

App Names Suggestions :

1. EasyPay
2. AccessPay
3. FlexiPay
4. UniPay
5. ClearPay
6. SimplePay
7. SmartPay
8. SafePay
9. InclusivePay

FlexiPay

Simple, secure, and inclusive banking for everyone.

Content

Introduction

- Challenge
- Initial Assumptions
- Approach
- Goal

Process, Research & Exploration

- Affinity Clustering
- How Might We
- User Research - user interviews
- Insights from User Interviews
- Problem Statement
- User Personas
- User Stories & User Flows
- MoSCoW feature prioritization

The Design Iterations

- Low-fidelity Prototype(balsamiq)
- Mid-fidelity Prototype (Figma)
- Usability Testing and Key Insights
- Moodboard
- High-fidelity Prototype (Figma)
- Key Designs
- Usability Testing and Key Insights

Evaluation & Reflection

- Potential improvement
- Additional features
- Reflection

Introduction

FlexiPay is a digital banking platform designed to make financial services accessible and flexible for everyone, regardless of their digital literacy or physical abilities. In a world where online banking has become the norm, many individuals still face challenges due to complex interfaces and a lack of inclusive design. FlexiPay aims to overcome these obstacles by offering a simple, secure, and user-friendly experience tailored to meet the needs of all users.

Our mission is to empower every individual to manage their finances independently and confidently, ensuring that no one is left behind in the digital age.

Challenge

Many people find current banking apps hard to use. **Complicated menus, small text, and lack of support for different needs make it tough for users with disabilities or limited tech experience to do basic tasks.**

The challenge is to create a banking app that's easy to use for everyone. This means thinking about the needs of people with visual, hearing, learning, and movement challenges, as well as those who are not used to digital banking. The aim is to build a truly inclusive app where everyone can manage their money easily and securely.

56% of users struggle with small buttons and touch targets in banking apps ([Accessibility Audits](#)) ([Consumer Reports](#)).

30% of users report difficulty understanding the app's layout and navigation ([SaaS UI/UX Design Agency – Eleken](#)).

17.2% of users have trouble reading the text on banking app screens ([The Financial Brand](#)).

12.8% of users experience issues typing on their mobile devices to interact with banking apps ([The Financial Brand](#)).

25% of U.S. adults live with some form of disability, controlling an estimated **\$490 billion** in disposable income ([Accessibility Audits](#)).

20.8% of older adults struggle with visibility issues when using banking apps ([The Financial Brand](#)).

36.3% of Boomers and Seniors worry about app security and potential theft ([The Financial Brand](#)).

47.7 million potential mobile banking users could be added if common UX issues were resolved ([The Financial Brand](#)).

Quote

"The role of UX is to be the voice of the customer in the journey of transformation and solution discovery. From a business side, UX research saves time and costs down the line and improves team culture. Research creates better solutions, better solutions create better wins, and better wins create better team cohesion."

— **Dylan Brits**, Client Experience Designer at Capitec Bank ([Fintech Futures](#)).

Initial Assumptions

When designing **FlexiPay**, it's essential to start with certain assumptions about the challenges and **needs of our users**. These assumptions **guide the early stages of research and design, helping us focus on the key areas that require attention**. By validating or adjusting these assumptions through **user research, we can ensure our solution truly addresses the users' needs**.

1. Users prefer a simple and intuitive interface.

Many users, especially those with limited digital literacy, struggle with complex designs. We assume that simplifying navigation and reducing cognitive load will lead to higher user satisfaction and adoption.

2. Accessibility features are critical for a significant portion of users.

Given that over 20% of the population has some form of disability, it is assumed that offering robust accessibility options (e.g., larger text, screen reader compatibility) will make the app more inclusive and usable ([Accessibility Audits](#)) ([Consumer Reports](#)).

3. Trust and security are top priorities for users.

Users need to feel confident that their financial data is safe. We assume that clear security indicators and straightforward authentication methods will help build user trust, especially among older users who often express concerns about digital security ([The Financial Brand](#)) ([The Financial Brand](#)).

