Welcome to Web Programming!

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Web programming is possibly the most exciting area of computer science today.

With these technologies you can create apps and programs for practically any platform out there. Things are changing so rapidly, it's hard to keep up.

In this course, we will be learning full stack development with a concentration on NodeJS & Vue. In order to do that, we will also need to learn Git, Express, Vite, ES6, ES2020, Typescript, REST, GraphQL, MongoDB, Asynchronous Programming, Functional Programming, and more. Then there will be tie-in technologies – databases, webservices/rest, continuous integration, social graphs, oAuth, websockets, pwas, html5, proper debugging, etc. Other technologies we will touch on because of their prevalence in the industry are Angular, React, jQuery, and php/wordpress. But much more important than any particular technologies will be the skills and patterns we learn. From particulars like mvc, mvvm, ioc, tdd, etc. to overarching patterns like DRY, reuse, nTier design, secure practices, maximizing http request-response, cloud deployment, taming asynchronous code, and thinking functionally.

To put it mildly, we will be covering a $#%* load of content in barely 13 weeks. So, we will be flying through stuff and need to be on our A game.

We will be developing two mobile-first web apps simultaneously. In class, I will explain each concept and demonstrate it by building an e-commerce app . You will first practice the techniques by trying to recreate what I do. Then you will use the same techniques to add something to your project which will be an app to track your exercise habits and share them with your friends.

In this course, we will not be covering the basics and there is a lot you will need to know and learn on your own. If you aren't an html/css ninja yet, you should start working on that NOW. That way you're ready when we get to the heavy lifting. You can test yourself by trying to create page with a dropdown menu system purely in html/css without any javascript. If you cheat and look at someone else's code or teach yourself how to do just this, then you've missed the point. You need to know css so well, that this task is something you can figure out just by playing around. You also must know the basics of object oriented programming and javascript before we begin. If you don't feel that you are up to it. Please drop the class and come back next year when you are ready.

We do not use a printed textbook for this course. All resources are online.

One of the "Textbooks" for this course is www.w3schools.com. Please read the first 43 pages of https://www.w3schools.com/html , the first 44 pages of https://www.w3schools.com/css, and all 47 pages of https://www.w3schools.com/bootstrap5 before class next Monday. Please make sure that in addition to reading the pages. You try out each concept. You can use sites like https://jsfiddle.net/ to try out concepts on the fly. But also make sure that you are creating real files and trying things out that way.

You will be trying out new things in class every day, and then trying to replicate them after class. We won't have computers in our classroom, but you will need to have one each day for class. It can be windows, linux, or mac, but you must make sure that it is charged and in working order every day before you come to class. You will be able to use whichever git, ssh, and ftp software you like, and our primary IDE is going to be VS CODE which is cross platform.

I am excited to get to know each of you. We start one week from today! See you then