Kayla Mesmain

Milestone

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Christmas Santa

Abstract

Christmas Santa is a project that preforms an easier task for Santa to use around the holidays when matching a nice kid to their Christmas wish. As decided in the previous assignment to choose a database project I have chosen to design a program using Java Swing, Windowbuilder, and Postgres that organizes the data by using a Graphical User Interface and stores the data in a database located in a Postgres Server. The user will be able to command and filter through information using buttons and drop-down menus all coded with flexible SQL query's in order to get the specific output they want. User's will also be able to insert and delete data into the database using the GUI as well. This program allows Santa to transfer his information over from a paper to a database system making his job easier, faster, and more efficient.

Introduction

Santa and many other people including myself have a difficult time figuring out Christmas gifts. I've always looked for a faster more efficient way of organizing present ideas to different people all while staying in budget but pen and paper still seems to be the only way. It's my job to find a way to implement the information into a database and to allow users to have a better experience during Christmas. The database is an easier alternative to the paper and pen method. The motivation behind using a database system allows me to have a deeper

understanding how to use the database with java. Within the final paper you will find the database Script and Java code attached with an explanation of why I used certain things within my code. It will also include an ER diagram on how I created the database and the UML diagram.

Detailed System Description

The system is supposed to organize the database information each time a user clicks on a button. Such as it can organize each table for Santa by putting each child's name in alphabetical order. If Santa is in a specific continent he is able to type in the text field or click from a drop-down menu that relates to each continent so that he knows which child is on that list in the area. He can click on a button that will only pertain to a specific class or table within the database such as just knowing the names, the addresses, the elf's, the reindeers and gifts. Santa also needs a detailed order of information of that night of which gift will be delivered at a specific time. There is also a rating for parents or Santa to input a field if their child was on scale to be good or naughty for Christmas. In the UML diagram you will find that the main object is the window Christmas_Miracle that extends a JFrame class. Within the Christmas Miracle there are many methods such as the Christmas_Miracle, the jbInit and the btnLoadTable method. Most of the methods are void with the exception of future ones that are not written yet.

Christmas_Miracle
-Name: String
-contentPane: JPanel
-btnLoadTable: JButton
-table: JTable

-scrollPane:JScrollPane
+main(String[] args)
+jblnit(): void
+do_btnLoadTable_actionPerformed(ActionEvent i): void

Requirements

The specific problems that I have has while creating the system has included the database. Never working with databases before I had to figure out how to create the database in postgres. With using this with the help of creating the ER diagram to organize each table I was able to write each value into columns. Then I have been having an extremely hard time figuring out a way to connect eclipse Java language to communicate with the server for postgres to receive the data and present it on the GUI that I am developing. After many trails and errors, I was able to make it work but there are still singularities that I have to work through. I have found a way to include the buttons for each action I want it to do however I am having a hard time making the buttons action code flexible and able to adapt so that I don't need to have a button for every different possible task that I need to run.

Literature Survey

Other work that was able to address the same issue is located in the postgres website. In which it included ways to use Java with the database. It showed that in the main method for the java language that I able to list the server being used in posgres. This will allow the users to be able to reach the database. When the user clicks onto the buttons it will allow the user to do the

specific action. Also, within eclipse there is a chart of allowing you to insert specific buttons to the database and how you want it to appear.

User Manual

The system should be used a database organizer. It will allow the user to be able to go through specific fields within a table and organize them based on their preferences. There are millions of kids within the world and Santa is unable to know everyone's information automatically. Once a user clicks on the button it will only collect the specific set of column(s) and row(s) from different tables in the database. The user will only be able to view and read the provided information not modify it. However, the user will be able to add new kids and/or people into the database using the program as well as delete users. Each kid/person will have a bunch on information linked to them regarding Christmas including Name, Address, even a Naughty and Nice Scale to determine their status on receiving presents for Christmas.

Conclusion

The goals within this system is that every button will able to work and throws back the user the correct data that is supposed to be given. The goal is that the users and Santa will find that this is an easier alternative to storing data rather than Paper and Pen. It will help organize the data for Christmas for future years to come.

References

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