Shiny app for business

Goal:

Currently, businesses spend valuable time copying, pasting, editing, and sending reoccurring emails spending their time more efficiently. Specifically, Dukes Creek Marina. DCM sends the same emails to their customers with mild tweaks. This process could be done much faster using a shiny app. All the user would have to do is go into the app and change a few inputs and hit the send button.

Not only this, but DCM also does not email it’s previous customers.

The goal of this application is to create an app that automates processes.

Content:

There will need to be multiple tabs. Here is what I am thinking.

* Welcome page
  + Picture of dukes, picture of logo
* Credential page
  + Username and password to gmail
* Enter new customer page
  + There should originally be only one box showing, which is where you enter the customer’s email. If the customer’s email does not match any of the existing emails, then the rest of the boxes appear that are consistent, such as name, address, ect., but first the email needs to be put in to auto populate.
    - It will also check to see if that email is on a “DO NOT RENT TO”
  + This page will have boxes where you can enter a new customer
  + The database will have to be relational and the key ID will be their email
  + The columns that will be manually entered in the database for the customers will be their email, customer type (rental boater, storage, camper, ect.) name, phone number, city, zip, date entered (date entered is very important for our database. This will help us get the most recent dates when we are querying the data.
  + The columns that will be calculated in the code will be the amount of times rented, ever\_multiday (which will tell us if they were ever a multiday rental. The reason for this column is that multiday rentals usually give more money through the week. If they were ever a multiday, then we really want to try and get them to come back.)
  + Rental boats: If a time slot if full, do not give option to put them in time slot
    - Sorting option for time slot and boat number
    - If they cancel it, do not show on calendar
    - Think about **rescheduling**
    - DO NOT RENT: Multiple fields that can be considered “banned” phone number, email
* Rental Tab
  + Calendar view of how many rental boats are in what time slot and what number for each day.
  + Cancelation: this is where employees can go and remove a customer as a cancelation
  + DO NOT RENT: This is where the employees can enter an email and put someone on the do not rent to list.
* Email send
  + This will be a tab where employees can pick a email template and quickly email their customers
  + Could have option to mass email
  + Send tab emails automatically
* New email design tab
  + This is a tab that will allow the marina worker to design a new email to mass produce.
* Subscribed customer
  + In this tab, you can email an entire list of customers promotions, discounts, ect.
  + The customers that are being emailed will have to be in the database and have “yes” under their subscribed column
  + Give promotions over the weekdays to generate more revenue
* Map
  + This will be a map of where all of our customers are located.
  + There will be several filters, one of which will be the type of customer. It may be beneficial to know where the bulk of our customers come from.
* Customer visualization
  + Previous year’s data vs current year’s data
* Service Tickets

Database/ data collection

Plan on a relational database. Need to establish what columns that I will need.

The marina has certain types of customers, which are listed below.

* Renters
* Campers
* Boaters
* Service
* Tab book

Each one of these customer types will have different subscription columns. One can be subscribed for rental boats, but not for campers.

Completed List of Columns:

* Gender
* Email
* Name
* Location
* email, customer type (rental boater, storage, camper, ect.) name, phone number, city, zip, date entered (date entered is very important for our database.

Customer type database

Rental:

* Email Primary key
* Number rented
* Time slot
* Ever\_multiday
* Amount of times rented

A-K