

EaseFindr – A newer way to go!

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Introduction:

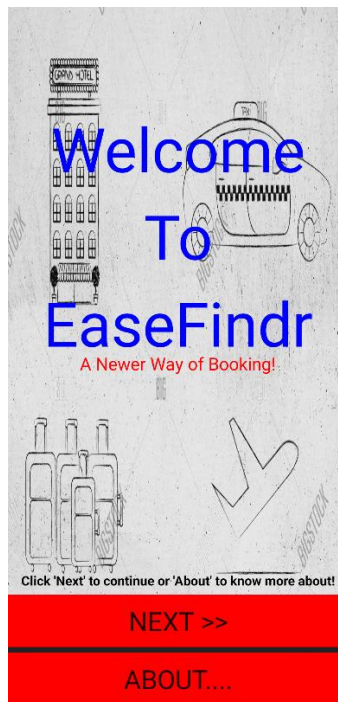
In today's world, where technology is advancing at a high pace, the need for user-friendly and efficient apps has become more crucial than ever before. And the users of today's application want the application (that they use) to be effective in terms of everything will be available at their fingertips. Despite the millions of applications available to us today, many of them fail to provide a good user experience. This bad user experience can be due to a number of reasons such as poor design, unclear instructions etcetera, which cause inconvenience for the users. So, keeping all these points in mind, I have developed an application which helps improve the usability of an application through its UI, proper navigation, and clear instructions. The application is developed for booking taxis, hotel rooms, and flights, and tickets for events. So, everything will be contained within one application and with just a few clicks the user can book anything he would need with multiple options.

Details modules, features, and activity of application:

This application comprises several modules such as hotel booking, flight booking, taxi booking, and event booking.

Basically this app starts from the a "Welcome screen" where we will be getting two options:

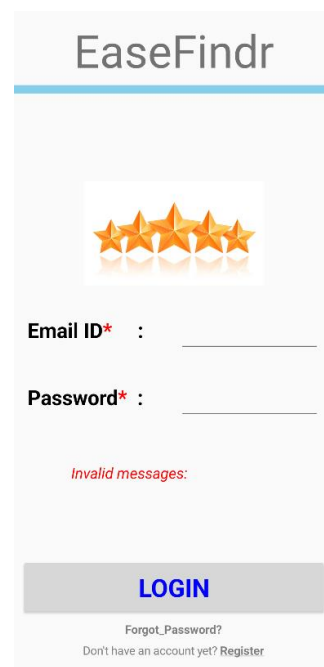
- 1) To continue to login page
- 2) To know more about the application use



Application first requires login with the user credentials, if they have already been a user. Or, if someone is using it for a first time, they can simply register for the application by filling a form containing name, email address and password fields. Once the app validates all the input, it will make the account and store the credentials in the database, or it will report the error, if we didn't put the credentials in the required format. Once user register for the account, he will be taken back to the login page, and will be asked to login with the credentials.

On the login page, user will also be having a feature to forget a password, which he can use to update the password, in case they didn't remember. For that, they must an email (which will be used as a kind of primary key). And again it will scan the database for finding the email, if it finds any same email in the database, it will update the database with the new password. From there, again the user will be taken back to the login page and will be asked to use the same login credential to login into the system.

This is how the login page would look like:



EaseFindr

★★★★★

Email ID* :

Password* :

Invalid messages:

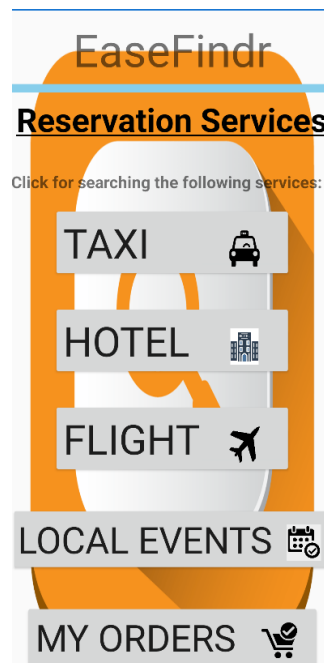
LOGIN

[Forgot_Password?](#)

