CS-499-T4251 Computer Science Capstone

Professor Goggin

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4-1 Journal: Career Choice and Artifact Update

Part One

When I reflect on my choice to pursue a career in software development, I see that, although at first, I thought it might be interesting to learn new technologies and use my creativity, the field is now offering a career path with countless options, advancement, and, depending on how well you do, respectable income. But the work has a lot more aspects than only the salary. There is nothing more satisfying than solving a problem. In your role as a software developer, you constantly provide solutions to user issues.

My current career goal is to improve as a full stack developer. Senior software engineers known as "full stack engineers" design, test, and implement software programs. Full stack engineers work on all stages and areas of software development, performing responsibilities like performance testing, code review, and internal product management. Both software engineers and full stack developers work to finish tasks and meet client requirements. Nonetheless, according to indeed, full stack developers frequently assume leadership roles, and software engineers may cooperate with full stack developers and draw on their expertise to produce project features while working under their supervision. I would want to be in a position of leadership, managing a team of developers who work together to meet business goals.

Part Two

Provide an update to your instructor on your progress with each category of artifacts for the ePortfolio:

Software design/engineering:

As indicated in my enhancement plan, for this first category as part of my final project, I decided to work with an artifact that was completed during **CS-360 Mobile Architect & Programming.**

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Artifact: Event tracking App – Built in Java and Android Studio**.**

Status Checkpoints:

1. **Artifact Selected: Completed.**
2. **Working on Initial Enhancements: Completed**
3. **Submitted, Awaiting Instructor Feedback: Completed**
4. **Working on Final Enhancements:** My first Android Studio and Java mobile app was incredibly basic. Only the ability to register for an account, sign in, and easily create or delete events were provided to the user. This time the current application I am working on application has already been enhanced with the addition of CRUD features, web app development, and visual user experience enhancements. In addition to HTML, CSS, and Javascript. EJS, Mongo DB, Mongoose, and Bootstrap are all things I've been studying and utilizing more of. When I previously delivered an update, I started by creating the data base, the CRUD processes, and the basic functionality. Now I am working on making sure all the views of the application work as expected and making sure that the final product completely matches the system requirements and original design presented during last week's update.
5. **Uploaded to ePortfolio: Pending.**
6. **Finalized ePortfolio Entry: Pending.**

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Algorithms and data structures:

For this first category as part of my final project, I also decided to work with an artifact that was completed during **CS-360 Mobile Architect & Programming.**

Artifact: Event tracking App – Built in Java and Android Studio**.**

Status Checkpoints:

1. **Artifact Selected: Completed.**
2. **Working on Initial Enhancements: Completed**
3. **Submitted, Awaiting Instructor Feedback: Pending**
4. **Working on Final Enhancements:** I'm currently working to finish the JavaScript web application, enhance the styling, and set up user authentication so that users may interact with the program's main user interface. I used the appropriate syntax, libraries, and the guidance and comprehension of the web documentation to be able to accomplish what I have so far. Since procedural programming is fundamentally an extension of object-oriented programming, all present applications have been written in files including methods or classes.

   I may show my understanding of how algorithms relate to data structures and object-oriented programming by adopting the appropriate syntax and naming conventions to make them more usable and less prone to issues.

   These were all reusable, and the capacity to break things down into objects is a fundamental principle of object-oriented programming.
5. **Uploaded to ePortfolio: Pending.**
6. **Finalized ePortfolio Entry: Pending.**

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Databases:

For this third category as part of my final project, I decided to work with an artifact that was completed during **CS-340 Client/Server Development.**

Artifact: Salvare Search for Rescue App.

Status Checkpoints:

1. **Artifact Selected: Completed.**
2. **Working on Initial Enhancements:** For databases, structured storage is reliable and speedy. I mentioned in my previous update that I had started using the Mac's terminal and Jupiter notebooks to work on the project for this category. I'm thinking about the best course of action to take to meet all system requirements right now. So, I'll follow a similar strategy to the one I used for the other artifact and focus initially on making sure the database is operating as it should.

   The goal is to build a full stack application based on the client's requirements. Jupyter notebooks are useful tools for connecting to your remote database. They allow you to replicate, standardize, and document your data. The Python Database (DB) APIs support relational database systems and can be used with a variety of databases. As soon as I finish the database design, I will start working on the Python CRUD methods for MongoDB. Building up the fully functional MongoDB dashboard is the last thing I need to do.
3. **Submitted, Awaiting Instructor Feedback: Pending.**
4. **Working on Final Enhancements: Pending.**
5. **Uploaded to ePortfolio: Pending.**

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6. **Finalized ePortfolio Entry: Pending.**

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References:

What is a full-stack developer? definition, skills and how to ... - indeed. (n.d.). Retrieved from https://www.indeed.com/career-advice/finding-a-job/full-stack-developer-definition