4. Personalization and guidance enhance the user experience.

Many users benefit from personalized assistance and contextual tips, especially those unfamiliar with digital banking. We assume that offering customizable features and step-by-step guidance will reduce confusion and support better financial decision-making ([Fintech Futures](#)) ([The Financial Brand](#)).

The Approach

1. Empathize: Understand users' needs and pain points through interviews, observations, and empathy maps.

2. Define: Clarify the core problem by analyzing research insights and framing a clear problem statement.

3. Ideate: Generate creative solutions through brainstorming, mind mapping, and evaluating the best ideas.

4. Prototype: Create simple wireframes and mockups to test core features with users.

5. Test: Validate the design with real users, gather feedback, and iterate until the solution meets user needs.

The Goal

The goal of **FlexiPay** is to:

1. **Be Accessible:** Make the app easy to use for everyone, including people with different abilities.
2. **Be Easy to Use:** Create a simple design that's clear and user-friendly.
3. **Be Secure:** Build trust by keeping users' financial information safe.
4. **Help Users:** Provide personalized features that guide users in managing their money confidently.

The main aim is to create an app that truly helps people in their daily lives by addressing their needs and making banking simple and stress-free.

Process, Research & Exploration

The Affinity Clustering

Affinity clustering is a method used to organize and make sense of large amounts of qualitative data, such as user interviews, surveys, or observations. This process helps identify patterns, group similar insights, and highlight key themes that inform our design decisions.

Gather User Data: Collect all the research findings from interviews, surveys, and usability tests.

Organize Insights: Write down each insight or observation on sticky notes.

Group Similar Ideas: Cluster similar insights together based on themes or commonalities (e.g., accessibility issues, security concerns, navigation difficulties).

Identify Key Themes: Analyze the clusters to extract the most common problems, opportunities, and user needs.

Pain Points:

1. **Confusing Navigation:** Users find it difficult to understand how to move through the app due to unclear menus and complex layouts.
2. **Small and Hard-to-Read Text:** Many users, especially those with visual impairments or older adults, struggle with small fonts and poor color contrast.
3. **Security Concerns:** Users worry about the safety of their financial data and often don't trust digital banking apps due to unclear security practices.
4. **Limited Accessibility Features:** Lack of support for assistive technologies like screen readers and poor voice command integration create challenges for users with disabilities.

Motivations:

1. **Convenience:** Users want a simple and easy way to manage their finances without needing to visit a physical bank.
2. **Independence:** Users are motivated by the ability to handle their own banking activities confidently without relying on others, especially those with disabilities or low digital skills.

Assumptions:

1. Users prefer apps with a minimalist and clear design.
2. Providing personalized guidance will reduce user confusion.
3. Accessible features (e.g., larger buttons and text) are essential for a significant portion of the audience.
4. Users expect real-time feedback and updates on their transactions.
5. Financial literacy is varied, so the app should cater to both beginners and experienced users.
6. Users are more likely to trust apps that clearly display security measures and offer multiple authentication options.

Potential Problems:

1. **Overcomplicating Accessibility Features:** Trying to add too many customizable options could overwhelm users instead of helping them.
2. **Balancing Simplicity and Functionality:** Stripping down the interface to make it simple might result in key features being hidden or removed.
3. **Resistance to Change:** Long-time users of traditional banking methods may struggle to adopt digital solutions.
4. **Maintaining Consistency Across Devices:** Ensuring the app works seamlessly on both mobile and desktop versions could be challenging.
5. **Technical Challenges in Security Implementation:** Balancing strong security with ease of use (like password recovery or multi-factor authentication) could cause friction for users.
6. **User Data Misinterpretation:** Misinterpreting user feedback during the research phase could lead to designs that don't fully address user needs.

Potential User Backgrounds:

Older Adults with limited digital skills.

People with Disabilities require accessible technology.

Tech-Savvy Millennials who expect seamless and personalized experiences.

Users with Low Financial Literacy who need simplified banking processes.

