**Reflection Questions** :-

1) - Was there anything else you would have liked to add to your project if you had more time?

Yes, I'd like to add the quantum algorithms for treatment planning optimization: developing quantum algorithms to optimize the distribution of radiation doses in cancer patients, taking into account the patient's individual anatomy and tumor characteristics, could lead to more effective and personalized treatment plans.

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Quantum machine learning for treatment response prediction: Using quantum machine learning algorithms to predict how individual patients will respond to radiation therapy could improve treatment outcomes and reduce side effects.

2)- What challenges did you face? What may you have done differently?

Inadequate understanding of how radiotherapy works and some equations..

what I'll do, I still need more revisions well understanding of quantum

equations, and read more about other fields such as radiotherapy and etc.

3)- What course concepts does your project connect to and how?

we are so interested in using Quantum Computing in medicine and a lot of space and physics, if we are going to talk about the topic of research, We are very interested in finding a cure for many diseases, specifically cancer. In this research, we tried as much as possible to find ways to improve treatment through radiotherapy.

4)- How does this project relate to the societal or ethical impact of quantum/AI on the future?

Quantum computing and AI have the potential to revolutionize various industries, like healthcare, and here in our project these technologies are developed and used in a responsible and ethical manner to benefit society as a whole.

5)- What did you most enjoy about this project?

I was very interested in diving into the idea of linking radiotherapy with quantum computing and seeing how we could improve the mechanism of action.