Abstract:

My project consists of a main PersonInfo class that contains all of the getter and setter methods for the instance variables. I have also created a Tester class. The Tester class asks the user if they are a new customer or not, and if they are a new customer it asks them basic profile questions and books their appointment. If they are not a new customer, it asks the user if they would like to book a new appointment, or view/modify/delete an existing appointment. Depending on what the user wants to do, that class will be able to call different methods which are connected to my database, salondb, in order to create, retrieve, update, and delete people or appointments.

Introduction:

The motivation for this project is to create a program that is able to simulate an online booking system for a salon. The program will be able to take user input and depending on what the user enters, it will be able to either create, retrieve, update, or delete customers and appointments and save the changes to the corresponding "person" or "appointment" table located in the database "salondb".

Detailed System Description:

When the program is first run, it asks the user if they are a new customer. If the user enters that they are a new customer, it then prompts the user to enter their name, email, and date, time, and extra info about the appointment they would like to book. If the user enters they they are a returning customer, the program asks them if they would like to view any upcoming appointments, or if they would like to schedule a new appointment. The user will be able to retrieve, update, or delete any existing appointments they may have. The person table

information and the appointment table information are connected by the customer's email

address. When the user creates their appointment or edits their account, the Tester class will call

the corresponding method that saves everything to the "salondb" database.

PersonInfo
-name: String -date: Date -extraInfo: String -email: String
+getName(): String +setName(name: String): void +getDate(): Date +setDate(date: Date): void +getExtraInfo(): String +setExtraInfo(extraInfo: String): void +getEmail(): String +setEmail(email: String): void

Tester
+main(args[]: String): void

<<object table>> person
name: varchar(50) email: varchar(50)

<<object table>> appointment
email: varchar(50) date: date extraInfo: varchar(50)

InsertPerson
+insertIntoPerson(name: String, email: String): void

DeletePerson
+deletePersonInfo(name: String, email: String): void

UpdatePerson
+updatePersonInfo(name: String, email: String): void

SelectPerson
+selectPersonInfo(name: String, email: String): void

InsertAppointment
+insertAppointment(email: String, date: Date, extraInfo: String): void

DeleteAppointment
+deleteAppointment(email: String, date: Date, extraInfo: String): void

UpdateAppointment
+updateAppointment(email: String, date: Date, extraInfo: String): void

SelectAppointment
+selectAppointment(email: String, date: Date, extraInfo: String): void

Requirements:

The requirements of this program are for it to correctly take in input from the user about what they would like to do (schedule an appointment, delete an appointment, update appointment, retrieve an appointment) and have the program ask the user for the right information. Also, it is important that the customer's information is stored in the database and can be accessed in the future. So far, I have been able to download mysql onto my computer and have begun learning how to use the different commands. I have been able to create basically the whole Tester class and PersonInfo class. The part that was the most time-consuming and required a lot of trial and error was getting the Date class to work and create objects with the date and time that the user entered. I have also got all of the insert, delete, and update methods working creating/deleting/updating people and appointments, but I have not yet connected it to create people from the user input. That is the main remaining part that I need to implement to get my program working as planned.

Literature Survey:

There are many salons that have online websites where the customer can enter their information and have their appointment saved in some database that connects to the salon. Obviously, my program will not look and act as well as these sites do since mine is just based off user input from a Scanner. However, my program will do essentially the same thing that these other sites do, it just won't look as professional.

User Manual:

The system should be used by running the Tester class. The tester class then prompts the user to enter different answers depending on what it is that they want to do. In each prompt if the

input is not a basic string or number, it clearly states the format that the text should be entered in.

The program will print out the corresponding information based on what the customer enters.

Conclusion:

The main goal of this program is to simulate an online booking system for a salon. It is crucial that the Tester class is able to call the insert, update, delete, and select methods which talk to the database, salondb, which stores the information in two corresponding tables, person and appointment. Appointments and people can be created, retrieved, updated, and deleted as the customer enters their information. At the end, all of this information for their profile and corresponding appointment will be printed out for them to see.

References/Bibliography:

"Java Tutorial." *Java Tutorial - An Introduction to Java Database Programming (JDBC) by Examples*,

www.ntu.edu.sg/home/ehchua/programming/java/JDBC_Basic.html.