



ITP 460: Web Application Project

Units: 4

Fall 2022 –Tuesday – 5pm-8:20pm

Location: On Campus: KAP 148

Instructor: David Tang

Office Hours: By appointment

Class Website:

<https://dtang.dev/teaching/2023/itp460/>

Email: dtang@usc.edu

TAs:

Mengdi Chai

Email: mengdich@usc.edu

Cell Phone: 323-449-0785

Office Hour: TBD

Mengfei Qi

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Cell phone: 213-245-8869

Office Hour: TBD

IT Help: Provided by Viterbi IT

Hours of Service: 8am – 5pm, Mon-Fri

Contact Info: (213) 740-0517

Email: engrhelphelp@usc.edu

Course Description

This course is intended to give experienced web developers practical industry theory, skills, and experience; prepare you to be ready to start working in the web development industry; Understand the different roles and responsibilities of working in a team. 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.

Learning Objectives

- 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;
- Migration and updating projects.

Prerequisite(s): ITP 304, ITP 303, or equivalent web development experience.

Technological Proficiency and Hardware/Software Required

Students should have access to their own computers running either Windows, MacOS, or Linux, and should be familiar with the basic operation of their computers.

Grading Breakdown

Individual Assignments	10%
Group Assignments, Weekly Sprints	30%
Lecture Attendance, Group Meetings	20%
Milestones	20%
Individual Contribution	20%
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Total	100%

Grading Scale

Course final grades will be determined using the following scale:

A	93% or up
A-	90% - 92%
B+	87% - 89%
B	83% - 86%
B-	80% - 82%
C+	77% - 79%
C	73% - 76%
C-	70% - 72%
D+	67% - 69%
D	63% - 66%
F	62% or below

Attendance

Lecture attendance will be recorded starting in Week 2. Class will also be available over Zoom, but it is highly recommended attending in person unless you are sick or have unforeseen circumstances. Let the instructor and Tas know if you plan on attending remotely or if you're unable to attend at all.

Late Assignments

10% per day penalty is applied to late assignments (both individual and group). No submissions are accepted after five (5) days beyond the due date. To receive a grade, students must notify the grader once late assignment is submitted.

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

Grade Corrections

Any questions or concerns regarding grades must be addressed within seven (7) days after grades are posted on Blackboard. No changes to any grades will be made after seven (7) days.

Course Schedule

Note: Subject to change throughout the semester

Week	Date	Lecture	Assignment
1	1/10	Course Overview	(i) A1: Student Background Survey (i) A2: Software Setup
2	1/17	Software Development Methodologies Web Technology Landscape and Architectures	(i) A3: Daily Scrum (i) A4: Readings - Google Design Sprint
3	1/24	Product Design Wireframing Usability Testing (Guest Lecture with Aarti Vashisht – Senior Product Designer at ServiceTitan)	(g) A5: Product Design (g) A6: Client & Group Meeting (g) A7: Create Your Initial Backlog with Product Owners
4	1/31	Version Control with Git README documentation	(g) M1: Mid-Semester Presentation Requirements (g) M2: Midterm Front-End Pages (2wks) (g) A8: Sprint #1
5	2/7	GitHub workflows and best practices	(g) A9: Sprint #2:
6	2/14	Frontend Frameworks	(g) A10: Sprint #3
7	2/21	Backend Frameworks	(g) A16: Sprint #4
8	2/28	Midsemester Presentations	(i) A11: Midsemester Peer Evaluations (g) M3: Final Web Application (g) M4: Final Presentation (g) A12: Sprint #5
9	3/7	Web Accessibility (A11Y)	(g) A13: Sprint #6
Spring Break			
10	3/21	Web Security	(g) A14: Sprint #7
11	3/28	Deployment	(g) A15: Sprint #8
12	4/4	TBD	(g) A17: Sprint #9
13	4/11	Testing and QA	(g) A18: Sprint #10
14	4/18	TBD	(g) A19: Sprint #11
15	4/25	Final Presentations	(i) A20: Final Peer Evaluations Final Projects Due

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 Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. 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>.

Support Systems

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.

Provides overall safety to USC community. <http://dps.usc.edu>