

## USER INTERFACE DESIGN FOR MOBILE DEVICES

### COURSE DESCRIPTION

Students will come away from this 2-day hands-on workshop-style course knowing how to conceptualize and create intuitive user experiences for mobile devices. UI designers who have worked with traditional applications and Web sites will learn how to transfer their skills to this new medium.

We will cover user research and usability testing techniques, information architecture and task flows, small screen layout, search, browse, and information design. We will also explore techniques for minimizing user input such as personalization, use of GIS data, defaulting, and analytics. Design principles will be taught through an analysis of the most innovative & popular mobile applications across a variety of industries – education, consumer goods, entertainment, health care, and enterprise.

While principles of design will be taught using iPhone, we will also look at the Blackberry, Android, and feature phone platforms. Each student will put their learning into action as they create an information architecture, screen layouts for a paper-based prototype of their mobile UI design.

### AUDIENCE

Developers, desktop interaction designers, product managers, usability professionals with a good grasp of the principles of user-centered design.

### DETAILED COURSE CONTENT

#### Strategic considerations

- What applications should (and should not) have a mobile version, techniques for creating a mobile version of a desktop product
- How platform affects approach (iPhone/touch vs. Blackberry vs. feature phone), pro's and con's of creating an application for a specific device vs. for the mobile web

#### Mobile information architecture and navigation

- How to translate task/workflow analysis to mobile information architecture & navigation
- How to keep navigation shallow

#### Mobile User interface design

- How mobile UI design is different from traditional UI design
- How to design to suit mobile's unique strengths and limitations
- What the best layouts are for a small screen
- What the best fonts, graphics, colors to use are while minimizing latency
- How to optimize a standard Web site so it works on mobile devices
- How to incorporate personalization, GIS data, defaults, auto complete, analytics and other resources to minimize user input

- How to provide Forms and widgets
- How to best allow search and browse
- How to write and design information
- How to handle errors and deliver help

### Techniques for communicating your design

- Designing Mobile site maps, process flows, click streams
- Creating wireframes for mobile applications

### Ways to evaluate and optimize your design

- Mobile usability testing approaches
- Publicly available standards (Apple) and design patterns

### Implement your design

- Demonstration and materials to help you create a paper prototype of the design you've created in class
- Demonstration of WebKit which allows you to generate a working electronic prototype of your design
- Opportunity to participate in a design review of student work at the end of day 2.

### COURSE BOOK AND OTHER RESOURCES

“Mobile Design and Development – Practical Techniques for Creating Mobile Sites and Web Apps,” Brian Fling, O’Reilly, 2009

Students will also receive a detailed bibliography of books, Web sites and other resources to help them continue learning about mobile user interface design.

### INSTRUCTOR BIOGRAPHY

Kay Corry Aubrey has 20 years experience as a user experience researcher and designer. She consults with companies such as Raytheon, AT&T, the Massachusetts Medical Society, and Avaya through Usability Resources Inc, the business she founded in 2002.

Kay is a RIVA-certified Master Moderator and a member of the UPA, GBSIGCHI, and the Qualitative Researchers Consultants Association (QRCA) where she is the Business Editor of the QRCA VIEWS magazine, a qualitative market research journal. Kay teaches graduate-level courses in user-centered research and design for desktop and mobile applications at Northeastern University and the Bentley University program in Human Factors and Information Design.

Kay holds an MS in Information Systems from Northeastern University, an MSW from Boston University, a BA from McGill University, and a Certificate in Graphic Design from the Museum School in Boston.