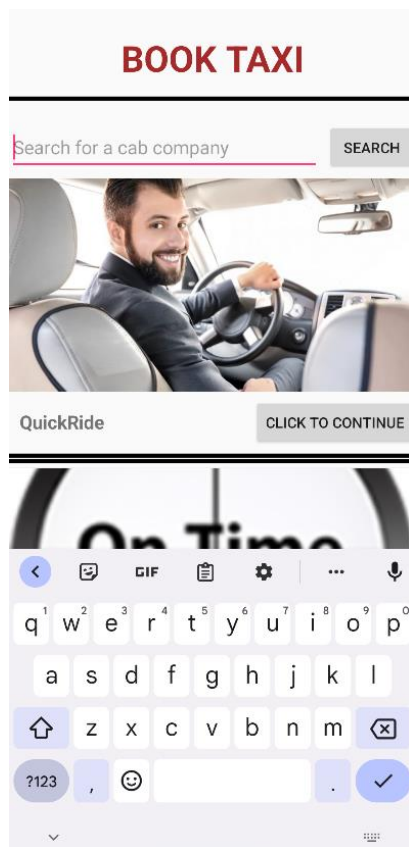
[Don't have an account yet? Register](#)

Now, once, they entered, they will be seeing an interface, where they can select what they want to book like hotel, taxi etc. And they will also have an option to see what they have booked so far using this application with the proper service name (like hotel, taxi, flight) and name of that organization with whom they have booked that service (like Air Canada for flight, Marriott for hotel, etc). And can also delete their booking using the button that will be appearing for each added entry. While going through multiple screens, user will be having proper instructions with proper UI, so that they can navigate efficiently and effectively.

Once they have selected which one of the things they want to book, they can select that by just clicking on the button itself or by clicking on the icon that can be adjacent to each button in the UI to make the better user experience.




After clicking, users will be having an option to book the particular thing from any company by comparing their prices and services and can scroll through them. They will be multiple companies to choose from. However, if the user already know the name of the company with whom he wanted to book the service, they can also search for it using the textField at the top. And the application will take them directly inside of that company's shell. There he will be provided with some descriptions about the company service and their prices. Additionally, user will also be provided with an option to leave a rating for the company to see. And those rating will be saved forever until the user changes it



However, if they don't know the name of company, they can literally scroll through the whole list to find the one. And they can do the same with everything whatever they are booking using the button provided at bottom of the company shell. Once they select the company, they can request the service from them by can go ahead to fill out the form with their personal details.

QuickRide



4.) Whether you need a ride to the airport, a night out on the town, or simply a quick trip across town, our taxi booking company is here to serve you.

5.) At our taxi booking company, we pride ourselves on our exceptional customer service and dedication to getting you where you need to go, when you need to get there.

Regular Price (per mile)	Comfort Price (per mile)	SUV Price (per mile)
\$ 2.5	\$ 4.2	\$ 6.5

How would you rate our service?

1

2

3

4

5

BACK

REQUEST A CAB

On that page, user will be asked to enter their phone number, on which application will again be perform validation, just to prevent user from filling the wrong number. However, there the name and the email address field will be filled already from the database where it storing the user credentials. This same screen will also ask the user to select the date and timing of the bookings, on which again the validation process will be performed. And once all validated on this screen, it will take you to the next page where the user must provide their card details in order to book the service. And it will validate, are all the fields fine with proper input. If yes, it will book the service and add to the database, otherwise, shows the appropriate validation error.

