

CPSC 304 Project Cover Page

Milestone #: __1__

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Group Number: __35__

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

1. Domain

The domain for our project will be related to astronomy, where data of celestial bodies will be tracked. Our database will store various parameters such as mass, diameter, rotation period of a variety of celestial bodies including stars, planets, moons, etc. The application aims to model star systems and planetary systems using real world statistics, implementing a simple visualization for those aforementioned systems. Furthermore, the application could be used by educational institutions as a teaching tool to help future students understand the complexities of star systems and the methods used in modern astronomical research.

2. Database specifications

the database will be able to provide information on the relative relation of celestial bodies within a system. For example, by knowing the central star, a user would be able to obtain a list of related, orbiting bodies. Additionally, the database allows for the indexing of various attributes and parameters of the aforementioned bodies, such as luminosity for stars, rotation period for neutron stars, and Earth Similar Index for planets. If time permits, the database will also be paired with a visual simulation of the bodies in question, providing an easy to use and intuitive graphical front end. Users can expect to add or remove celestial bodies visually via the interactive front end.

3. Description of the application platform

We aim to use Oracle in conjunction with JavaScript, HTML, and Node.js as our backend, and may use front-end frameworks like react if time permits. The final presentational GUI of our project may be 2D or 3D depending on factors during development.

4. ERD

