping Hands!

For what can you lend a helping hand ?　　　⬍

What can you lend?　　　⬍

Can you lend a helping hand?　　◯ Yes　　　◯ No

Where is your neighbourhood?　　　[   ]

Lend

🏠　　　CLOSE THE APP

Helping Hands!

For what can you lend a helping hand ?　　**Repair something** ⬍

What can you lend?　　**Hammer** ⬍

Can you lend a helping hand?　　◯ Yes　　🔵 **No**

Where is your neighbourhood?　　Lüneburg

Lend

Thank you for offering a Helping Hand!

🏠　　　CLOSE THE APP

My Profile

Code of Conduct

Your offered items

Your borrowed items

🏠

CLOSE THE APP

Community Code of Conduct

Welcome to the HelpingHands community! Our community is built on principles of trust, collaboration, and mutual respect. To ensure a safe and enjoyable experience for all users, we ask that you adhere to the following Code of Conduct:

1. Respect and Inclusivity: Treat all members of the community with respect and dignity. Discrimination, harassment, hate speech, or any form of abusive behavior will not be tolerated.
2. Safety First: Prioritize safety in all interactions. Be mindful of your surroundings and take necessary precautions when borrowing tools or offering help. If you feel unsafe or encounter any concerning behavior, please report it immediately.
3. Clear Communication: Communicate openly and honestly with other users. Clearly discuss expectations, timelines, and any relevant details before engaging in a transaction or collaboration.
4. Privacy and Confidentiality: Respect the privacy and confidentiality of other users. Do not share personal information without consent, and refrain from disclosing sensitive details about others' projects or situations.
5. Fairness and Transparency: Be fair and transparent in your dealings with others. Honor commitments, provide accurate information about your tools or skills, and disclose any limitations or potential challenges upfront.
6. Feedback and Improvement: Provide constructive feedback to help improve the community. Use the rating and feedback system responsibly to share your experiences and contribute to the overall quality of interactions.
7. Empowerment and Support: Support and empower fellow community members. Offer

Go back to My Profile!

🏠

CLOSE THE APP

You have 0 items offered

Would you like to offer items?

Go back to My Profile!

🏠   CLOSE THE APP

You have 0 items borrowed

Would you like to borrow items?

Go back to My Profile!

🏠   CLOSE THE APP