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DAT602 Milestone Reviews

## Milestone Three Summary (23/06/2022)

For this milestone, the previous attempt using MySQL and C# were scrapped after an extensive amount of time was spent on it with very little progress. The difficulties and frustrations that led to this decision are also discussed in related sections of the MS3 report. This new implementation, referred to as Galaxias 2.0 is an attempt that utilises a tech stack that I could competently use to complete this assessment. Considering the decision was made about five days before the MS3 submission deadline, certain aspects of the game were made a primary focus, while other aspects were considered secondary and are only discussed in the MS3 report.

The technologies used for Galaxias 2.0

- Visual Studio Code editor
- HTML5
- CSS3
- JavaScript
- Firebase real time data base and related JavaScript modules

The first step was to plan out the primary focuses for Galaxias 2.0, these included:

- Login functionality
- Multiplayer functionality
- Real time database storage of:
    - High-score data
    - Current players data
    - Current stars data
- Browser based access
- Basic game logic

Once the primary focuses were accomplished, the game could be scaled to a multi game implementation with just some basic additions to the database and user interface. Most of these additions are discussed in the MS3 report.

First, I set up the firebase real time database design, configuration,  and rules. There was lots of documentation provided by Firebase to make this a relatively simple process. Then I coded the game logic around interactions with the database design. Once a single game instance

with database connectivity was established with fundamental logic, some bugs were found and fixed. This took a bulk of the five days to complete. The user interface was created early on and used to test each bit of logic and bugs along the way.

I was planning on modifying the database to accept multiple game instances today, but decided to focus on finishing the MS3 report to detail Galaxias 2.0, as well as finishing this review.

I am happy with my final submission, and proud of what I completed in my 'mad dash' to finish. I will keep developing it, maybe figure out how to transition it into a blockchain project. I understand I will lose marks for not completing the assessment as prescribed by the class outline. But I feel confident that my work over this semester is more than enough to give me a passing grade. I have implemented a basic functional version of Galaxias utilising a MySQL database and meeting the requirements prescribed by the class outline, as well as implementing a basic functional version of Galaxias utilising a NoSQL database and meeting a select number of the requirements prescribed by the class outline.