

Practical User Interface Design and Prototyping - 3 Days

Course 934 Overview

- You Will Learn How To**
- Design and generate effective user interfaces to address end user needs
 - Gather requirements through user personas and user stories
 - Configure interfaces that allow users to enter information more quickly and accurately
 - Implement best practices in the development of user navigation for desktop and Web-based applications
 - Incorporate WAI guidelines to ensure support and accessibility for all users
 - Address porting issues associated with mobile devices
- Course Benefits** Competitive advantage can be won or lost depending on the design of the user interface. To be effective, modern software application designs must not only support the required functionality but also fully engage users. Throughout this course, you learn to apply proven user interface design practices to gather requirements, reduce user input errors, and provide intuitive navigation pathways through complex applications to ensure usability.
- Who Should Attend** User system analysts, system developers, programmers, testers and anyone involved in developing user interfaces. General software development knowledge is preferred but not required.
- Hands-On Training** Hands-on exercises provide you with practical experience designing user interfaces. Exercises and demonstrations include:
- Generating an electronic prototype of an interface
 - Increasing speed and reducing errors to improve end user productivity
 - Adding useful help and error messages
 - Creating navigation controls
 - Incorporating search capabilities
 - Adjusting for visual difficulties to increase accessibility
 - Providing customization support

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Course 934 Outline

Presenting Your Best Face to the Customer

Core practices of user interface design

- Leveraging core best practices
- Realizing productivity gains
- Increasing your competitive advantage
- Converting binary data to meaningful displays
- Managing the complete user experience

Gathering Requirements

Viewing the system from the user's perspective

- Discerning system needs through user discussions
- Generating user personas
- Extracting user stories

Collecting user feedback

- Building prototypes
- Sketching mock-ups

Designing Based on User Input

Increasing user speed

- Determining sensible defaults
- Selecting the right controls for the job
- Exploring Fitts' Law

Reducing user error

- Limiting the scope for error
- Providing automatic cues
- Allowing for undo
- Supporting users with helpful error messages

Creating the User Navigation

Identifying user interactions

- Designing interface flow diagrams
- Focusing on the necessities

Selecting high-level structures

- Supporting intuition with network-based hierarchal or sequential organization
- Reinforcing the mental model

Applying best practice guidelines for user interface controls

- Choosing appropriate icons
- Adding shortcut keys for advanced users
- Organizing screen real estate with tabs
- Matching menus to widgets

Presenting, Sorting and Filtering Data

Grouping information effectively

- Structuring menus to match workflow
- Separating blocks of data with color
- Deciding when to right/left/center justify

Handling presentation delays

- Providing feedback during long wait times
- Collapsing and expanding content on demand

Retrieving data meaningfully

- Implementing search boxes
- Facilitating advanced searches
- Filtering search responses dynamically

Incorporating Aesthetic Considerations

Leveraging images and color

- Utilizing the color wheel
- Keeping the mental model consistent
- Sign posting with symbols
- Choosing color harmonies
- Implementing the right metaphor

Handling text issues

- Achieving readability with high contrast
- Adjusting for different language considerations
- Increasing accessibility for different context

Testing for Usability

Gathering measurements

- Counting screen access
- Enumerating mouse events

Applying usability metrics

- Navigating problem discovery
- Determining interface effectiveness
- Calculating efficiency

Evolving the Interface for Future Needs

Porting to mobile devices

- Arranging for a smaller screen
- Adapting to user selection devices
- Customizing for differing interaction styles

Preparing for the future of user interaction

- Going beyond two dimensions
- Creating new uses for existing devices