User Experience Finals Endterm Exam

Jilson adds more than 7+ colors to every single page in his app design. Is it a good practice according to user experience?
→ B) No

Using more than 7 colors on every single page in an app design can confuse the users, give visual discomfort, and create accessibility issues. It also is generally not a good practice according to UX principles.

Can FigJam be used to create an information architecture or user flow?
→ A) Yes, it can be used

FigJam offers features like sticky notes, shapes, and connectors for visualizing and organizing complex ideas which makes it a collaborative whiteboarding tool ideal for creating information architecture and user flows.

Is it fine to design an 'On Hover button' for mobile?
→ B) No, as you are using a mobile, you will not be able to hover over a touchscreen

Touchscreens do not support hover interactions as there is no functionality for it. Use on-tap instead. (Apples iPhone Mirroring might become an exception to this)

Aditi uses a simplified checkout method in her design to avoid shopping cart abandonment; is she following the correct approach?
→ A. Yes, she is following the correct approach

Simplifying the checkout process like minimizing steps and providing guest checkout improves user experience. This is a proven strategy to reduce shopping cart abandonment.

Balsamiq too is used for?
→ C. Low-fidelity wireframing

Balsamiq allows designers to sketch and visualize ideas quickly without focusing on detailed design elements. It is designed for low-fidelity wireframing.

What type of questions should participants be given during user interviews during user experience research?
→ C) A mix of both open and close-ended questions

A mix guarantees rich qualitative insights from open-ended questions and specific quantitative data from close-ended questions.

Which of the following is NOT a key element of a user persona?
→ D Favorite color scheme

A user's favorite color scheme is not a key element of a user persona. User personas focus on goals, pain points, and technical skills.

What are the key elements included in a use case, as mentioned in the presentation?
-→ C. Title, Actor, Overview, Subject area, Trigger

Use cases define interactions between users and a system, focusing on elements like title, actor, overview, subject area, and triggers.

User Interview helps the researcher to understand

→ D) All of the above

User interviews provide insights into user needs, behavior, and motivation, helping researchers design better solutions.

What involves dividing the user base into groups with similar needs and behaviors?

→ B. User Segmentation

User segmentation involves grouping users based on needs, behaviors, demographics, or other characteristics to tailor experiences effectively.

Q1 **Redesigning the Northeastern Website Using the Five Planes of User Experience**

1. The Strategy Plane

2. The Scope Plane

3. The Structure Plane

4. The Skeleton Plane

5. The Surface Plane

The strategy plane focuses on understanding the goals of the organization and the needs of its users. Northeastern's website is designed to serve its primary audience, including current students and faculty, while also attracting prospective students. Additionally, it aims to provide accessible information about academics, research, and campus life. The website caters to a diverse group of users such as faculty, staff, alumni, prospective students, and current students. Each of these users requires a seamless browsing experience with intuitive navigation and quick access to essential information. To address this, the redesign approach involves conducting user research through surveys and interviews to identify pain points for each user group. Content and features, like admissions information and academic calendars, will be aligned with user expectations and organizational goals.
The scope plane defines the essential features and functionalities required to achieve the website's strategic objectives. The redesigned website will feature a personalized dashboard for logged-in users, offering seamless access to critical services such as financial aid, email, and course registration. Additionally, a powerful search function will be implemented, allowing users to filter results by location, user type, and content category. The site will be fully responsive, ensuring an optimal experience across devices. To make the website inclusive, accessibility features like keyboard navigation, high-contrast display options, and text-to-speech capabilities will be incorporated.

The structure plane focuses on organizing content and functionality to ensure logical flow and usability. The redesign will introduce a hierarchical

menu that clearly separates key sections such as Admissions, Academics, Campus Life, Research, and Alumni. Breadcrumb navigation will help users understand their position within the site, enhancing overall navigation. Custom user paths will be developed to cater to specific needs: for instance, prospective students will have prominent access to application resources, while current students can quickly find schedules and course materials.

The skeleton plane outlines the layout and placement of key elements to improve navigation and usability. A sticky navigation bar will remain visible as users scroll, providing easy access to vital sections at all times. The homepage will feature a grid-based design that highlights essential areas like news, events, admissions, and campus updates. Consistent and prominently placed call-to-action buttons, such as “Apply Now” and “Schedule a Visit,” will guide users effectively. A prominently positioned search bar at the top of every page will streamline the process of finding content.

The surface plane emphasizes the website’s visual design, ensuring it aligns with Northeastern’s brand identity while enhancing user engagement. The redesign will use the university’s signature colors—red, black, and white—consistently across the site. High-quality visuals showcasing campus life, academic activities, and events will create a vibrant and engaging experience. Modern typography will be applied to improve both readability and aesthetics. Accessibility will be prioritized by adhering to WCAG standards, including features such as alt text for images and appropriate color contrast to accommodate diverse user needs.

