

Integrated Digital Service Delivery Platform for
Ministry of Chittagong
Hill Tracts Affairs

**Citizen Portal** 

**UX/UI** Design Portfolio of



**Aminul Islam**Sr. UX/UI Designer



### Project overview



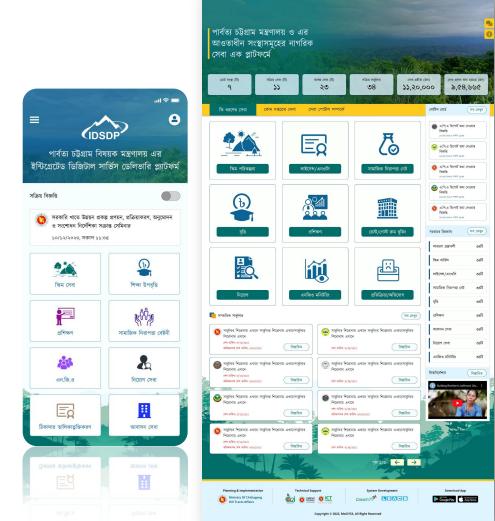
### The product:

The Ministry of Chittagong Hill Tracts
Affairs in Bangladesh is implementing a
comprehensive **Integrated Digital Service Delivery Platform** across its six
offices. This initiative aims to digitalize
and centralize all service provider
organizations and service recipients
within a virtual platform, utilizing web and
mobile applications for enhanced
accessibility and efficiency.



### **Project duration:**

April 2022 to August 2022



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 পার্বত্য চট্টগ্রাম বিষয়ক মন্ত্রণালয়
হার্যক্রের বিষয়ক সার্বন বেলভার প্রায়ক্ত

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### Project overview



### The problem:

The office is struggling with issues such as paperwork, scheduling delays, and approval backlogs. Inefficiencies stem from the need for physical visits between departments and communication gaps. Public awareness programs are facing obstacles, and there is currently no streamlined process for handling appeals or inquiries. Additionally, the absence of monitoring and a help desk is impeding Ministry oversight and assistance.



#### The goal:

The plan modernizes government services with web and mobile apps, upgraded facilities, and centralized features. It includes scheme management and registrations for recipients, providers, and vendors, covering scholarships, training, social safety nets, NGO monitoring, recruitment, and accommodation. The goal is streamlined communication, digital signing, and a user-friendly support center to enhance the efficiency and accessibility of government services.

# Project overview



My role:

**UX/UI Designer** 



### Responsibilities:

- User Research
- Wireframing
- Prototyping

# Understanding the user

- User research
- Personas
- Problem statements
- User journey maps



### User research: Summary

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Through 50-60 Qualitative and Quantitative Interviews, our user research aimed to uncover behavior, needs, pain-points, and motivations. Initial assumptions were challenged, revealing unexpected pain-points and diverse user motivations. Quantitative data validated certain assumptions, guiding feature prioritization. The insights gained will shape a user-centric product/service strategy, ensuring alignment with user expectations and addressing previously undiscovered aspects of user experiences.

### User research: pain points



#### **Administrative Hurdles**

Administrative delays, ledger conflicts, and dependence on authorized letters pose communication obstacles, significantly hampering overall efficiency.

2

#### **Complex Welfare Processes**

Users encounter bureaucratic hurdles, hierarchy issues, and complications with paper-based schemes, affecting their access to welfare benefits.

3

#### Skills Development Gap

Limited training opportunities hinder public skill development, limiting personal and community growth.



#### Social Safety Struggles

Difficulties in understanding ration schedules, distant distribution points, and decreasing ration quantities contribute to challenges in ensuring an adequate food supply.

### Persona: Lokkhi Chandro

#### **Problem statement:**

Lokkhi Chandro is a service recipient who needs easy and user-friendly online software for applying and tracking government schemes and services because he is socially welfare-aware.





I need to make sure my people's better lifestyle, earning facility, better communication, skill development trainings, cultural activity etc.

#### **Lokhi Chandro**

Headman

Age : 60 Area : Rural Tribe : Chakma Favorite Color: Sky Blue

#### **Technological Skills**

Feature phone

Smartphone/Tablet

Internet

Laptop/Computer

#### Habit

- Making relation with public
- Conduct public awareness program
- Insight thinking about citizen facility
- Scheme create to develop citizen facility.

#### Pain Point 🔀



- Reducing traditional culture
- Paperbase scheme creating critical for me
- Lack of training scheme to develop public skills
- Difficult to know application status
- Sometimes paper based Application were damaged

#### Nice to Have



- Mobile apps to send scheme to develop citizen facility
- Scheme status tracking facility
- Central Information System
- Central Schedule Management
- Want to get notification allocated scheme for my area

## User journey map

Analyzing Lokkhi Chandro's user journey highlighted the considerable benefits that users could derive from the availability of a dedicated online platform.

