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CS166 Project: Cruise Database Management

Introduction

The purpose of this project is to construct a cruise database management system, which allows users to track information for different cruise companies, the ships they own, the maintenance of those ships, the captain and crew and the trips that the captains make, as well as information about the customers that use the company services.

Group Contribution

Surya Kumaraguru:

- ER Diagram
- Functions 1-3
- Debugging
- Written Report, Comments

Khuaja Shams

- Relational Schema Design
- Functions 4-7
- Debugging
- ReadMe, Comments

Source Code <https://github.com/KhuajaShams/CS166>

Challenges

- Main issue accessing database, specifically the following error (was not able to receive any guidance regarding this) *code still compiles without issue

```
"C:\Program Files\Java\jdk1.8.0_251\bin\java.exe" ...  
Connected to the target VM, address: '127.0.0.1:51079', transport: 'socket'  
Usage: java [-classpath <classpath>] com.company.DBproject <dbname> <port> <user>  
Disconnected from the target VM, address: '127.0.0.1:51079', transport: 'socket'  
  
Process finished with exit code 0|
```

- Various bugs we had to fix
- Time constraints in completing implementation of java file
 - Would've been nice to have the project assigned earlier in the quarter
- Difficulty setting up GUI

Assumptions

- Assumptions for ER Diagram as follows: “Ship” contains “Crew,” “Captain,” and “Maintenance Staff.” “Cruise Company” owns/has “Cruise” and sails on a ship. “Cruise” sells “Tickets,” which gives “Customers” a reservation (relationship). “Maintenance Request” is an entity made by “Captain” and fulfilled by “Maintenance staff.” “Ship” travels to “Destination” with “Departure City” as attribute
- Assumptions in Relational Schema: There are no constraints on which ship gets which technician, there's no way to make sure crew members don't work on any overlapping cruise schedules, as well as overlapping for a ship and captain assignment, and none to make sure customers don't book two cruises with overlapping schedules either.