# Design document

## Introduction

This is my design document, within this I will outline the different design features of my program and how I will build it.

This program is a car dealership app that allows users to search for cars, employees and customers within a system and view all of the details on those provided that they login to system as a valid employee.

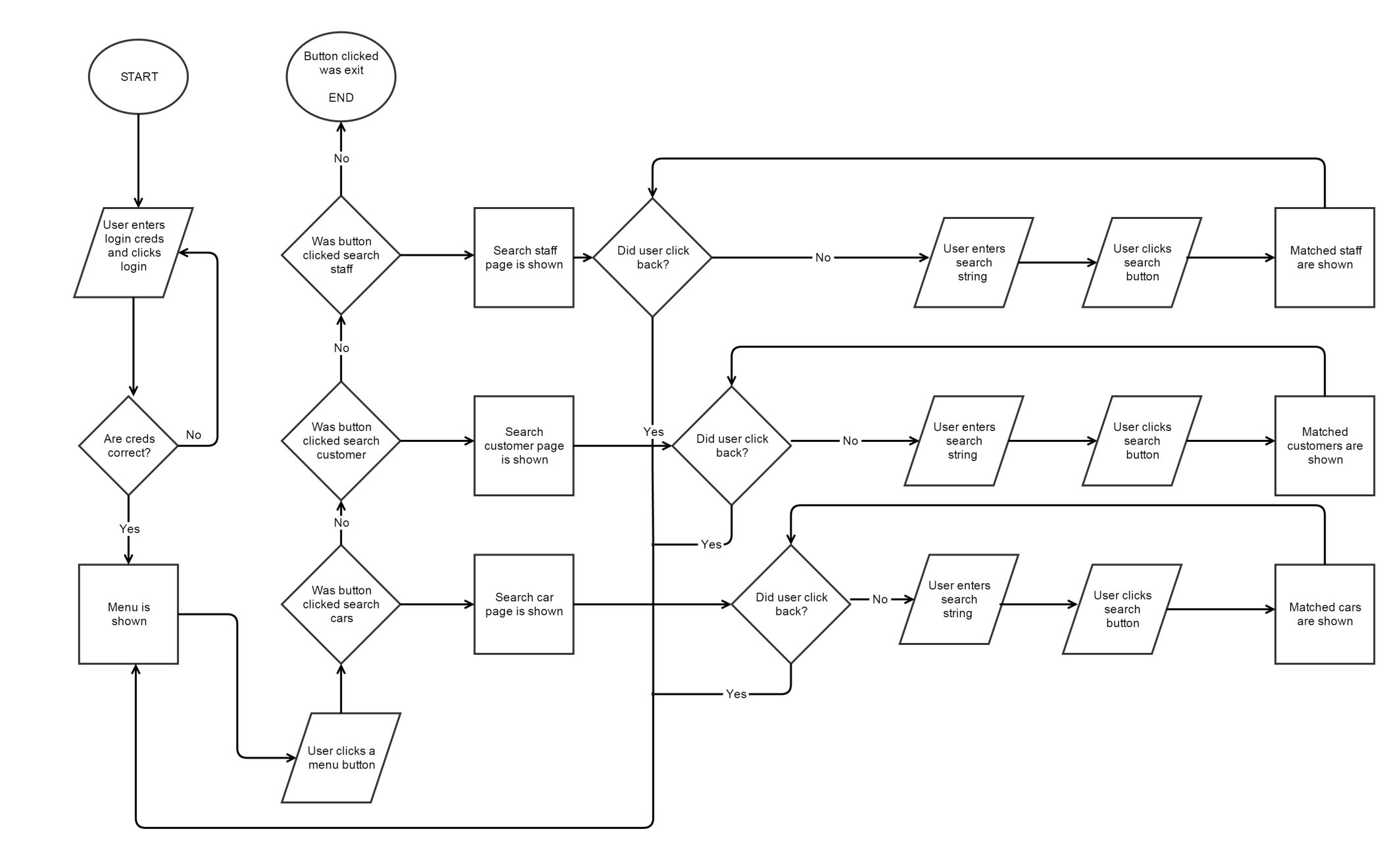
First I will show a flowchart showing an overview of how my program will execute.

Then I will show a class diagram to show how my program links together.

Then I will show a story board showing how my program will look including designs of my GUI screens.

Finally I will give a quick overview of the different inputs and outputs of this program.

## Flowchart



## Class diagram

**Variables / objects**

ArrayList<Employee> employees

ArrayList<Car> cars

ArrayList<Customer> customers

CarDealership

Methods

Void numberGenertor()

Void generate()

numberGenerator

numberChecker extends numberGenerator

inputANumber

Methods

Boolean playAgain()

Methods

Boolean isNumberCorrect(Int enteredNumber)

Void higherOrLower(Int enteredNumber)

Variables / objects

Int generatedNumber

Random random

Variables / objects

None

Variables / objects

Scanner s

Methods

Int getNumber()

## Story boards

Welcome message

Welcome to the random number guessing game.

Would you like to see the help screen?

Y

This is a random number guessing game.

When you start the game a number is generated at random,

You then have an unlimited number of opportunities to guess this number.

If you guess wrong you will be told if you guessed too low or too high.

Please enter a number:

User was asked to enter a number

User choses to see the help screen

Help screen is displayed

v

User is then told if the number is correct and asked if they would like to play again

User is then asked to enter a number again

User is told if this number is “too low” or “too high”

User enters a number

Please enter a number:

50

Too low

Please enter a number:

75

Too high

Please enter a number:

63

Congratulations, you entered correctly. Would you like to play again?

## Input output

In my program I have used different inputs and outputs to allow data to be used and processed.

### Inputs

All of the inputs are managed using the scanner class; this allows you to read user input from the keyboard. For the first input I use the nextLine() method to capture a string of what the user has inputted. This allows the user to choose if they would like to see the help screen or not.

Within my inputANumber class I have then used the nextInt() method to capture the input of an integer, this allows me easily compare these integer to other values.

Finally I use another nextLine() method to allow me to capture the user input for if they would like to play the game again or not

### Output

My program outputs text to the command line, this is done using the System.out.println() method, at multiple points in my program I pass text through to this method and it is outputted to the command line – or IDE console.