Overall Redesign Strategy

By addressing all five planes of user experience, the Northeastern website will offer a cohesive, user-centered experience. The redesign will balance user needs with organizational goals, ensuring intuitive navigation, functional design, and a visually appealing interface. This approach will enhance user satisfaction, support university objectives, and showcase Northeastern as a forward-thinking institution.

Q2. Read and React (10 Marks)

Read the article "8 Psychology-Based Design Hacks That Will Make You A Better UXDesigner" from Usability Geek.

summary of the reading. if/how they connect to our lessons, readings, videos, etc. your reactions to the reading. Do you agree or disagree with the article?

Chintan Bhatt's article, "8 Psychology-Based Design Hacks That Will Make You a Better UX Designer," focuses on how psychological insights can completely change UX design. Bhatt argues that a deep understanding of human behavior and motivation is essential for creating products that are not only practical but also emotionally appealing. By using psychology in their design process, interfaces that genuinely connect with users can be developed. The article outlines eight psychological principles that can help improve user engagement and satisfaction.

Mirroring and Emotional Interaction is one of the key principles discussed, which focuses on how users naturally copy others' behaviors, a concept known as the Chameleon Effect. Designers can use this tendency to build emotional connections through engaging elements, such as Duolingo's cheerful animations that motivate users to keep learning. Another principle, the Aesthetic-Usability Effect, explains how users often judge a product's quality based on its visual appeal. While attractive designs can grab attention, maintaining usability is crucial for ensuring long-term satisfaction.

The article highlights on the Placebo Effect in Assurance, where animations like pull-to-refresh create a sense of control, even if the action does not change anything directly. This can make users feel assured and build trust in the product. Similarly, the Cocktail Party Effect shows how personalization, such as notifications addressing users by name, draws attention and keeps users engaged. Serial-Position Effect another principle, reveals that users are more likely to remember the first and last items in a sequence, which makes it important for designers to strategically place critical information in these positions for maximum engagement and focus from the users.

Another principle, Hick's Law, states that decision-making becomes harder

as the number of options increases. To minimize user frustration, Bhatt points to Amazon's search bar as an example of simplifying choices for faster decision-making. The Mere-Exposure Effect focuses on how familiarity with a product's layout or design elements, such as button placement, fosters user comfort. Finally, the Illusion of Control demonstrates how offering redundant options, such as "Cancel" and "X," makes users feel more in charge, even when these choices serve similar purposes. This helps to reduce anxiety and improve overall satisfaction.
Bhatt's insights closely align with principles taught in UX design and user-centered design courses. Hick's Law, the Mere-Exposure Effect, and the Serial-Position Effect are kinda the foundational concepts that form the backbone of many UX methodologies. Also the emphasis on empathy and creating emotionally resonant experiences ties directly to lessons on designing for intuitive user behavior. Examples like Duolingo's engaging animations and Amazon's streamlined search functions showcase the practical application of these theories, making the article accessible and relevant to both students and seasoned professionals.
According to me, the article is thought-provoking and approachable. It breaks down complex psychological ideas into understandable examples, providing clear takeaways for UX designers at any stage of their career. While the content itself underscores the importance of understanding user psychology in crafting effective designs, the conversational tone adds to its appeal. The article becomes a valuable resource for designers seeking to create more engaging and user-friendly products, by demonstrating how these psychological principles can improve user interaction.
I agree with Bhatt's assertion that psychology is essential to successful UX design. Understanding how users think and behave allows designers to create interfaces that are not only functional but also resonate on an emotional level. However, I believe ethical considerations are just as important. While techniques like creating the illusion of control or using emotional design elements can boost user engagement, they should be used responsibly. Designers must ensure that these methods do not manipulate or frustrate users. Striking a balance between user motivation and ethical responsibility is crucial for fostering trust and delivering genuine value.
In conclusion, Bhatt effectively illustrates the deep connection between psychology and UX design. By applying these principles thoughtfully,

designers can create products that are engaging, efficient, and user-focused. At the same time, ensuring these techniques are used ethically is critical to building trust and delivering positive, meaningful experiences for users.

Q3

Assume you are interviewing for a company and the interviewer asks you these two questions. How would you answer them?