Rural Users with inconsistent internet access.

Potential User Traits:

Older adults prefer larger text and simple navigation.

People with disabilities rely on assistive features like screen readers.

Tech-savvy millennials demand quick, efficient interfaces.

Users with low financial literacy need clear instructions and visual aids.

Rural users require lightweight apps and offline functionality.

Where Do We Find Them?

Older Adults: Community centers, senior groups, Facebook.

People with Disabilities: Accessibility forums, support groups, disability organizations.

Tech-Savvy Millennials: Social media (Instagram, TikTok), tech events, innovation hubs.

Users with Low Financial Literacy: Local financial education programs, simple finance apps.

Rural Users: Local events, rural telecom providers, SMS-based services.

The User Research: Interview

Conducting interviews is a key part of understanding our users' needs, behaviors, and pain points. This phase focuses on gathering deep insights by speaking directly with our target users. The goal is to uncover motivations, frustrations, and expectations that will guide the design process.

Identify Participants:

Select diverse users from each target group (e.g., older adults, people with disabilities, tech-savvy millennials).

Prepare Questions:

Develop open-ended questions focusing on their banking habits, challenges, and preferences.

Conduct Interviews:

Engage users in one-on-one conversations, encouraging them to share their experiences in detail.

Analyze Findings:

Group responses into common themes and insights that can shape the design direction.

Quantitative Questions

Gender: Male / Female

Age: Age range? (e.g. 13-18, 18-24, 25-34, 35 - 45, 45 and above)

Experience: Years working? (e.g., 0, 1-2, 3-5, 5 and over)

Digital Knowledge: Yes / No

Marital Status: Single, Married?

Bank Accounts: Number of accounts?

Primary Bank: Which bank often?

App Usage: Daily app usage? Regularly / Often / Less / No use

Online Transactions: % of online transactions? Bills / Chalan / Fees - Dues / Money Sending /

Transaction Time: How long per transaction? Less than a mint / 2 mint / over 3 mint

Navigation Issues: How often are issues? No issue / sometime / mostly / everytime / certain /

Preferred Features: Favorite app features? Security / Send money - Unlimited Transaction / Bank Statements - Certification / Financial Wellness / Shopping / Define yours

How do you rate your Current App? 1-5 (if 1 then explain the issue)

Why? Personal Data security concern?

Agar use karna pare tu?

Kya difficulties?

Agar physical bank khatam hu jye?

Konse features requires hain to become a user?

Internet connectivity issues?

If you are a previous user then why you stop using it?

Qualitative Questions:

Biggest Frustration: What frustrates you most about using banking apps?

Security Concerns: What are your biggest worries when using a banking app?

Feature Wish List: If you could add one feature to your banking app, what would it be?

Usability Issues: Can you describe a time when you struggled to complete a transaction?

Trust in Technology: How comfortable are you relying on technology for financial transactions?

Onboarding Experience: How easy or difficult was it to start using your current banking app?

App Preferences: What makes you choose one banking app over another?

Learning Curve: How quickly did you learn to use your current banking app?

Accessibility Needs: How do you typically navigate apps with accessibility features?

Support Needs: What kind of help or guidance do you wish apps provided more of?

The Key Insights:

Answer #1:

Answer will be here....

Answer #1:

Answer will be here....

Answer #2:

Answer will be here....

Answer #3:

Answer will be here....

Answer #4:

Answer will be here....

Answer #5:

Answer will be here....

Answer #5:

Answer will be here....

Answer #6:

Answer will be here....

How Might We?

After analyzing the interview responses, we've identified key areas where users face challenges with existing banking apps. Using these insights, we can frame the problems as opportunities for improvement by asking "How Might We?" questions. These questions guide brainstorming and help generate solutions that directly address user needs.

Navigation Simplicity:

How might we create a clearer and more intuitive navigation system?

Many users struggle with confusing menus and complex layouts. Simplifying navigation can improve accessibility and ease of use for all users.

Accessibility Enhancements:

How might we better support users with disabilities by enhancing accessibility features?

