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CS-499 Computer Science Capstone

09/30/25

4-2 Milestone Two

Enhancement: Algorithms and Data Structure

1. Briefly describe the artifact. What is it? When was it created?
   * I used the same application as in enhancement number one. This was originally an inventory application made in January 2025. It started from nothing and built throughout 8 weeks to show mobile development principles and best practices to develop mobile applications. It shows a user forward design, with security, compatibility, and product checks to show assorted possibilities that can be provided to a entity to meet their needs.
2. Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in software development? How was the artifact improved?
   * As this being the same artifact as enhancement one I would describe the same important parts as the first but with maybe more emphasis on security and showing how limiting the areas for access to only the right people can deter potential attacks and help with security overall. Which I think is a huge problem when it comes with the ever-growing issues related to security breaches and another cyber-attacks on companies and individuals. I want to include many of the same agureements as I stated in enhancement number one and repeated here. I think this shows an employer focused application and with the way that technology has moved to our phones, I think application development and developers are a huge community and open many doors to the software career environment. I think having a base knowledge of how mobile applications work and how to debug and work through issues shows the capabilities that I have to solve problems and move towards being someone a company wants. I know that at the convenience store I worked at they had no idea how to build an application due to them being simple mom and pop establishment, but they did struggle competing with the big brands when it came to having a simple way of doing basic tasks that a mobile application would have helped with. They still do not have the most advanced application, but they have a simple one that gets what they need accomplished, and I think having these skills I would have been able to offer something to them at the time.
3. Did you meet the course outcomes you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?
   * Security is number one is this enhancement and making sure that the right users are able to access only the areas that they have permission to access is the most important aspect of this portion and to show how security is a priority.
   * I think I have started to meet the course requirements I originally set out but have not completed them, I want to make sure that I use the best standards and have a clear and visually appealing code that meets the principles we have learned through the terms and makes sure that security issues are met as well.
4. Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?
   * Most of the same can be said for both enhancement one and two which is summed up here. I needed to make sure to update more often and if by the consistent updates the program should have run easier with limiting the problems with running correctly and hopefully not taking as much time to get back to the start. So, for this I fell behind when working towards the enhancements and started working both one and two at the same time and used the same application to apply to both. I added a user and an admin option and I am having trouble with only allowing the user to access certain areas while when I limit the application sends and error and shuts down and so I am working towards troubleshooting solutions towards that option but for this week I spent most of the week working towards the third enhancement and I think I am finally on the path of completing all three. I feel good about where they are going.