Can you describe your design workflow from concept to final product?
My design workflow is straightforward and adaptable, ensuring that I deliver solutions that meet both user needs and business goals. Here's how I approach it:
First, I focus on understanding the problem. I work with stakeholders to define the project's objectives, analyze business goals, and gather user insights. This helps me clearly identify what the product should solve and ensures alignment with user expectations.
Next, I conduct research. I analyze competitors, study user behavior, and review industry trends to understand what works and what doesn't. If needed, I create user personas to better empathize with the target audience and guide design decisions.
After this, I go ahead to the concept stage. I draw the ideas out as a rough sketch and create low-fidelity wireframes to map out the structure and flow of the product. These drafts are shared with stakeholders to confirm the direction before diving into the details.
After the framework is established, I use programs like Adobe XD or Figma to create interactive prototypes. I can test and improve the design using these prototypes in response to user and stakeholder feedback. To find and fix usability problems early, this phase is essential.
I concentrate on the visual design after prototyping. I make sure the design is responsive and accessible on all devices by honing the layout and adding colors, font, and other visual components.
Collaboration is key during implementation. I work closely with developers, providing detailed specifications, assets, and design guidelines to ensure accurate execution. Regular check-ins help resolve any issues and maintain consistency.
Finally, I test the product after implementation. Usability testing and feedback from real users help me make necessary adjustments. Once the product is launched, I monitor its performance and gather insights for future improvements.
This process ensures that the final product is functional, user-friendly, and aligned with the project's goals.

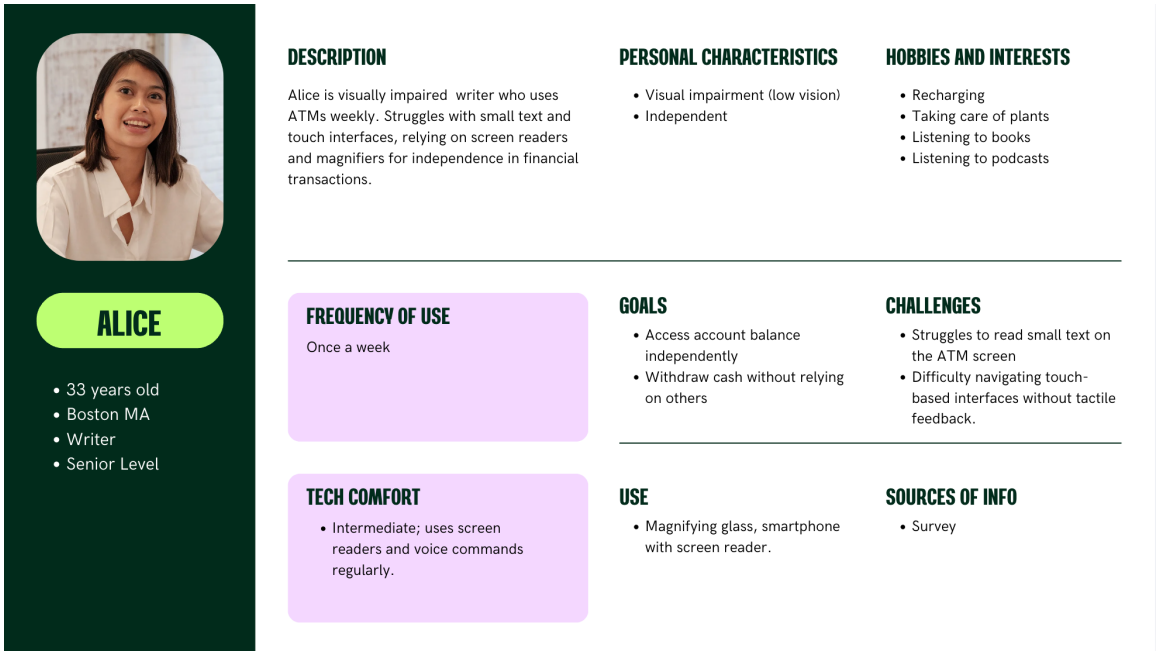
How do you stay updated with the latest UI/UX design trends and industry developments?
To stay current in the fast-evolving design field, I use a mix of resources and activities:
I frequently visit design platforms like Dribbble, Behance, and Awwwards to explore new trends and get inspired by creative work from other designers.
I follow blogs and newsletters from trusted sources such as the Nielsen Norman Group and UX Design Weekly. These provide insights into best practices, case studies, and updates on design tools and methods.
Participating in online design communities on platforms like LinkedIn and Slack keeps me connected to peers and industry discussions. These communities often share new tools, techniques, and trends.
In order to learn from professionals and keep up with new concepts and technology, I also go to conferences, webinars, and seminars. I can meet other designers and widen my horizons by attending these events. Another way I continue to learn is by trying out new tools. I experiment with AI-assisted tools, for instance, to investigate how they may improve workflows or generate new ideas.
Lastly, I routinely evaluate my work and ask for input from peers. Maintaining relevance in the market requires constant improvement.

By combining these practices, I ensure that I remain updated and bring innovative, effective solutions to every project I work on.

