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CS-499 SNHU

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6-1 Journal

Quantum Computing has come a long way, including the creation of the first-ever circuit based commercial quantum computer, called the IBM Q System One, in 2019. Quantum computers work very differently from a normal computer, which operates on data represented by 0s and 1s. In a quantum computer, data is represented as quantum bits, or qubits, which can exist in multiple states simultaneously due to superposition. They can also be ‘entangled’ to allow for simultaneous processing of a vast amount of data. Because of these features of quantum mechanics, certain fields such as cryptography, optimization, and complex system simulations will potentially be revolutionized with quantum computing technologies.

Mobile networks also have promising new technology on the horizon in the form of 5G technology, which will likely have faster speeds, less latency, and the ability to connect many devices at once to the network. 5G networks have more advanced architecture and systems while being designed for the growing demand for mobile data and increasing number of devices connected to the internet. Because of 5G networks demand for better network architecture, cybersecurity, and application development will also increase in the near future.

As the end of class nears, I hope to put my best work forwards given what I’ve been able to complete with the time remaining. I hope to continue to grow my skillset by tackling personal projects as well as looking into open-source projects to learn how to go into existing code and tweak features, or add new features. I don’t believe I’ve met all five course outcomes yet, but I hope to get there as soon as possible.

| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
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| **Name of Artifact Used** | **Artifact name:** Appointment management app  **Origin:** CS-320 | **Artifact name:** Appointment management app  **Origin:** CS-320 | **Artifact name:** Appointment management app  **Origin:** CS-320 |
| **Status of Initial Enhancement** | Enhancement completed | Enhancement completed | Enhancement planning started |
| **Submission Status** | Submitted to Brightspace alongside journal | Submitted to Brightspace alongside journal | Submitted to Brightspace alongside journal |
| **Status of Final Enhancement** | Enhancement completed | Enhancement completed | Enhancement completed |
| **Uploaded to ePortfolio** | Completed | Completed | Completed |
| **Status of Finalized ePortfolio** | In progress | In progress | In progress |