QuickRide

Atul

atulkumar01@algonau.ca

Phone

Select One

4/10/2023

12:00 AM

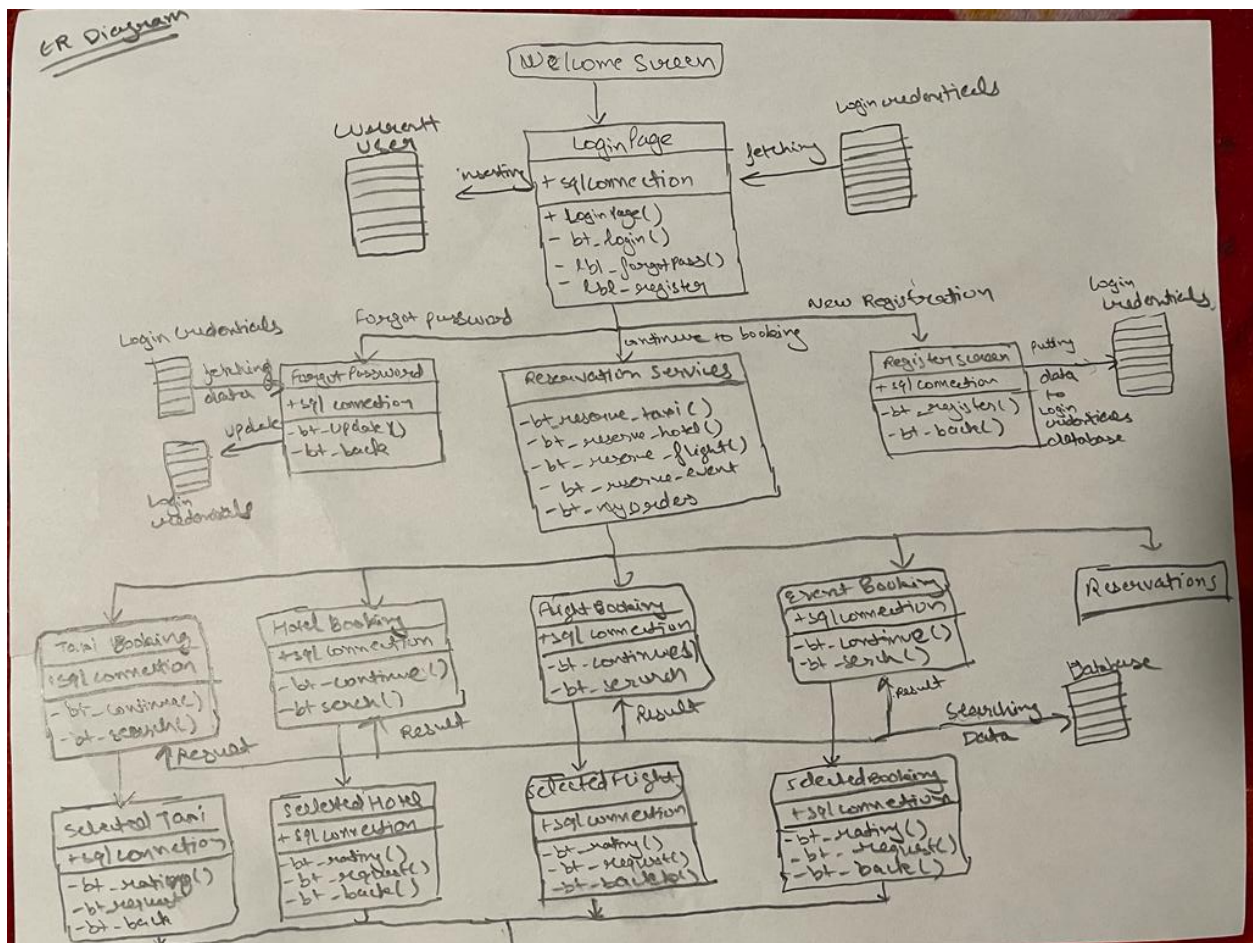
Invalid Message: Please fill all the details