ATM REDESIGN

Task 1: User Personas (10 Points)

Persona 1:



- **Name and Age:** Alice , 33
- **Occupation:** Writer
- **Type of Disability:** Visual impairment (low vision)
- **Goals and Frustrations:**

  Goals:

  Access account balance independently.

  Withdraw cash without relying on others.

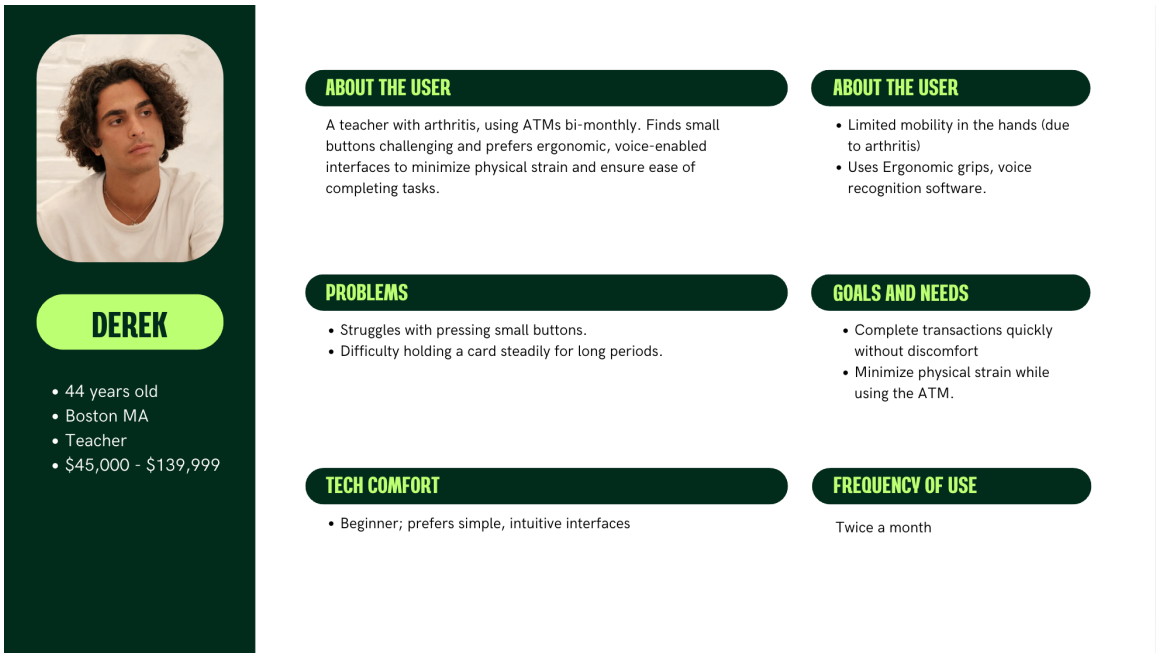
  Frustrations:

  Struggles to read small text on the ATM screen.

Difficulty navigating touch-based interfaces without tactile feedback.

- **Technology Comfort Level:** Intermediate; uses screen readers and voice commands regularly.
- **Frequency of ATM Use:** Once a week.
- **Assistive Devices:** Magnifying glass, smartphone with screen reader.

Persona 2:



- **Name and Age:** Derek, 44
- **Occupation:** Teacher
- **Type of Disability:** Limited mobility in the hands (due to arthritis)
- **Goals and Frustrations:**

Goals:

Complete transactions quickly without discomfort.

Minimize physical strain while using the ATM.

Frustrations:

Struggles with pressing small buttons.

Difficulty holding a card steadily for long periods.

- **Technology Comfort Level:** Beginner; prefers simple, intuitive interfaces.
- **Frequency of ATM Use:** Twice a month.
- **Assistive Devices:** Ergonomic grips, voice recognition software.

Task 2: Research Methods (15 Points)

Method 1: User Interviews

- **Description:** Conduct one-on-one interviews with individuals with disabilities to understand their experiences and challenges with ATM usage.
- **Why Chosen:** Direct feedback helps uncover specific pain points and user needs.
- **Insights Gained:**
  - Common challenges in interacting with ATM screens.
  - Desired features and functionality.
- **Implementation:** Schedule interviews at accessible locations or virtually. Provide accommodations such as screen readers or interpreters.

Method 2: Usability Testing

- **Description:** Observe participants as they use an existing ATM interface to complete common tasks.
- **Why Chosen:** Identifies usability issues and barriers in a real-world context.
- **Insights Gained:**
    - Which interface elements cause confusion or difficulty.
    - Physical limitations when interacting with ATM hardware.
- **Implementation:** Modify an ATM mock-up or simulator to record interactions. Ensure participants can use their assistive devices.

