Web Application Project
ITP 460 (4 Units)

Objective

This course is intended to give experienced web developers practical industry theory, skills, and experience. Students will build websites for actual clients. They will work in teams with assigned roles, developing the site throughout one semester and following the traditional development stages and cycles.

Concepts

Students will be taught important development theory including: methodologies and frameworks; project planning and resource management; project roles and collaboration; information architecture; applied database design and implementation; user interface design and testing; version control; quality assurance; testing and debugging; documentation; and migration and updating projects.

Prerequisites	ITP 300, ITP 303, or equivalent web development experience
Instructor	Zune Nguyen (tridungn@usc.edu), Bo Wang (yuanbo@usc.edu)
Office Hours	See course website
Lecture and Lab	Wednesday 5:00pm - 8:50pm, KAP 164
Website	http://itpwebdev.com/

Grading

The following percentage breakdown will be used in determining the grade for the course.

Individual Assignments	10%
Group Assignments	30%
Labs and Attendance	15%
Milestones	20%
Individual Contribution	25%
Total	100%

Grading Scale

The following shows the grading scale to be used to determine the letter grade.

A	93% or up
A-	90% - 92.99%
B+	87% - 89.99%
B	83% - 86.99%
B-	80% - 82.99%
C+	77% - 79.99%
C	73% - 76.99%
C-	70% - 72.99%
D+	67% - 69.99%
D	65% - 66.99%
F	64.99% or below

Policies

Attendance
An attendance sheet will be circulated at the beginning of each lecture. You must sign in to receive attendance credit. You can miss **one** lecture without affecting your grade.

Late Assignments
10% per day penalty is applied for late assignments (group and individual). No submissions are accepted 4 days after due date.

Late submissions for weekly sprints (tracking, retro, planning, meetings) are **not accepted**.

Grade Corrections
Any questions or concerns regarding grades must be addressed within 7 days after grades are posted on Blackboard. No corrections to any grades will be made after 7 days.

Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations… for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) "is assigned when work is not completed because of documented illness or other 'emergency' **occurring after the twelfth week** of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks)."

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. If you need accommodations for an exam, the form needs to be given to the instructor at least two weeks before the exam.

DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Contact info: 213-740-0776 (Phone), 213-740-6948 (TDD only), 213-740-8216 (FAX), ability@usc.edu, http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html.

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism - presenting someone else's ideas as your own, either verbatim or recast in your own words - is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men*

http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* http://emergency.usc.edu/ will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Web Application Project
ITP 460 (4 Units)

Course Outline
Subject to change throughout the semester

Week	Lecture	Assignment
1	Course Overview Project life cycle, Roles Project Pitches	
2	Agile Software Development Spring Development Cycle JIRA	(i) A1: Student Background Questionnaire
3	Version Control, Deployment, and Git Workflow	(i) A2: Software Setup (g) A3: Slack Channel, Git Commit, Client Meeting, Sprint Review Schedule
4	UI / UX Design, Wireframing, Prototyping, Usability Testing	L1: First Sprint Planning (g) A4: Wireframes
5	Scrum Methodology Revisited	(g) A5: Prototypes [Milestone]
6	Server Infrastructure, Deployment Techniques, Firebase	(g) A6: Server Setup
7	CSS & JS Preprocessors	(g) A7: Front-end Pages [Milestone]
8	Behavioral Driven Testing	
9	Cloud Computing	
Spring Break		
10	Web Optimization, Content Delivery Network	
11	**Progress Presentations**	(g) A8: Progress Report [Milestone]
12	Availability, Stability, Scalability	

13	Search Engine Optimization (SEO), Analytics	
14	Going Live, Migration Plan, Maintenance	(g) A9: Hand-off Plan
15	Final Presentations	(i) A10: Peer Evaluations **Final Projects Due**