#### Persona: Lokkhi Chandro

Goal: Discover a pathway to apply and tracking government services.

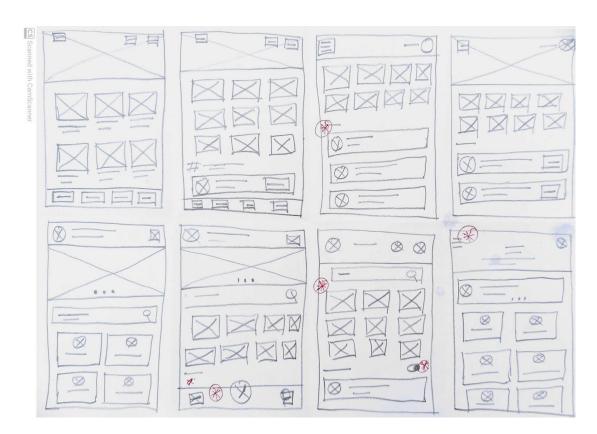
ACTION	Browsing Information	Submit a Application	Get Notification	Tracking Application status	Leave Feedback & Rating
TASK LIST	Read Service information.     Find & read office wise notices & circulars.     Identify Services.	Tasks  Sign In/Sign Up Read Guideline Complete Application Form Upload Supporting Documents Submit Application Approval Process	Confirmation     SMS/Notification to     mobile/email     Update Notification     Get Newsletters	Search by tracking no.     Sign in to personalized user panel to track     Get live status	Service/     Scheme wise rating with stars     Leave a Remarks
EMOTIONS	Lost     Hopeful	Confused     Intimidated     Excluded	Relieved     Glad     Alert	Satisfied     Excited	Overwhelmed     Excited
IMPROVEMENT OPPORTUNITIES	Include screen reader     Voice command	Better wayfinding     Audio/Video     Guideline     Support assistance	SMS/Notification on/off facilities	Better wayfinding to remember tracking no.	User should get a push notification to leave a rating.

Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies

# Paper wireframes (App)

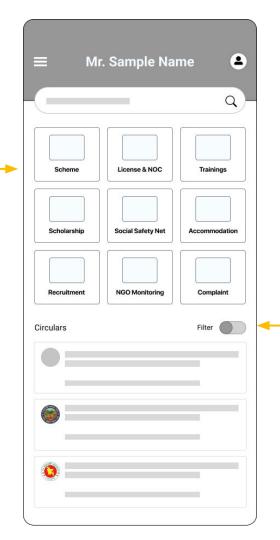
Investing time in sketching multiple versions of each mobile apps homepage on paper ensured that the elements transitioning to digital wireframes were meticulously crafted to address user pain points effectively. My focus centered on prioritizing a swift and user-friendly process, aimed at saving users valuable time.



### Digital wireframes (App)

During the initial design phase, I consistently grounded the mobile app's homepage designs in feedback and insights gathered through user research, actively playing a role in the continuous iterative improvement process.

The services menu at the top of the mobile app homepage guarantees a swift and seamless ordering experience for users.



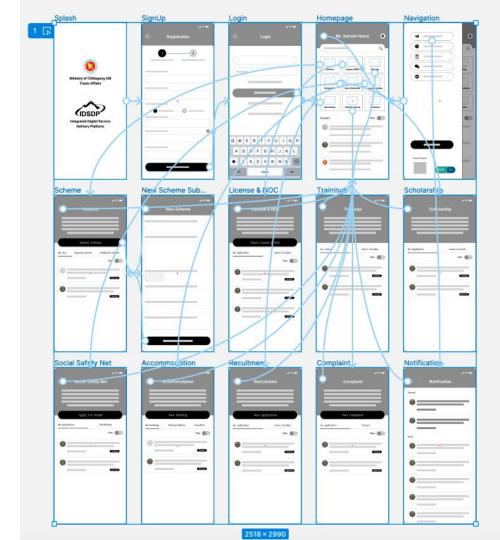
The left-side filtering of circulars based on offices provides users with a convenient way to tab through and navigate effortlessly.

### Low-fidelity prototype (App)

The basic prototype successfully integrated with the primary user journey, encompassing the creation and ordering processes within the citizen portal's mobile app. Subsequently, this prototype was employed in a usability study involving mobile app users.

