**Community Help Board - Design Report**

**1. Chosen Domain & Task**

The **Community Help Board** is a web application that connects individuals needing assistance with volunteers. Categories include errands, tutoring, repairs, and tech support. The goal is to create an intuitive platform for seamless help exchange.

**2. Design Approach**

I applied **User-Centered Design (UCD)** principles:

* **Accessibility**: Readable typography, high contrast, and responsive layout.
* **Simplicity**: Clean, focused interface.
* **Feedback**: Instant visual cues (animations, toasts).
* **Consistency**: Unified design across components.
* **Efficiency**: Keyboard shortcuts and streamlined workflows.

**3. Key Features**

* **Help Request Board**: Categorized requests in a card-based layout.
* **Real-time Chat**: Direct communication.
* **Notifications**: Updates on offers and request status.
* **Authentication**: Secure and seamless login.
* **Dark/Light Mode**: Customizable themes.

**4. Interactive Components (Norman’s Model)**

**Gulf of Execution**

* **Clear Actions**: "New Request" and "Offer Help" buttons.
* **Input Guidance**: Descriptive placeholders and labels.
* **Loading Feedback**: Visual indicators during processing.

**Gulf of Evaluation**

* **System Feedback**: Toast notifications for success/errors.
* **Status Updates**: Request tracking and notifications.

**5. Nielsen’s Heuristics Applied**

1. **Visibility of System Status** – Progress indicators, real-time updates.
2. **Match with Real World** – Familiar terminology and icons.
3. **User Control & Freedom** – Undo, confirmations, clear navigation.
4. **Consistency & Standards** – Uniform UI patterns and iconography.
5. **Error Prevention** – Form validation and confirmation prompts.

**6. Usability Evaluation**

* **Heuristic Evaluation** – Checked against Nielsen’s principles.
* **User Testing** – Gathered feedback for refinements.
* **Accessibility & Responsiveness** – Ensured smooth performance on all devices.

**Findings:**

* Improved navigation via keyboard shortcuts.
* Enhanced feedback through dynamic notifications.
* Streamlined request workflow and visual hierarchy.

**7. Challenges & Innovations**

**Challenges:**

* Balancing simplicity and feature richness.
* Managing real-time interactions efficiently.

**Solutions:**

* Implemented clear feature hierarchy.
* Used React Context API for state management.
* Applied responsive design for cross-device usability.