Activities: List everything related to this course that you accomplished this week. Look over the goals that you have set. State what you achieved.

This week, I learned:

- 1. White Dwarves
- 2. Neutron Stars
- 3. Black Holes
- 4. Intrinsic Variable Stars
- 5. Star Clusters (Associations, Galactic Clusters, Globular Clusters)
- 6. The Milky Way Galaxy
- 7. Why we came up with dark matter
- 8. Types of Stellar Populations
- 9. Models of galactic formation
- 10. Catalogues of galaxies
- 11. Types of galaxies
- 12. Hubble tuning fork diagram
- 13. Primary, secondary, and tertiary distance indicators
- 14. Hubble's law and the age of the universe
- 15. Different models of the origin of the universe
- 16. Types of active galaxies
- 17. Cosmological models and possible geometries of the universe
- 18. Why the night sky is dark and our flaws with that assumption
- 19. How to make a sky map using python

Challenges: List any challenges that you faced or difficulties that you had to overcome. Not too many this week! There's been a lot of assignments and they've all gone pretty well. One thing I did note is that when working on the Yale Bright Star Catalog, it's important to drop NaN values.

Plans: List what you want to accomplish next week. Be realistic. You are setting your own goals. Have our research topic solidified and start working on our research papers. Also, do "stellar" on the finals.

Comments: Let me know of any concerns, issues, observations, or opinions that you may have. This could also be the place where you reflect on your own study. N/A