

CPSC 304 Project Cover Page

Milestone #: 3

Date: 10/13/2024

Group Number: 27

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Kevin Li	32137903	e7o5s	kevxtroyg@gmail.com
Kiana Li	45863628	t0s7f	kianali1208@gmail.com
Junru Chen	74767625	u2q3r	junruchen2021@163.com

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.

(2) Summary

Our project's application is in the astronomy area, especially aiming for the teaching of basic astronomical knowledge about stars and galaxies. Our database models the basic structure of the universe from moon to halo and contains fundamental information about each celestial body.

(3) Timeline

What	Description	People	Date Due
App Service	<p>The layer that communicates with the Oracle Database to query and retrieve data from the database.</p> <p>This layer should include not only vital functionality that communicates with the Oracle DB, but also abstracted functions to help carry out the various SQL statements (such as INSERT, CREATE TABLE, etc.)</p>	<p>Kevin Oracle DB API communication.</p> <p>Junru, Kiana Some abstracted functions that carry out the various SQL commands.</p>	November 3
App Controller	<p>Parses client requests into commands used to communicate with the App Service.</p> <p>App Controller should deny invalid client requests and should implement basic security practices (sanitization). Errors are sent back to the client for feedback.</p>	Kevin	November 6
Server Entry Point	Hosts the website using Express.js and routes client requests to the App Controller.	Kevin	November 8
SQL Concatenation System	System that can concatenate multiple SQL create table statements and insert statements into a single SQL file (for better organization)	Kevin	November 6
Table Creation	A single SQL script to create all the tables and data for the database, this should be standardized	Kiana, Junru	November 23
Table Dropping, Recreation, & Reloading (INSERT, CREATE TABLE)	SQL script should be able to be used to easily drop, reload and recreate tables in database	Kiana	November 23

University of British Columbia, Vancouver

Department of Computer Science

Requirement: Sufficient Data in Database (INSERT)	Database has sufficient data so that queries has non-trivial answers	Kiana	November 24
Queries: DELETE, UPDATE operations	Make sure there is DELETE and UPDATE operations, as well as references to code location	Kiana	November 26
Queries: Selection, Projection, Join	Make sure there is Query Selection, Projection and Join, as well as references to code location	Junru	November 26
Queries requirement: JOIN Aggregation with Group By	Make sure there is a aggregation with group by, as well as references to code location	Junru	November 26
Queries requirement: Aggregation with Having	Make sure there is a aggregation with having, as well as references to code location	Junru	November 26
Queries requirement: Nested Aggregation with Group By	Make sure there is nested aggregation with group by, as well as references to code location	Junru	November 26
Queries requirement: Non-trivial Division	Make sure there is query non-trivial division, as well as references to code location	Kevin	November 26
Complex SQL queries	Complex SQL queries as well as descriptions on their use cases & what they do	Junru	November 26
Front-end Data Structure	The data structure(s) used on the front-end to store the tables or data sent from the server.	Kevin	November 16
Front-end GUI	Friendly front-end GUI so users can interact with our database and explore the various celestial bodies present in the Universe. GUI should be responsive and follow basic UX design principles (well-designed affordances, signifiers, and feedback). This includes success and	Kiana, Kevin	November 20

	failure feedback.		
	Can use React.js if familiar.		