Users with visual or mobility impairments need more robust features, such as screen reader compatibility and customizable text sizes, to interact comfortably with the app.

Trust and Security Visibility:

How might we make security features more transparent and easy to understand?

Users express concerns about data safety. Highlighting security measures clearly can boost trust and reduce anxiety around using digital banking services.

Onboarding for Low Digital Literacy:

How might we streamline the onboarding process for users unfamiliar with digital tools?

Simplifying the setup process and providing clear, guided steps can help users with low digital literacy feel more confident in adopting the app.

Steps to Analyze Questions and Create a User Persona:

What is a User Persona?

A **User Persona** is a fictional character based on real data that represents a specific group of your target users. It captures their demographics, goals, behaviors, and pain points.

Why Do We Need It?

User personas ensure that the design is user-centered by:

1. Keeping the design focused on real user needs.
2. Guiding feature prioritization and design decisions.
3. Building empathy within the design team.
4. Aligning the team on who the users are.

How Does It Help in UX Design?

Personas guide the design process by prioritizing features, creating relevant user flows, ensuring consistency, and informing testing scenarios. They help ensure that the final product is both user-friendly and aligned with user needs.

How to analyze data and convert into Persona

1. Collect and Organize Your Data:

Start by gathering all qualitative and quantitative responses from interviews, surveys, and research. Organize them by questions and group similar answers together.

2. Identify Key Patterns:

Go through the responses and look for patterns or recurring themes. For example:

- If multiple users mention difficulty with app navigation, that's a key pain point.
- If several users mention quick access as a motivation, it highlights an important feature preference.

3. Segment Users Based on Common Traits:

Group users by similar characteristics such as age, experience, and behaviors. For instance, group all tech-savvy young professionals together and all older adults with limited digital experience separately.

4. Extract Key Attributes for Your Persona:

Once you have your user segments, focus on key attributes like:

- **Demographics:** Age, gender, location, occupation.
- **Goals:** What are they trying to achieve with the product?
- **Frustrations/Pain Points:** What problems do they consistently face?
- **Motivations:** Why do they use the app? What drives them?
- **Behaviors:** How often do they use the app? What features do they prioritize?

5. Develop a Narrative:

Create a short story or narrative that personifies the user, combining their traits, motivations, and pain points. Give your persona a name, age, and background to make them relatable.

6. Validate and Refine:

Cross-check your persona with other data to ensure it's realistic and represents a significant segment of your user base. Adjust if necessary to reflect true user behaviors and needs.

User Persona: Name

- **Age:** 18-25
- **Gender:** Male
- **Occupation:** Young Professional
- **Location:** Lahore, Pakistan

Demographics:

- **Primary Bank:** HBL
- **App Usage:** Daily
- **Online Transactions:** 75% of all transactions

Frustrations:

He finds it frustrating to have to add a payee every time he wants to send money.

Motivations:

He's motivated by the convenience of managing finances digitally and uses the app regularly for quick transactions.

Security Concerns:

He worries about transactions getting stuck between banks, creating uncertainty and potential risks.

Onboarding Experience:

He found the onboarding process straightforward and didn't face significant difficulties when starting to use the app.

Feature Preferences:

He prefers apps that don't require repeatedly adding payees, making transactions quicker and easier.

What are some key UX insights?

Simplified Money Transfers:

He finds it frustrating to add a payee every time he transfers money.

Insight: Focus on streamlining the transfer process by allowing quick transfers without repeatedly adding payees, such as a "Recent Payees" feature or one-tap transactions.

Seamless Onboarding:

He had no major issues with the onboarding process.

Insight: A simple, straightforward onboarding experience that doesn't overwhelm new users is effective. This suggests keeping the setup process minimal and intuitive.

Transparency in Transactions:

He is concerned about transactions getting stuck or delayed.

Insight: Clear feedback and real-time updates during transactions are crucial. Incorporate status indicators, confirmation messages, and instant notifications to reassure users.

