

Academic Architects

Course Data Sheet

Course Number:	WEBTECH-330
Course Name:	Applied Mobile Application Design and Prototyping
Level of Effort:	3 Semester Hours or 5 Quarter Hours
Course Level:	Intermediate
Prerequisites:	Introduction to Web Development, HTML, and CSS
Adoption/Use:	Mobile Application Design
Subject Area:	Information Technology, Mobile Development, Web Development
Release Version:	2020-1

Primary Course Objective: Upon completion of this course students will be able to plan, design, and prototype a mobile application.

Course Description:

This competency-based course will provide students with the "hands-on" skills to plan, design, and prototype mobile applications using the client-side web development languages HTML5 and CSS3, and a JavaScript Library. Students learn to structure mobile applications that include headers, footers, toolbars, navbars, lists, forms, grids, panels, and widgets. Students will create designs and themes for mobile device applications. The course will culminate in the plan, design, and prototype construction of an enterprise mobile application.

Course Topics:

- Mobile Application Prototype Development Tools
- Designing and Prototyping Mobile Applications
- Mobile Application Headers, Footers, Toolbars, and Navbars
- Lists and Forms for Mobile Applications
- Modifying and Enhancing Mobile Application Prototypes
- Grids, Panels, and Widgets for Mobile Applications
- Database Simulation for Mobile Application Prototypes
- Mobile Application Designs and Themes
- Mobile Application Design, Structure, and Usability

Course Learning Objectives and Competencies:

Upon completion of the course you will be able to:

1. Setup a computer for mobile application design and prototyping
2. Implement tools and technologies for prototyping mobile applications
3. Add pages to mobile application prototypes
4. Add and work with links in mobile application prototypes
5. Add headers, footers, and navigation to mobile application prototypes
6. Add and work with lists in mobile application prototypes
7. Modify and enhance mobile application prototypes
8. Add and work with forms in mobile application prototypes
9. Add grids, panels, tabs, and popups to mobile application prototypes
10. Simulate working with a database in mobile application prototypes
11. Make configuration changes and work with methods and events in mobile application prototypes
12. Implement designs and themes in mobile application prototypes
13. Design a mobile application using navigation flow charts and storyboards
14. Design and build a functional mobile application prototype

Course Deliverables:

Deliverable	Quantity
Course Curriculum Design	1
Course Syllabus	1
Course Schedule Plan (8, 10, and 16 week plans)	1
Course Learning Modules	16
Course Assessment Rubrics	4
Handouts	4
Competencies and Objectives Map (Maps Competencies and Objectives to Learning Activities and Assessments)	1
Instructor Notes	1
Administrator Notes	1

Learning Activities:

Learning Activity	Quantity
Hands-On Workshops	5
Discussion Boards (Graded)	9
Lab Exercises (7 - Graded)	8
Course Project Activities (2 - Graded)	7