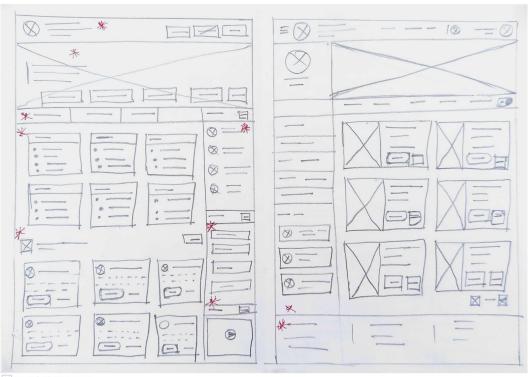
#### **Prototype Link**

https://www.figma.com/proto/hkdCl0lNbSSWKeYnWao0 Ge/MoCHTA\_Apps?page-id=504%3A2&type=design&no de-id=513-412&viewport=676%2C445%2C0.5&t=djWesdj aVzrLNqFm-1&scaling=min-zoom&starting-point-node-id =513%3A412&mode=design



## Paper wireframes (Web)

Investing time in sketching multiple versions of each web homepage on paper ensured that the elements transitioning to digital wireframes were meticulously crafted to address user pain points effectively. My focus centered on prioritizing a swift and user-friendly process, aimed at saving users valuable time.



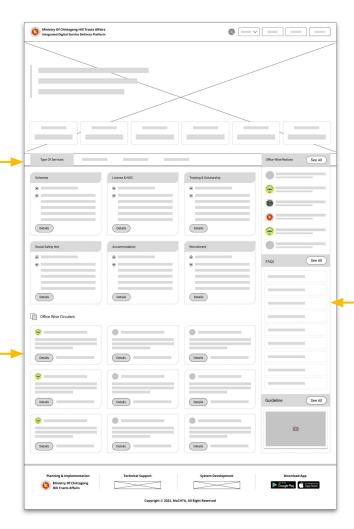
CS Scanned with CamScanner

### Digital wireframes (Web)

In the initial design phase, I consistently anchored the homepage designs in feedback and insights obtained through user research, actively contributing to the ongoing iterative enhancement of the website.

The top-placed services menu on the homepage ensures a quick and effortless ordering experience for users on the website.

Effortlessly access the most recent circulars categorized by office.



The sticky bar on the right side enhances user navigation, particularly for those who prefer using the mouse with their right hand.

### Low-fidelity prototype (Web)

The low-fidelity prototype established a connection with the main user flow, involving the creation and ordering process on the citizen website of the portal. This prototype was then utilized in a usability study with users.

#### **Prototype Link**

https://www.figma.com/proto/EHxCq5m8v0PNPRxBma UZ0o/MoCHTA\_V2.U3?page-id=1757%3A44&type=des ign&node-id=1757-45&viewport=146%2C540%2C0.27& t=XQTvZOskSzZOUX86-1&scaling=min-zoom&startingpoint-node-id=1757%3A45&mode=design



# Usability study: parameters



### Study type:

Moderated & Unmoderated



#### **Location:**

CHT Complex, Dhaka, Bangladesh



### **Participants:**

55 participants



#### Length:

2 days





### Usability study: findings

55 participants, in both moderated and unmoderated sessions, performed tasks within the mock interface, emphasizing key functionalities. Interactions and feedback were closely observed and documented.

### **Round 1 findings**

- 1 User aims to minimize text and explore alternatives to icons or images.
- 2 User wants an easier registration/login process for improved accessibility.
- 3 User wants to navigate through services on both the web & apps.

### **Round 2 findings**

- 1 User desires a focus on tracking features.
- User wants interactive support assistance.
- 3 User wants to ensure secure payment confirmation.

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

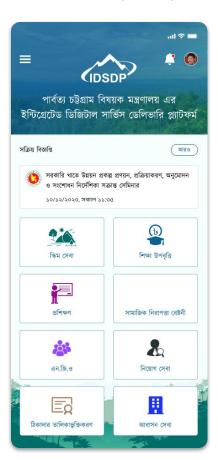
## Mockups (App)

Addressing navigation challenges identified in the usability study, I optimized the mobile app's flow by consolidating service-based elements. A hilly theme was integrated to improve user-friendly registration and login. Furthermore, accessibility features and an interactive support center were implemented to elevate the overall mobile app experience.

#### **Before usability study 01**



#### **After usability study 01**



# Mockups (App)







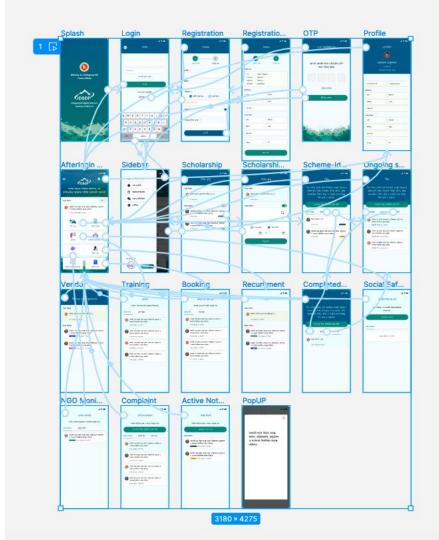


# High-fidelity Prototype (App)

The high-fidelity prototype seamlessly integrated into the primary user journey, covering the creation and ordering processes within the citizen portal's mobile app. Following this integration, the high-fidelity prototype was utilized in a usability study with mobile app users.