High Usage Among Young Professionals:

He uses the app daily for most of his transactions.

Insight: Frequent users value efficiency and speed. Ensure that commonly used features, like payments and account management, are easy to access and require minimal steps.

Security Reassurance:

Although He has concerns about transaction reliability, he isn't primarily worried about security breaches.

Insight: While security is vital, focusing on reliability and smooth experiences may be more important for users like THIS. Ensure that security measures are visible but don't obstruct user flow.

User Persona: Name

- **Age:** 18-25
- **Gender:** Female
- **Occupation:** Young Professional
- **Location:** Karachi, Pakistan

Demographics:

- **Primary Bank:** HBL
- **App Usage:** 3-4 times per week
- **Online Transactions:** 70% of all transactions

Frustrations:

She finds the login system challenging and dislikes that the app requires high-speed internet to function smoothly.

Motivations:

She has moderate trust in digital banking but values the convenience it provides for managing her finances.

Security Concerns:

She worries about transactions being interrupted or stopped midway, causing uncertainty.

Onboarding Experience:

She found the onboarding process moderately challenging, neither too difficult nor completely seamless.

Feature Preferences:

She prefers an app that allows adding multiple account numbers in one place, making it easier to manage various accounts.

User Persona: Aslam Sheikh

- **Age:** 40-55
- **Gender:** Male
- **Occupation:** Local Business Owner
- **Location:** Rawalpindi, Pakistan

Demographics:

- **Primary Bank:** National Bank of Pakistan
- **App Usage:** Once or twice a week
- **Online Transactions:** 20% of transactions

Frustrations:

Aslam struggles with complex app interfaces and small text sizes. He also finds it difficult to remember multiple passwords.

Motivations:

He is motivated by the convenience of avoiding bank visits and simplifying tasks like utility bill payments.

Security Concerns:

He worries about the safety of online transactions and is unsure about how secure the app really is.

Onboarding Experience:

He found the onboarding process confusing and needed help from family members to set up the app.

Feature Preferences:

He prefers apps with large buttons, clear instructions, and simple navigation, focusing on ease of use rather than advanced features.

User Persona: Fatima

- **Age:** 30-40
- **Gender:** Female
- **Occupation:** Teacher
- **Location:** Islamabad, Pakistan

Demographics:

- **Primary Bank:** Meezan Bank
- **App Usage:** 2-3 times per week
- **Online Transactions:** 50% of transactions

Disabilities and Needs:

Fatima has a visual impairment and relies heavily on screen readers and voice commands. She needs high contrast, scalable text, and clear navigation with minimal clutter.

Frustrations:

Fatima finds that many banking apps lack proper support for screen readers, have low contrast, and offer poorly labeled buttons, making navigation difficult.

Motivations:

She is motivated by the independence and convenience digital banking offers, enabling her to handle her finances without needing in-person assistance.

Security Concerns:

She worries about accidentally authorizing transactions due to unclear prompts or inconsistent feedback when using assistive technologies.

Onboarding Experience:

Fatima struggled with initial setup due to poorly labeled elements and a lack of voice-guided instructions, requiring additional help.

Feature Preferences:

She prioritizes accessibility features such as voice navigation, customizable text size, and high-contrast modes. She also values apps that offer consistent, screen reader-friendly labels and well-defined visual cues.

1. Ensure Screen Reader Compatibility:

- **Insight:** Fatima relies heavily on screen readers but struggles with apps that have poorly labeled buttons and elements.
- **Action:** Implement proper ARIA labels, alt text, and ensure that all interactive elements are accessible via screen readers. Conduct regular accessibility testing with real users who use screen readers.

2. Prioritize High Contrast and Scalable Text:

- **Insight:** Fatima needs high contrast and scalable text to navigate the app comfortably.
- **Action:** Offer customizable text sizes and color contrast options that comply with AAA standards. Include dark modes and high-contrast themes that are easy to toggle.