Method 3: Surveys

- **Description:** Distribute surveys to a diverse group of ATM users with disabilities to gather quantitative data on preferences and needs.
- **Why Chosen:** Provides statistical insights into usage patterns and pain points.
- **Insights Gained:**
    - Frequency of accessibility feature usage.
    - Overall satisfaction and areas for improvement.
- **Implementation:** Design simple, accessible surveys (e.g., with large fonts or screen reader compatibility). Ensure anonymity for honest feedback.

Detailed Explanation of Research Methods for ATM Redesign

User interviews, usability testing, and survey methods were considered to create a balanced understanding of user demands for the redesign of the ATM interface for accessibility. These techniques assure an in-depth investigation into the difficulties people with impairments face by combining qualitative and quantitative methodologies.

User interviews allow for good insights into individual experiences and annoyances. In talking with users, especially those with visual impairments or restricted mobility, one can identify specific pain locations: for example, trouble seeing small writing or clicking buttons. Participants are allowed to state what features they would like to see, such as voice controls or text-to-speech. Accessible forms of interviews and assistive technologies, such as transcription or interpreters, ensure inclusion. These findings support the identification of both functional and emotive needs that are necessary to meet by a redesign.

Usability Testing provides real-world observations of how users interact with an existing ATM or prototype. It reveals challenges such as physical difficulties with button layouts or cognitive load during menu navigation. Participants would perform typical tasks, such as withdrawing cash or checking balances, using their assistive devices. Metrics like task completion rates, error frequency, and satisfaction levels are recorded to measure usability. Post-test interviews can further capture participant feedback, ensuring both hardware and software improvements are aligned with user needs.

Lastly, surveys provide a scalable means of gathering quantitative data from a wider population. Trends like the most sought-after ATM features or the frequency of accessibility issues can be found with the aid of accessible surveys. Prioritizing essential features like high contrast displays or speech recognition is made easier with the help of survey data. When combined, these techniques offer practical advice for creating an accessible ATM user interface that supports a wide range of abilities and is more enjoyable and usable for all users.

Task 3: ATM Screen Redesign (25 Points)

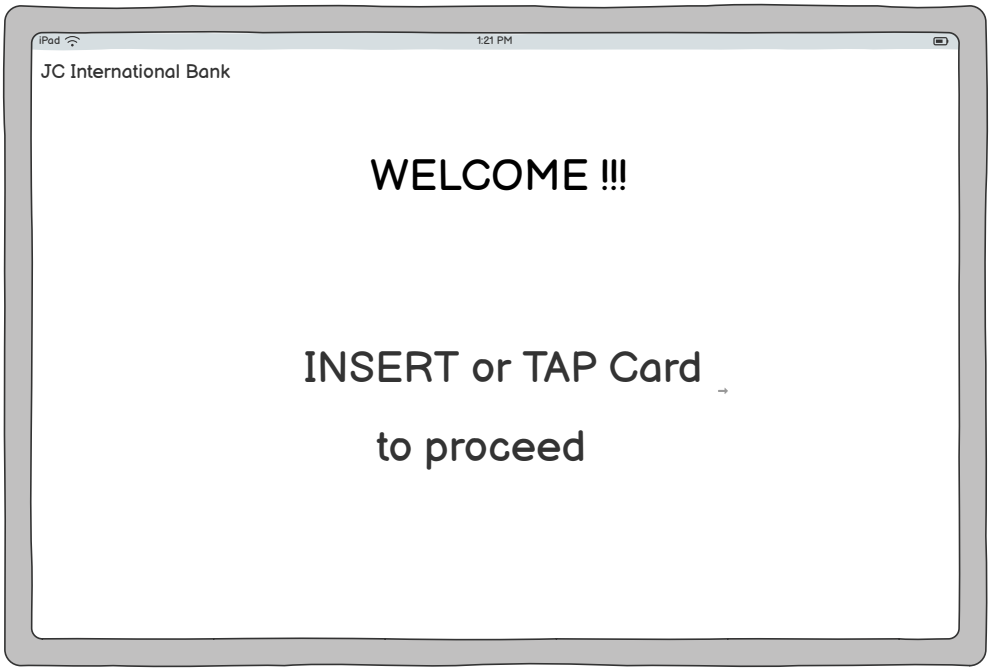
The redesigned ATM interface focuses on accessibility and ease of use, ensuring a seamless experience for users of all abilities. Its intuitive layout and advanced features address a wide range of needs, from visual impairments to mobility challenges, while maintaining a user-friendly design.