#### **Prototype Link**

https://www.figma.com/proto/ZfkSSQAdGrsF9tdv50uAa y/MoCHTA\_Prototype?page-id=0%3A1&type=design& node-id=1614-9455&viewport=1786%2C2696%2C0.07 &t=a5TblzknXHgIHHEx-1&scaling=min-zoom&startingpoint-node-id=1614%3A9455&mode=design



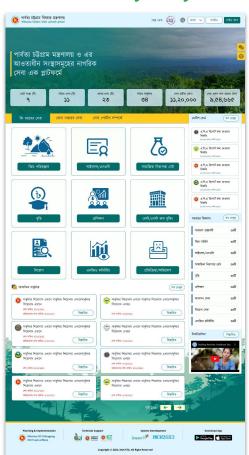
### Mockups (Web)

Responding to navigation challenges revealed in the usability study, I streamlined the process by consolidating service-based elements. A hilly theme was incorporated for user-friendly registration and login. Additionally, accessibility features and an interactive support center were introduced to enhance the overall user experience.

#### **Before usability study 1**



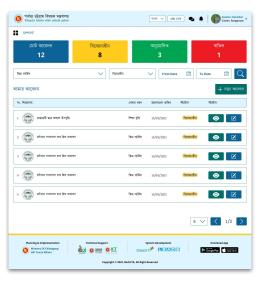
#### After usability study 2



### Mockups (Web)





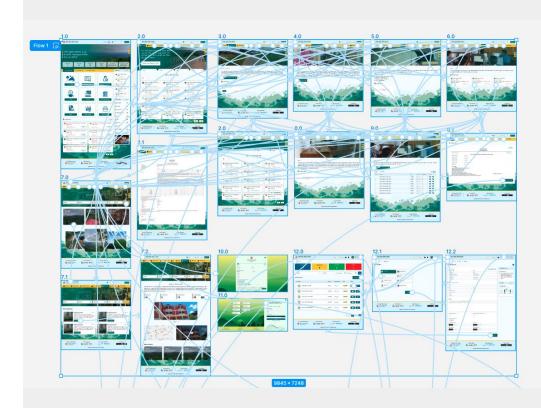


### High-fidelity prototype (Web)

The high-fidelity prototype seamlessly integrated into the primary user flow, encompassing the creation and ordering processes on the citizen website of the portal. Subsequently, this advanced prototype was employed in a usability study with users.

#### **Prototype Link**

https://www.figma.com/proto/ZfkSSQAdGrsF9tdv50uAa y/MoCHTA\_Prototype?page-id=0%3A1&type=design& node-id=1614-9455&viewport=1786%2C2696%2C0.07 &t=a5TblzknXHgIHHEx-1&scaling=min-zoom&startingpoint-node-id=1614%3A9455&mode=design



## Accessibility considerations

1

Ensure the portal is compatible with screen readers to provide access for users with visual impairments.

2

Option for readable fonts and ensure high contrast between text and background colors to improve legibility, catering to users with visual challenges.

3

Adopt a responsive design approach to ensure optimal user experience on various devices, providing accessibility on both web browsers and mobile devices.

# Going forward

- Takeaways
- Next steps

### Takeaways



#### Impact:

The system has brought about notable improvements, enhancing efficiency and user satisfaction through features like increased accessibility, streamlined workflows, and real-time data availability. Its scalability, flexibility, and commitment to best practices contribute to positive organizational impacts. Continuous user feedback ensures the system remains adaptive and user-centric.



#### What I learned:

Key takeaways include prioritizing user-centric design, emphasizing accessibility, and embracing continuous improvement based on user feedback. Scalability and adherence to best practices emerged as crucial factors, underscoring the dynamic nature of technology and the need for ongoing learning and refinement.

### Next steps

1

Conduct a thorough analysis of the gathered user feedback to identify specific areas for improvement and refinement in the system's design and functionality.

2

Implement iterative design updates based on the insights gained from user feedback analysis. Prioritize enhancements that address usability issues, improve accessibility, and align with user preferences.

3

Perform comprehensive accessibility testing to ensure that the system remains compliant with relevant standards, providing an inclusive experience for users with diverse needs.

### Let's connect!



I'm eager to connect, share insights, and explore collaborations. Whether you have questions or ideas, feel free to reach out. Your input is valuable, and I look forward to building connections and fostering a positive exchange of information and ideas.

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# Thank you!