3. Voice Navigation and Assistive Tech Support:

- **Insight:** She relies on voice commands for navigation.
- **Action:** Integrate voice navigation and ensure that all key actions (e.g., transfers, checking balances) can be completed via voice commands. Focus on clear, consistent voice feedback and prompts.

4. Streamlined Onboarding with Accessibility Features:

- **Insight:** Fatima faced challenges during onboarding due to poorly labeled elements and lack of voice guidance.
- **Action:** Develop an accessible onboarding process that includes voice-guided setup and step-by-step instructions designed with accessibility in mind.

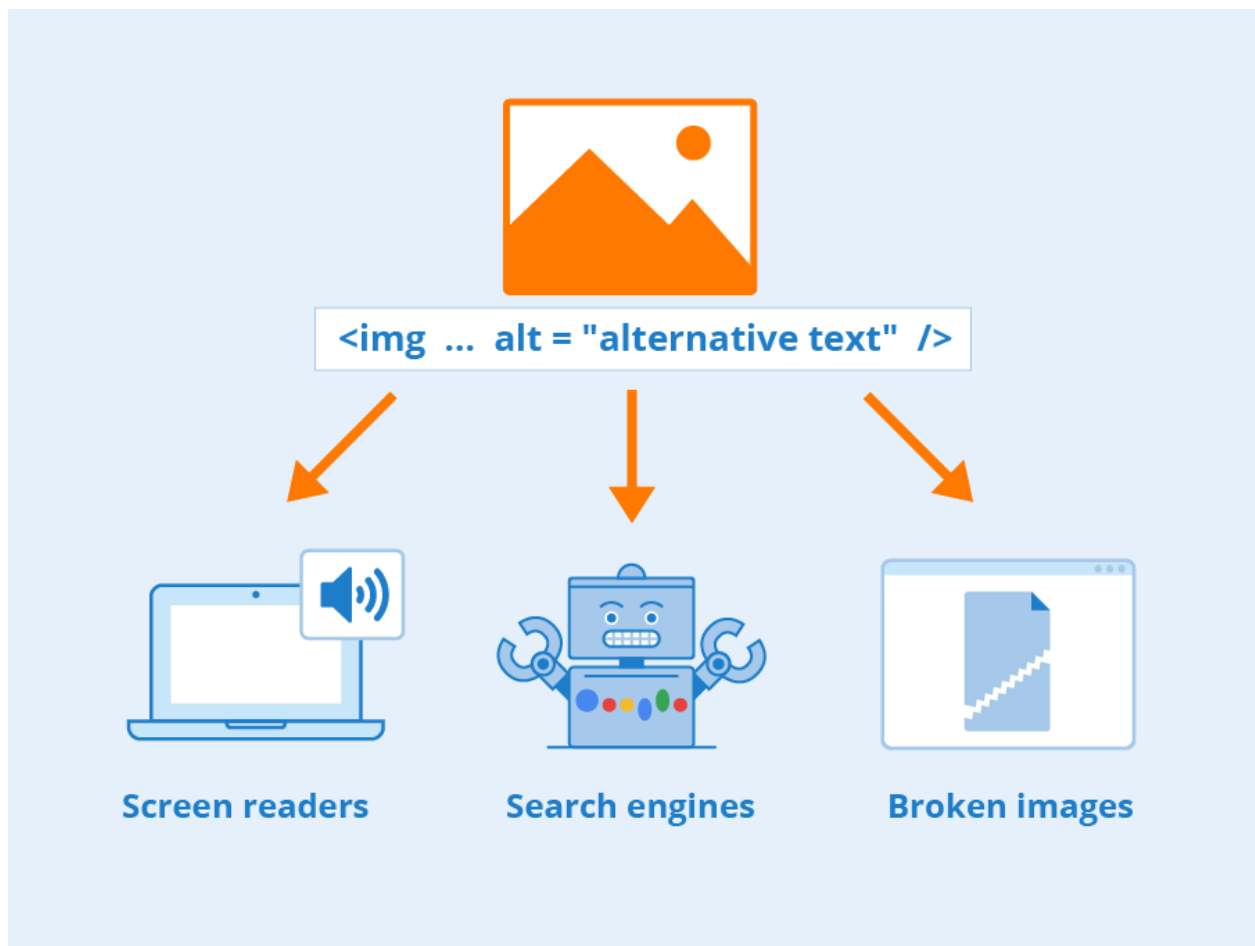
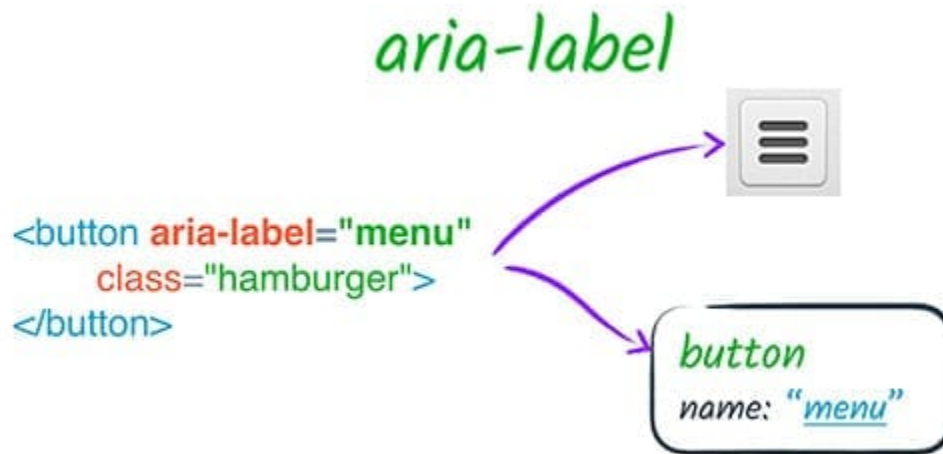
5. Clear and Consistent Feedback for Transactions:

