



MAHARISHI UNIVERSITY OF MANAGEMENT

CS445 - Modern Asynchronous Programming

Umur Inan, M.S.

2021

Maharishi University of Management is an Equal Opportunity Institution.

© 2012 Maharishi University of Management

Transcendental Meditation®, TM®, TM-SidhiSM, Science of Creative Intelligence®, Maharishi Transcendental MeditationSM, Maharishi TM-SidhiSM, Maharishi Science of Creative IntelligenceSM, Maharishi Vedic ScienceSM, Vedic ScienceSM, Maharishi Vedic Science and TechnologySM, Consciousness-BasedSM, Maharishi International University, and Maharishi University of Management are registered or common law trademarks used under sublicense or with permission.

CS445: Modern Asynchronous Programming

Main Objectives of Modern Asynchronous Programming

Mastering Modern Asynchronous Programming Techniques as a Foundation to Building Single Page Applications.

CS445: Modern Asynchronous Programming

Assistant Professor of Computer Science: Umur Inan

Course Overview

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1	Fundamentals of JavaScript	Collaborative Git	JS Engine and Modern Web Browsers	JS Modules, Introduction to TypeScript and Bundlers	TypeScript	Review
Week 2	JS Lexical Environment and Scoping, Closures	JavaScript Inheritance, Bind, Apply and Call, Immutable Arrays	JavaScript DOM, Selectors, Events, History API, Geolocation API	Asynchronous JavaScript, Event-Loop, Promises	Midterm Review	Midterm
Week 3	HTTP Requests, Ajax, Fetch, JSON	Reactive Programming, RxJS Observables, and Operators	Design Patterns 1: Module, Prototype, Singleton, Observer	Design Patterns 2: Façade, Factory, Decorator, Proxy, Strategy, Memoization	Review/ Project Announcement	Project Day 1
Week 4	Project Day 2	Project Day 3	Project Day 4	Final		

CS445: Modern Asynchronous Programming

Umur Inan, M.S

Evaluation Criteria

Midterm	40%
Final Exam	40%
Homework	5%
Project	15%
Attendance and Etiquette	0%, -3%

Grading Scale

92 - 100	A
88 - 91	A-
84 - 87	B+
79 - 83	B
75 - 78	B-
71 - 74	C+
66 - 70	C
62 - 65	C-
0 - 62	NC

Contact Info

Umur Inan
Assistant Professor of Computer Science
Email: uinan@miu.edu
Office: McLaughlin #209

Class Attendance

Attendance at all classes is required because all elements of class — lectures, questions, and answers, discussions, laboratory work — contribute to the learning process. Absences are usually excused only if you are sick in bed or have a family emergency.

If you must miss a class, please let your instructor know ahead of time. Call, send an email, or send a note to a friend. There is no such thing as a “personal day.” If you have personal business to take care of, please schedule it for after class or during the days between blocks. At the same time, it may occasionally be necessary for you to miss a class (or part of a class) for some reason other than illness or a family emergency. Please speak with the instructor beforehand, who will be open to considering your needs.

The first lesson of each course is the most important. Students are expected to be present from the first lesson onward. Any student not present on the first morning (except for such compelling reasons as illness or family emergency) may be asked to withdraw from the course. Unexcused absences may result in the student receiving a grade of NC (No Credit) for the whole course.

PUNCTUALITY

Punctuality is expected and required in the professional world. People commonly lose their jobs for being late — especially new college graduates unfamiliar with professional expectations. Colleges and universities have come under criticism for not properly preparing students in these values.

Therefore we place a similarly high value on arriving on time for every class session. If students are late, they disrupt the learning environment and may miss the wholeness of the lesson. Coming late is unprofessional and shows a lack of courtesy to the instructor and to fellow students.

Thus the faculty request that students arrive a couple of minutes early, so everyone is seated and settled when the class begins. Well begun is half done.

Punctuality also extends to returning from the class break in a timely fashion (as announced by the professor at the beginning of the break). The instructor should not need to go out and round up students.

If you need to be late to class for some reason beyond your control (a dentist appointment, for example), please arrange that with me ahead of time.

CLASS PARTICIPATION

American companies (and universities) expect employees (and students) to be active participants in discussions about projects and plans. This is in contrast to many other cultures in Asia and Africa that many of our students are from. Our classrooms are a great environment to get used to being a more active participant. Being an active participant means volunteering information and asking questions from your side—i.e., raising your hand to make a comment or ask a question without being prompted by the professor. This should always be done in a polite manner, but it is not sufficient to sit silently and passively unless called upon.

