

ASSIGNMENT HCI-BIT 316/COMP 401/ACMP 446/SOEN 426

12-Week Practical Assignment Schedule – User Interface Design / HCI

Week	Assignment Title	Description / Task	Tools / Deliverables
1	Introduction & UI Observation	Students pick any 2 apps/websites they use daily and identify 3 usability strengths and 3 weaknesses.	1–2 page observation report
2	Heuristic Evaluation	Apply Nielsen’s 10 heuristics to evaluate an existing interface (e.g., social media, e-learning system).	Report with heuristic analysis
3	User Personas & Task Analysis	Create 2–3 personas for a chosen system (e.g., food ordering app) and outline task flows for main user goals.	Personas + task flow diagrams
4	Low-Fidelity Wireframing	Sketch paper prototypes of key screens for the chosen system.	Scanned sketches / PDF wireframes
5	Digital Wireframing	Convert sketches into low-fidelity digital wireframes using Figma, Balsamiq, or XD.	Clickable wireframe prototype
6	High-Fidelity Prototyping (Part I)	Add colors, typography, branding to wireframes. Focus on layout and navigation flow.	High-fidelity prototype (draft)
7	High-Fidelity Prototyping (Part II)	Add interactions (clicks, transitions) to make a working prototype.	Interactive prototype (Figma/XD link)
8	Usability Testing	Conduct usability tests with at least 3 peers on the prototype. Collect feedback on ease of use, navigation, and satisfaction.	Usability testing report
9	Accessibility Evaluation	Evaluate a real website/app using WCAG 2.1 guidelines (color contrast, font size, alt text, keyboard use).	Accessibility audit report
10	Redesign Challenge	Choose a poorly designed form/page and redesign it using UI principles.	Before-and-after redesign mockups
11	Multimodal / Mobile-First Design	Design a voice interaction storyboard OR a mobile-first responsive prototype.	Storyboard diagrams / responsive layouts
12	Capstone Mini Project (End-to-End Design)	Complete an end-to-end UI/UX design for a real-world problem (e.g., e-learning, smart farming, campus navigation). Include: Personas, Wireframes, Prototype, Usability Report.	Full project + Presentation

How This Works

- Weeks 1–3 → Analysis phase (understanding users and problems).
- Weeks 4–7 → Design phase (wireframes → high-fidelity prototypes).
- Weeks 8–9 → Evaluation phase (usability & accessibility).
- Weeks 10–12 → Improvement & final project (redesign + capstone).