Star Life Emulator Dev Timeline

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# 4.11.2016

Work on building database information for a 1 solar mass Star and a system for reading database information into the display. Building the database information should be fairly simple, taking a week at most. Devising a method for reading that information will be much more difficult, as the information itself is not complete and the system will have to synthesize and interpret some of the information from the known data points, effectively performing the function of a best fit function as well as transferring that data to the interface. The HR Diagram graphic will likely be a list plot with data from a variety of star types with the star that is being viewed tracking across it. This must be researched as well to find the points for other stars.

# 4.16.2016

By this point our database for a 1 solar mass star should be complete, and we can work on building up a database for another star size. In addition, our database reading system should be at least complete enough to provide data for the exterior and HR Diagram position of a 1 solar mass star, so we can start to run the whole program with actual values. We will continue work on how to make the program interpret the data to create the graphic for the interior.

# 4.21.2016

The database should have been populated with the data for another star type, and the graphic for the interior should be nearly complete if not complete for a 1 solar mass star. The interface will likely have added to it the functionality to select the starting solar mass from buttons. The graphics for different mass stars will likely be different in the interior due to the creation (or destruction) of certain layers due to varying conditions. The interior graphic will likely need to have altered code for each star mass if this is the case.

# 4.27.2016

Data for different star masses should have been added and the database reading system may need to be altered to handle the different data sets due to the different results to be produced from each star type. All the graphics should be working for their individual star types. It is likely that some layers may need specific functions for themselves to calculate bounds, temperatures, etc. The exterior graphic may be changed to alter its appearance as luminosity increases.

# 5.3.2016

This will be our time to look through everything for any major bugs and/or add some complexity to the interface and the project as a whole (granted there is time and everything else is operational). We will ask Dr. Carini throughout the process for his opinion, and this will be another one of those times. We will ask if there is anything that is faulty and what could be added if necessary.

# 5.8.2016

We will do our final check of all our project materials to make sure they are working as well as adding to the project any last minute things to finalize it. This will likely be about the time when we will meet with Dr. Carini for the last time to make sure everything is to his liking since he hopes to utilize our project in future astronomy classes as a demonstration. We should have a small selection of star masses to choose from that will have an exterior graphic, interior graphic, readouts, and an HR diagram for each.