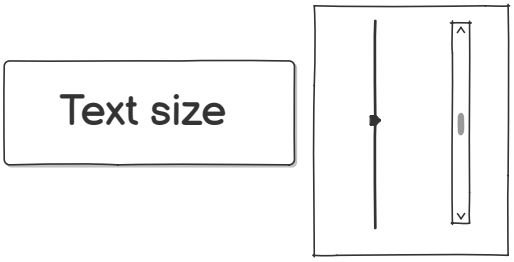
The journey begins with the welcome screen, which invites users to start their session by inserting or tapping their card. Accessibility options, such as high contrast mode and voice assistance, are immediately visible, allowing users to customize their experience right from the start. Once authenticated via the PIN entry page, users are guided to the main menu, which serves as a centralized hub for all essential actions like withdrawing cash, checking balances, or depositing funds. The menu is designed with large, clearly labeled buttons that are easy to read and press, ensuring smooth navigation for all users.

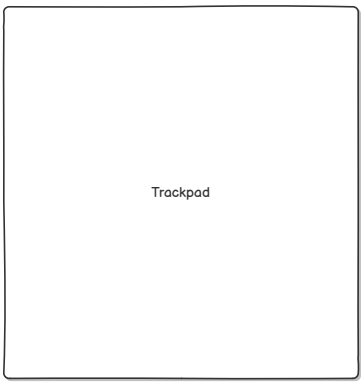
Each feature prioritizes inclusivity. For instance, high contrast mode improves visibility by enhancing the distinction between text, buttons, and background colors, while adjustable text size accommodates users with low vision. Voice assistance provides spoken instructions and menu options, enabling visually impaired users to navigate independently. The inclusion of tactile elements and oversized buttons ensures ease of use for individuals with limited mobility, offering both physical and visual cues to guide their interactions.

Tasks like withdrawing cash are streamlined with quick-access options for preset amounts and a keypad for custom entries, minimizing effort and confusion. Similarly, the deposit and balance inquiry screens are organized to provide clear instructions and feedback at every step. A confirmation screen concludes each transaction, reassuring users with messages like "SUCCESS!" and offering options to continue or exit.

This thoughtful redesign balances accessibility, usability, and security, ensuring that every user, regardless of their abilities, can interact confidently and efficiently with the ATM.

