**Modern Web Technologies:**

**Lab 5 – Exploratory Assessment**

**Blurb:**

Last semester, I asked, **“What do you want to do, and why did you choose this program?”** Some of the answers left me uncertain, while others were along the lines of, **“I’ve fallen out of love with tech, and I just want to finish this and leave.”** And I get that.

Until you have a clear direction and know what you truly want to do, it can feel aimless—like it’s never enough. And with everything going on in life, finding free time to explore new interests isn’t always easy.

That’s why this lab exists: to give you that extra nudge toward discovering what excites you and finding a path that feels right. That’s the hope at least.

If you want to (small list, but not limited to these options):

* Look into Game Development, see how a game is made
* Look into Machine Learning and AI, try making something small
* Look into data analytics/ science, write a paper about your findings
* Look into cyber security and cryptography
* Looking into developing applications

**If I relate it back to this course and the works behind it:**

The ones I have seen so far include this list. This doesn’t mean ‘**up and coming’** this is just a list of things I have seen through the last year for Entry level and up positions:

* Next.JS
* Rust
* Ruby on Rails
* C# and .Net

I recommend working at it like this:

1. What is the job title you want soon
2. Look for jobs on the market and note down any listed skills
3. Look online for a small project or try making your own
4. Submit however much you can complete. Try making something function and send me a recording.

**Rationale:**

For the purposes of learning, MERN has been fine. It provides you with 1 common language to learn about how a full stack application works together, the interaction between Front End, Back End, and the Database.

Within the last year, I have seen a transition for a lot of companies to go back to the SSR (Server-Side Rendering) model and as such, moving onto Next.JS. So, I will provide you with an assessment that focuses on using Next.JS. You can do anything else if you choose.

The goal: Go through a tutorial of your choice and try making it. I will provide you with a few examples that you can try, you only need to do one, but if you feel like going into another programming language or doing something else, **you are free to do anything. (Some of these are over a year old now).**

**NEXT JS tutorials:**

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| Ticketing App – 2.5 hours  [Next.js, Tailwind CSS, and MongoDB Project Tutorial – Ticketing App (youtube.com)](https://www.youtube.com/watch?v=H0vhkoXljq0&ab_channel=freeCodeCamp.org) |
| AI Expense Tracker – 2.5 hours  [Build an AI Expense Tracker & Financial Advisor App with Next.js, Tailwind CSS, and TypeScript (youtube.com)](https://www.youtube.com/watch?v=gvUsUpDlav4&ab_channel=AlbertMends) |
| Banking Application – 6.5 hours  [Build and Deploy a Banking App with Finance Management Dashboard Using Next.js 14 (youtube.com)](https://www.youtube.com/watch?v=PuOVqP_cjkE&ab_channel=JavaScriptMastery) |
| E-Commerce Shopping app – 12 hours  [Build a Complete E-Commerce Shop with Next.js 14, Tailwind, React | Full Course 2024 (youtube.com)](https://www.youtube.com/watch?v=SG82Aqcaaa0&ab_channel=Joshtriedcoding) |
| Portfolio Website – 3 hours  [Build and Deploy a Portfolio Website Using Next JS, Tailwind CSS & Framer Motion (youtube.com)](https://www.youtube.com/watch?v=dImgZ_AH7uA&ab_channel=CristianMihai) |

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| **Rubric** |
| Have you completed the following:   * Have you done a tutorial/made your own project * Do you have documented proof – video of the running work or git repository + commit history * Small summary of what you have learnt using the technology, maybe some similarities to our course (if they apply). |

Ultimately, it’s about time and practice. You can only start when you know what you want to do. So go and find it.