5-2 Milestone Three: Enhancement Three: Databases

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Abstract

According to the Milestone Three Rubric for CS 499 and the enhancement that I outlined in Milestone One selection, I will use this document to show my ability in data structures and algorithms and attempt to portray my skills in problem solving and describe ideas and technical solutions.

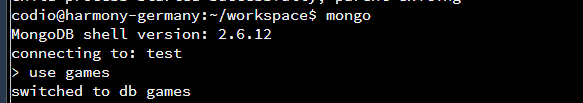
Artifact Description

I have chosen to update the functionality of the Game Review website that I wrote in IT270. I have improved the look and feel of the site as well as included a way for a user to submit a review through the web interface from scratch.

The enhancements that I have included will allow a user to add a review through the web portal and pull a list of reviews from a mongoDB database. For this Databases Enhancement, I have added the database that the end program will run off. The database style chosen is document oriented system called MongoDB. Contrary to the standard relational database document-oriented systems focuses less on tables and defined data structures and more on storing related data together. The system allows a record to be created without first defining the structure of the database. This has several benefits to query speed and allows for a faster setup.

You can see in the creation of the data structure for this project, there was very little time spent on defining the schema. Creating out first record of a review came in only 3 commands.

1. Create the database by using it in mongo



1. Set up the collection using the built in “createCollection” function



1. I can then create my data structure by simply inserting a document into the schema.



This simplicity of setup has its advantages over the traditional MySQL style relational database system. Allowing new fields to be created on the fly by just adding them to an insert can be a great advantage over traditional SQL column additions. In some ways data queries can run faster on a MongoDB database because more data can be held in one document. Depending on how the database is set up however, queries could be slower because Join-like aggregations have to check files for whether a field actually exists.