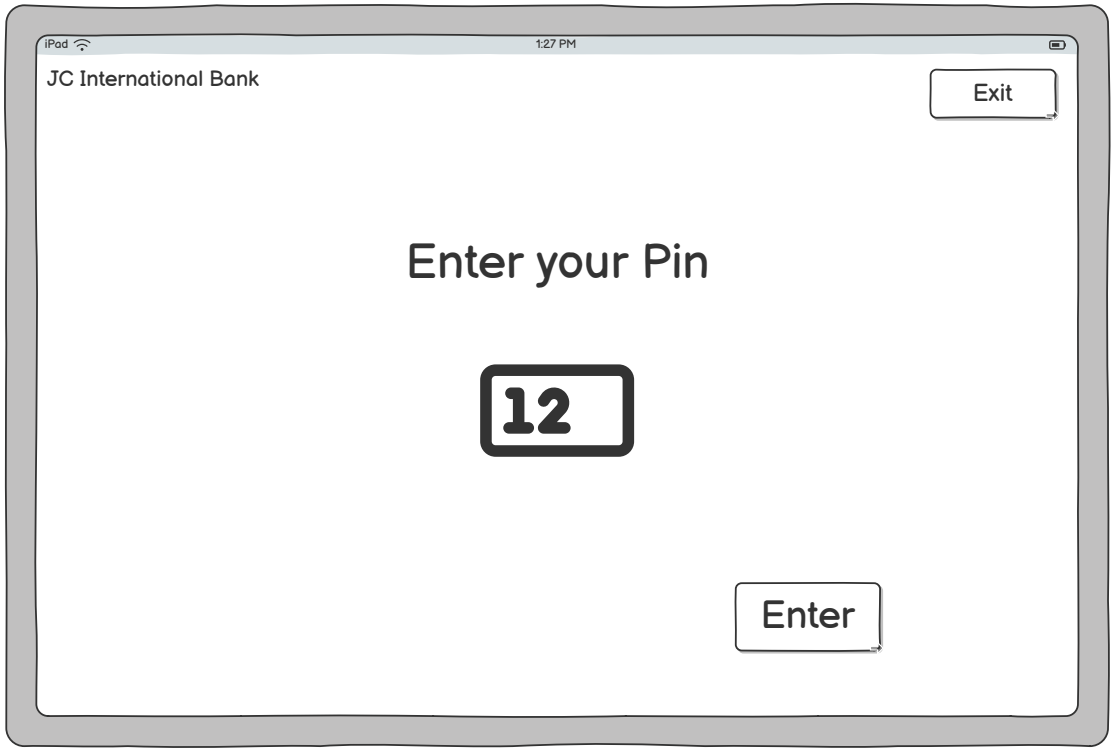


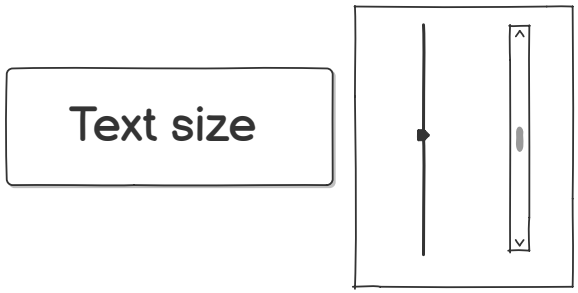


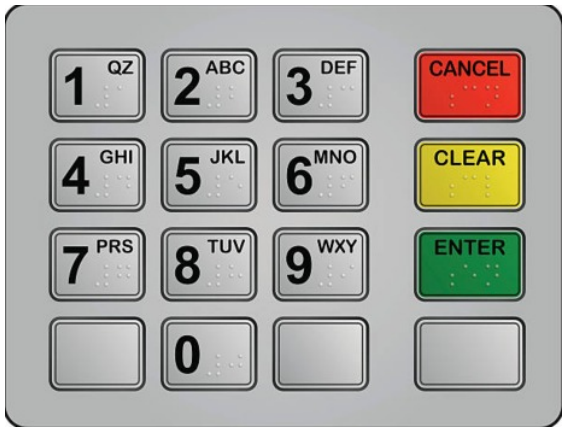


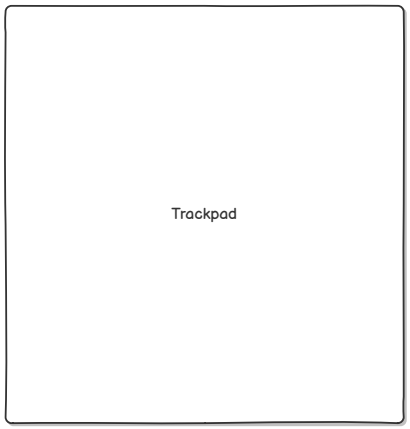
Welcomes users and prompts them to begin the transaction.
Welcome! Please Insert or Tap Your Card to Proceed.
Buttons for audio assistance or high contrast mode ahead.
Upon card insertion, the screen transitions to the PIN entry page.

High contrast mode is an accessibility feature designed to improve readability and usability for users with visual impairments or those who struggle to see content on standard displays. It enhances the visibility of text, buttons, and other interface elements by increasing the contrast between foreground (e.g., text, buttons) and background colors



