Virtuoso Infotech Pvt. Ltd.

About Virtuoso Infotech

- Fastest growing IT firm; Offers the flexibility of a small firm and robustness of over 30 years experience collectively within the leadership team
- Technology expertise & passionate team
- Successful client engagements across India, USA, UK, Australia and Argentina
- Handle enterprise solutions that involve 30,000 active users, more than 20 servers, data volume as big as 5 million entries per day.

Mobile UI/UX Design

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Agenda

- User Centered Design

- Interface Design Principles

- Difference in UI/UX Design of Android and iOS

User Centered Design

- In User centered design you need to focus on creating a product that will address the needs and pain points of users; this means knowing who they are and what steps need to happen for them to achieve certain goals on solve their pains.

- Answer following questions before starting with UI/UX design
  - Who is the user?
  - What are the user's goals for using the product?
  - Where does the user use the product?
  - When does the user use the product?

Features of User Centered Design

- **Accessibility**
  - Building your application to accessibility specifications helps your mobile UI design reach a broader audience, while becoming more usable for everyone.
  - Guidelines to achieve accessibility
    - Keep it simple.
    - Build your mobile UI design for customization.
    - Use easily recognizable clues and metaphors.
    - Be smart with color.
    - Make your text size visible and high-contrast.
    - Define form labels, and make sure they make sense.

Features of User Centered Design

- **Localization**
  - Right to left Flip
  - Line Breaking and Word Wrapping
  - Select Fonts for Global Consistency

- **Readability**
  - Change in readability based on change in importance of information.
  - Clear and Concise labels
  - Clear font style, font size and alignment

- **Hardware Controls**

Design Principles

- Learnability
- Simplicity
- Consistency
- Efficiency
- Error Recovery
- Memorability
- Scalability
- Feedback
- Satisfaction

Learnability

- The term 'Intuitive' is often used to describe mobile apps when suggesting that they are very user-friendly.
- An interface should be easy to use from the first time user interacts with it.
- Options should be placed in a manner where users can infer what the next step would be.
- Areas of App that will make UI learnable
  - Action Bars
  - Big and Clear Action Buttons
  - Proper icons

Simplicity

- Avoid ambiguity while designing by applying the principle of simplicity.

- Design should make simple and common tasks easy to use while communicating clearly in the user's own language.

- If there are certain processes that require users to access more elements, then provide good shortcuts that are meaningful.

- Design elements that are interactive in nature should be clearly depicted as well.

Consistency

- Different sections of the app must be coherent in the design layout with a consistent flow all throughout.
- Elements should be consistent in the app even when it's using a different OS or platform.
- Following things should be considered for a consistent design
  - color scheme
  - styles
  - border
  - font types and size
  - effects
  - buttons.

Efficiency

- Number of steps it takes for user to complete a task.
- Key tasks should be made as efficient as possible.
  - E.g. use of Radio buttons will be more efficient than using dropdown for less number of choices.

Error Recovery

- In a perfect user interface user should not be allowed to make mistake.

- Ways to avoid mistakes by user
  - Restricted inputs
  - Fix length of inputs
  - Provide selectors for inputs with fixed number of values

Memorability

- When users return to the design after a period of not using it. How easily can they reestablish proficiency?
- Improving memorability of an interface design is a good way to address the problem of forgetting how to use systems and the time that is wasted relearning.

Scalability

- A user interface is not confined to single device anymore.
- It can flow from one device to another or be shaped by multiple devices simultaneously.
- Basic guidelines to make UI scalable
  - Use of scalable dimensions
  - Relative width and height
  - Scalable icons

Feedback

- When users tap a button, they need to be informed whether the process has started and how long will it take.

- The design of the app must let the user know of any actions, interpretation, changes of state or condition, and errors or exceptions whenever they interact with it.

- The message should be clear, concise, and unambiguous to them.

- Utilize Toast in Android and notifications in iOS to notify users when a process has been completed.

Satisfaction

- How much the user enjoys or dislikes using the software.
- It depicts The perceived value the person associates with their investment (time, effort, cost) in learning how to use the product.
- Efficient use of all design principles is the key to satisfaction of customers.

Difference in UI/UX of Android and iOS

Android	iOS
Material Design	Flat Design
Uses animations to express the type of "material" you are interacting with.	Uses Animations in such a way that it takes user to destination without distracting.
Gives importance to drop shadows.	Promotes gradients and blurred designs.
Back navigation is at top as well at bottom.	Back navigation is only at top.
Tab navigation is at top.	Tab navigation is at bottom.
Search bar is placed at top of screen mainly.	Search widget can be placed any where on screen.

Thank You!

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