

UI and UX Design Foundations

User research, interface design, prototyping and evaluation

FA-0704 · 1 day

Software Development

Introduction

This one-day introduction connects user experience research with interface design and evaluation. A supplied digital-product scenario guides discussion, a small wireframe/prototype exercise and a short usability review.

Participants survey research methods, information architecture, visual systems, responsive/accessibility considerations and team handoff. It is a foundation course, not a promise to conduct a complete research programme or master every design technique in one day.

Learning outcomes

- Distinguish UI, UX and their collaboration with product and development teams.
- Select suitable research questions and methods for a supplied scenario.
- Create a simple evidence-informed user flow and low-fidelity wireframe.
- Apply selected hierarchy, typography, colour, layout and reusable-component principles.
- Build or inspect a small clickable prototype and identify usability/accessibility issues.
- Explain testing, iteration, developer handoff and responsible AI-assisted ideation.

Prerequisites

- Basic computer literacy
- Familiarity with web or mobile applications

- General understanding of digital products
- No prior UI/UX design experience is required
- Basic knowledge of graphic design concepts is beneficial but not mandatory

Access to a prepared collaborative design tool or a suitable sketching alternative for the guided exercise.

Training outline

1. UI, UX and human-centred process

- UI objectives, effective interfaces and UX across the product lifecycle; clarify team roles and cross-functional collaboration.
- Design thinking: empathise, define, ideate, prototype and test as an iterative approach rather than a rigid guarantee.
- Balance user needs, business objectives, accessibility and ongoing learning.

2. Research and user modelling

- Define objectives and compare interviews, surveys, observation, contextual inquiry and competitive analysis.
- Plan participants and questions; stakeholder views are not a substitute for user evidence.
- Organise findings with affinity mapping, pain points and opportunity identification.
- Evidence-informed personas, empathy maps and journey maps: goals, behaviours, touchpoints, stages and uncertainties.

3. Information architecture and wireframes

- Content categories, hierarchy, navigation, site maps and content relationships.
- Task flows, decisions, scenarios and interaction paths.
- Compare low-, mid- and high-fidelity representations; sketch and refine a small flow rather than fully designing a product.

4. Visual interfaces and design systems

- Hierarchy, spacing, alignment, contrast, typography and readable responsive layouts.
- Colour and brand associations depend on context; avoid relying on colour alone to communicate meaning.
- Consistent iconography, recognition, grids and whitespace.
- Tokens for colour, type and spacing; reusable buttons, forms, cards and navigation.

- Component libraries, consistency, collaboration and versioned design decisions.

5. Prototyping, responsive design and accessibility

- Static versus interactive prototypes, clickable workflows, microinteractions, transitions and feedback.
- Scenario review, stakeholder feedback and refinement of the small prototype.
- Mobile-first/adaptive layouts, breakpoints and cross-device consistency.
- Keyboard interaction, focus, colour contrast and screen-reader considerations; introduce WCAG 2.2 without asserting conformance.

6. Usability evaluation, tooling and handoff

- Define test objectives, participant needs and representative tasks; compare moderated and unmoderated methods.
- Observe behaviour, analyse qualitative/quantitative evidence and prioritise improvements.
- Heuristic review of consistency and error prevention complements rather than replaces user testing.
- Collaborative tools, design specifications, asset management and developer handoff.
- AI-assisted ideas, layouts or content are optional aids; review outputs, protect research data and validate assumptions with people.
- Review the guided exercise and identify further research, iteration and implementation work.