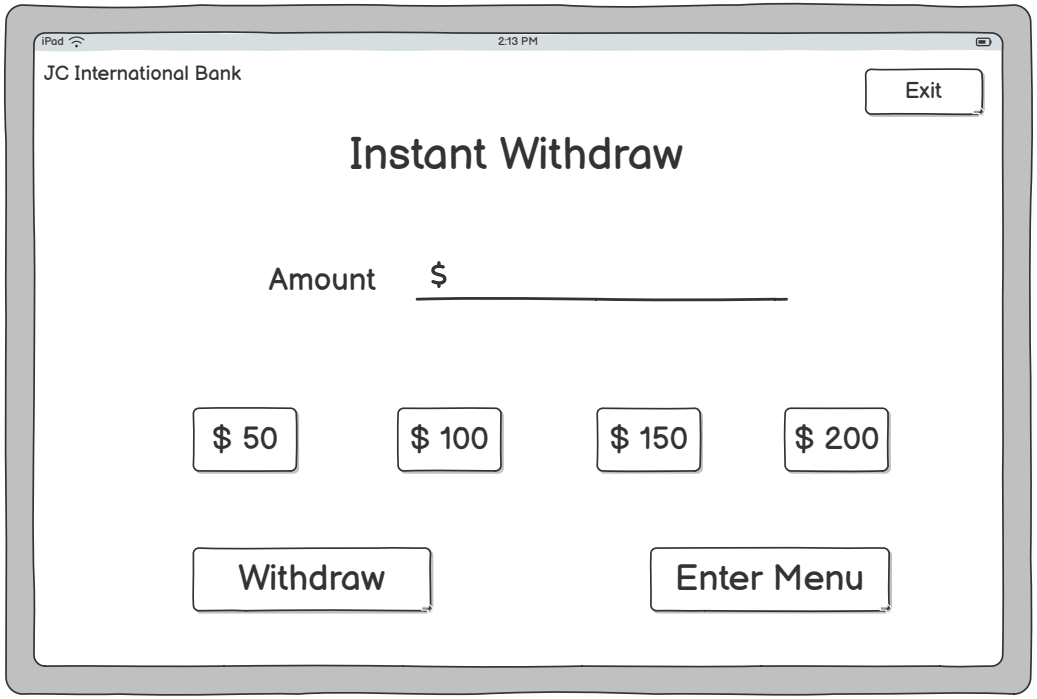


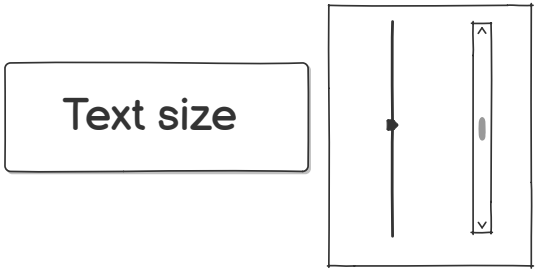


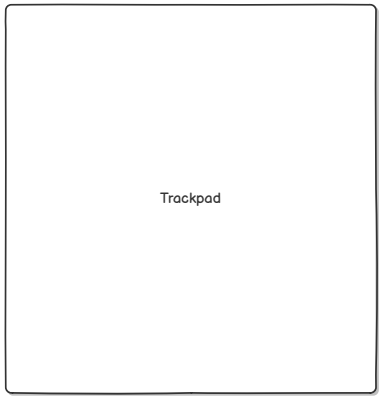


Securely authenticate the user.

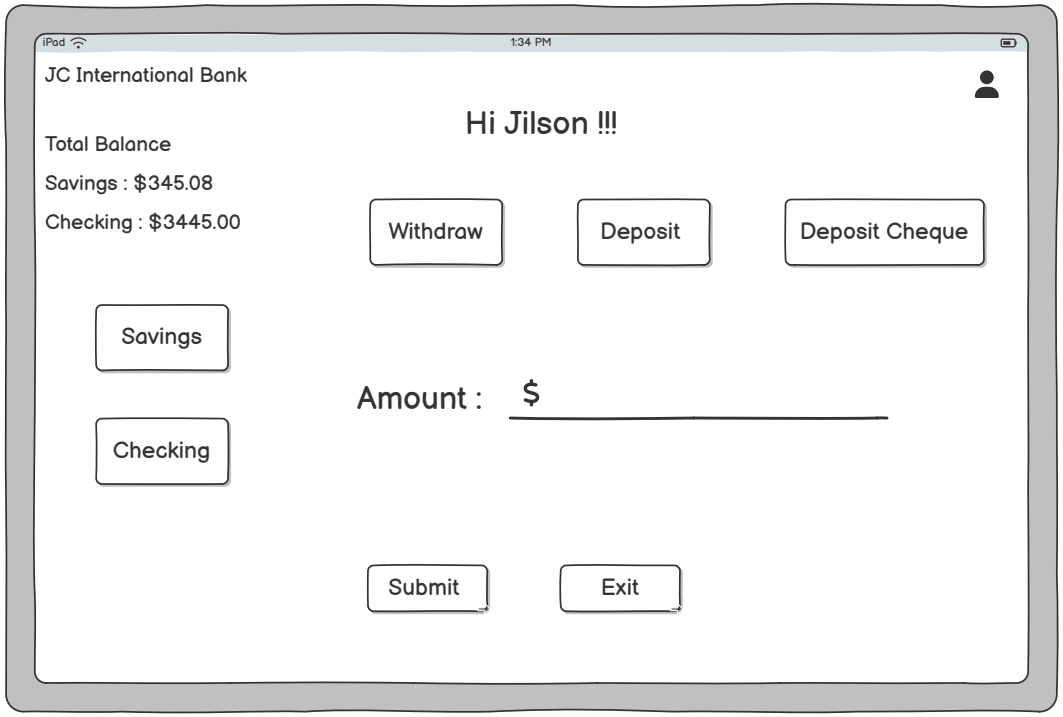
Elements:
Instruction: "Enter Your PIN."
Buttons: Number pad for PIN input and "Enter" and "Exit" for action.
After entering the PIN, users proceed to the main menu.







Purpose: Simplifies the withdrawal process with quick preset amounts.
Elements:
Options: Large buttons for preset amounts ($50, $100, $150, $200).
Trackpad/Keypad: For navigation and custom amount entry.
Buttons: “Exit” and “Voice Assistance.”
Flow: After selecting or entering an amount, users confirm the transaction.



Voice Assistance

High Contrast Mode

Text size

Trackpad

Purpose: Central hub for accessing different actions.
Elements:
Actions: Buttons for "Withdraw " "Deposit" and "Deposit Cheques"
Accessibility Options: Audio assistance, text size adjustment, and contrast mode.
Trackpad/Keypad: For navigation and custom amount entry.
Greeting: Personalized welcome message (e.g., "Hi, Jilson!").
Flow: Users select their desired action and proceed to the relevant page.

iPad 2:19 PM

JC International Bank

SUCCESS !!!

HOME Exit

Voice Assistance

High Contrast Mode

Text size

Trackpad