- **Insight:** She worries about accidentally authorizing transactions due to unclear prompts.
- **Action:** Provide clear, consistent feedback during transactions, with visual, auditory, and haptic confirmations. Ensure that critical actions require clear confirmation prompts that are screen reader-friendly.

6. Minimal Clutter and Simple Navigation:

- **Insight:** Fatima values minimal clutter and clear navigation.

- **Action:** Design with a focus on simplicity, reducing unnecessary elements, and ensuring a straightforward flow. Use clear headings, easy-to-navigate menus, and avoid overly complex layouts.



High contrast

colour contrast ratio 21:1

High contrast

colour contrast ratio 17.6:1

Low contrast

colour contrast ratio 1.6:1

Low contrast

colour contrast ratio 1.9:1

What is a User Flow?

A User Flow is a visual map of the steps a user takes to complete a task within an app or website, from start to finish.

Why is User Flow Important in UX?

1. Clarifies the Journey: Ensures users have a clear, logical path to follow.
2. Identifies Pain Points: Highlights where users might struggle, allowing for improvements.
3. Optimizes Tasks: Streamlines actions to make them quick and easy.
4. Supports Accessibility: Ensures all users, including those with disabilities, can navigate smoothly.
5. Informs Design: Guides layout and interaction decisions for a better experience.
6. Aligns Team: Keeps everyone on the same page about how the app should work.

User Flow for Signup:

Open App
Welcome Screen (Login / Signup)
Enter Personal Details
Setup a username and password
Verify Phone Number
Enter OTP
Set Up Security Questions
Add Banking Details
Set Up Biometric Authentication?
Review and Accept Terms
Complete Profile
Home Screen

User Flow for Login:

Open App
Welcome Screen (Login / Signup)
Enter Credentials
Use Biometric Authentication?
Are Credentials Correct?
Forgot Password?
Forgot Password Selected?
Enter OTP
Is OTP Correct?
Successful Login
Home Screen

On-Boarding Flow

- 1. Tech-Savvy / Young**
- 2. Less Digital Knowledge (40-60 years old)**
- 3. Low Internet Connectivity**
- 4. Impaired Visual Disability**