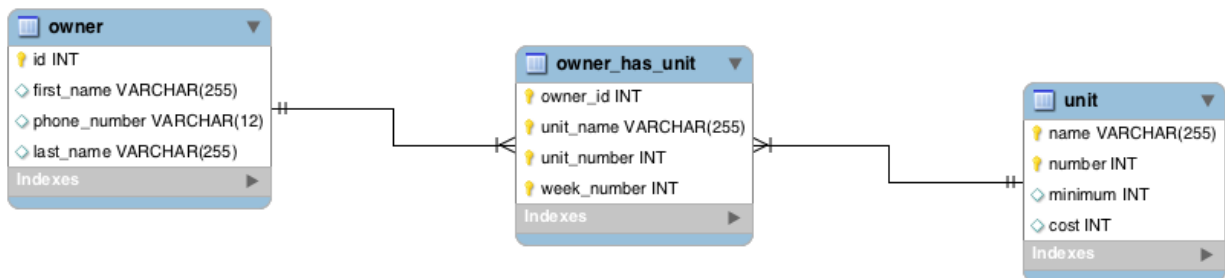


Lab 4

Josh Ault
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Schema

Our schema for this lab is represented by the following ER diagram and sql script.



```
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS,
FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='TRADITIONAL,ALLOW_INVALID_DATES';
```

```
DROP SCHEMA IF EXISTS lab4 ;
CREATE SCHEMA IF NOT EXISTS lab4 DEFAULT CHARACTER SET latin1 ;
USE lab4 ;
```

```
-- -----
-- Table lab4.owner
-- -----
```

```
DROP TABLE IF EXISTS lab4.owner ;
```

```
CREATE TABLE IF NOT EXISTS lab4.owner (
  id INT NOT NULL AUTO_INCREMENT,
  first_name VARCHAR(255) NULL,
  phone_number VARCHAR(12) NULL,
  last_name VARCHAR(255) NULL,
  PRIMARY KEY (id))
ENGINE = InnoDB;
```

```
-- -----  
-- Table lab4.unit  
-- -----
```

```
DROP TABLE IF EXISTS lab4.unit ;
```

```
CREATE TABLE IF NOT EXISTS lab4.unit (  
  name VARCHAR(255) NOT NULL,  
  number INT NOT NULL,  
  minimum INT NULL,  
  cost INT NULL,  
  PRIMARY KEY (name, number))  
ENGINE = InnoDB;
```

```
-- -----  
-- Table lab4.owner_has_unit  
-- -----
```

```
DROP TABLE IF EXISTS lab4.owner_has_unit ;
```

```
CREATE TABLE IF NOT EXISTS lab4.owner_has_unit (  
  owner_id INT NOT NULL,  
  unit_name VARCHAR(255) NOT NULL,  
  unit_number INT NOT NULL,  
  week_number INT NOT NULL,  
  PRIMARY KEY (owner_id, unit_name, unit_number, week_number),  
  INDEX fk_owner_has_unit_unit1_idx (unit_name ASC, unit_number ASC),  
  INDEX fk_owner_has_unit_owner_idx (owner_id ASC),  
  CONSTRAINT fk_owner_has_unit_owner  
    FOREIGN KEY (owner_id)  
    REFERENCES lab4.owner (id)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION,  
  CONSTRAINT fk_owner_has_unit_unit1  
    FOREIGN KEY (unit_name , unit_number)  
    REFERENCES lab4.unit (name , number)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

```
-- -----  
-- Load data from text files  
-- -----
```

Load Data local Infile 'owner_data.txt' into table lab4.owner fields terminated by '\t' optionally enclosed by '"' lines terminated by '\n' ignore 1 lines ;
Load Data local Infile 'unit_data.txt' into table lab4.unit fields terminated by '\t' optionally enclosed by '"' lines terminated by '\n' ignore 1 lines ;
Load Data local Infile 'owner_has_unit_data.txt' into table lab4.owner_has_unit fields terminated by '\t' optionally enclosed by '"' lines terminated by '\n' ignore 1 lines ;

Java Source Code

The source code is part of the directory that this report is in.

Database Data

Copies of the text files used to initialize the database can be found in the src/main/resources directory. There are 3 text files: owner_data.txt, unit_data.txt, and owner_has_unit_data.txt.

Note:

You do not need to import this data into your database because the create_schema script imports this data for you. Simply run the create_schema.sql file in the src/main/resources directory.

How to run

Run the packaged jar “dblab4.jar” from the command line with `java -jar dblab4-standalone.jar -o src/main/resources/owner_data.txt -n src/main/resources/unit_data.txt -h src/main/resources/owner_has_unit_data.txt`

There is a bug with the input where you sometimes need to hit ‘Enter’ multiple times to make the next prompt appear.

Sample Outputs

```

8 - Show ownerships for specified week.
2
last name | first name | phone number
Anderson | Sara | 885-464-3318
Ault | Josh | 911-324-3344
Brown | Katie | 918-264-4483
Clark | Quentin | 525-252-6743
Davis | Sean | 948-776-4443
Garcia | Sally | 987-654-3210
Harris | David | 765-223-4334
Harris | Gerardo | 843-358-1991
Jackson | Mason | 445-334-2351
Johnson | Jack | 817-472-0573
Jones | Alison | 833-742-7743

```

3

```

8 - Show ownerships for specified week.
3
Unit name: Evergreen
Unit number: 203
Weeks owned: 3
last name | first name
Anderson | Sara
Williams | George

```

4

```

8 - Show ownerships for specified week.
4
Unit name: Evergreen
Unit number: 203
last name | first name | share owed
Anderson | Sara | 62500.0
Williams | George | 62500.0

```

5

```

8 - Show ownerships for specified week.
5
Unit name: Evergreen
last name | first name | weeks owned
Anderson | Sara | 7
Ault | Josh | 1
Martinez | Mark | 1
Volkhart | Marius | 1
Williams | George | 7

```

6

```

8 - Show ownerships for specified week.
6
last name: Volkhart
first name: Marius
unit name | unit number | weeks owned
Evergreen | 205 | 12

```

7

```
8 - Show ownerships for specified week.  
7  
unit name: Evergreen  
unit number: 203  
week | last name | first name  
37 | Anderson | Sara  
38 | Anderson | Sara  
39 | Anderson | Sara  
40 | Anderson | Sara  
41 | Anderson | Sara  
42 | Anderson | Sara  
43 | Anderson | Sara  
44 | Williams | George  
45 | Williams | George  
46 | Williams | George  
47 | Williams | George  
48 | Williams | George  
49 | Williams | George  
50 | Williams | George
```

8

```
8 - Show ownerships for specified week.  
8  
week number: 23  
unit name | unit number | last name | first name  
Marble Canyon | 122 | Garcia | Sally  
Shorewood | 724 | Jones | Alison  
Sunset Drive | 183 | Thomas | Steve  
Sunset Drive | 185 | Smith | John
```

Time Log

Person	Time
Josh Ault	5 hours
Tyler Terp	6 Hours
Marius Volkhart	14 hours

Suggestions/Comments

Josh - None

Marius - None

Tyler - None