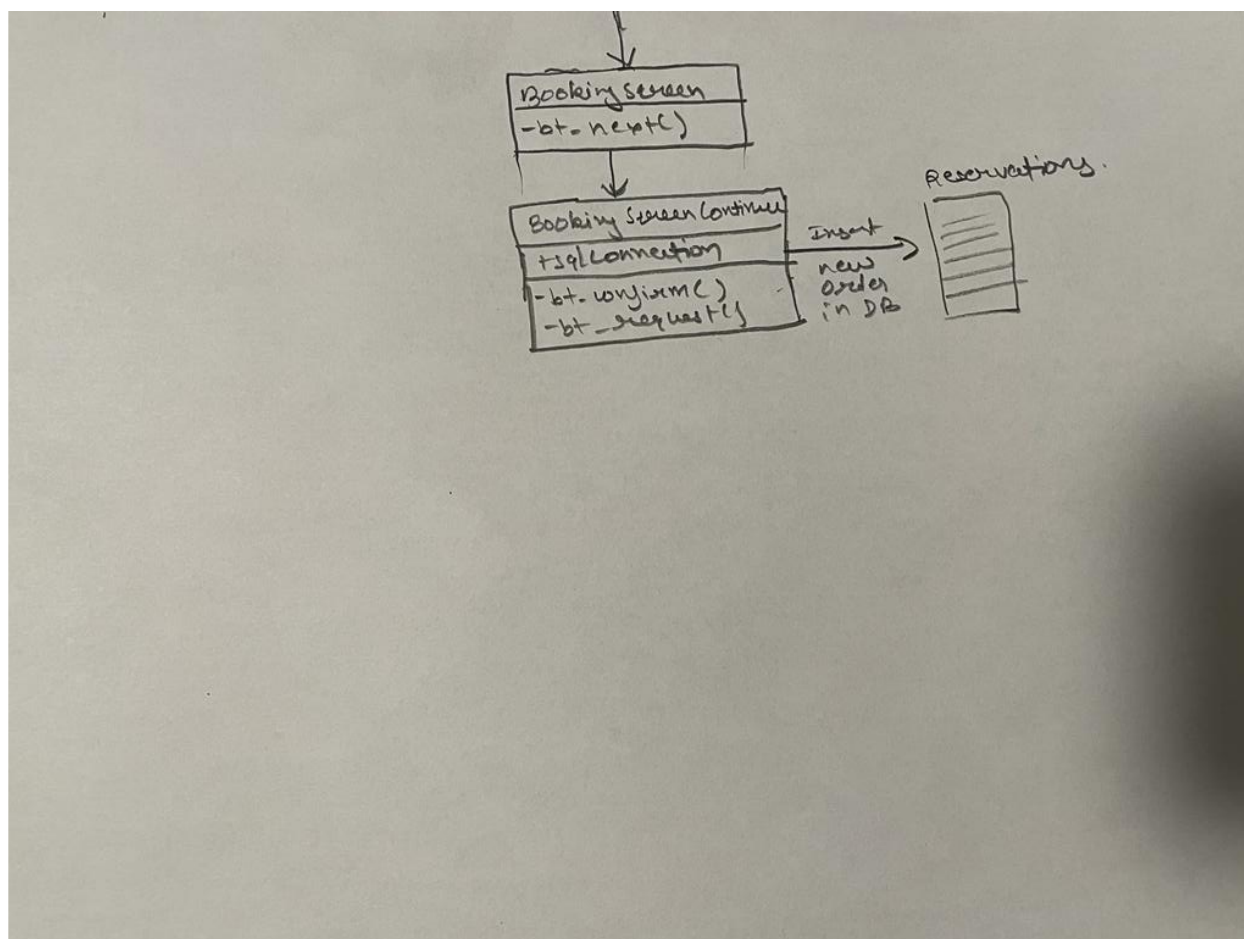
NEXT

Design Documentation:

This application is extensively using the database. It's using the database for the following:

- 1) For keeping all the Login Credentials
- 2) For keeping track of the current user
- 3) For maintaining the information about hotels, taxis, flights, and events. Following are the information that the database stores about all these:
 - a. Name
 - b. Images
 - c. Description of their services
 - d. Prices of their services
 - e. Rating
- 4) For keeping the track of requested services





As we can see, from the above figure, how the entities of our application are working. Starting from the WelcomeScreen, which will be giving an option to continue. Then we will come at the login page, where user will put the credentials and then application will fetch the data from the database, and if it matches, will allow the user to enter the system, otherwise, they have to put the credentials again. Once matched the password, application will also update the CurrentUser table. So, it will firstly delete all the rows from the database, if there is any, and append the row with the username and email id into the database to maintain the track of the current user. This keeping track of the user is necessary for the Booking screen, because it will be fetching the data from this same database and filled the name and email id field into the form by itself to avoid the user experience (which can go bad if the user have to put the same information again and again).

On the same login screen, user can go in three direction:

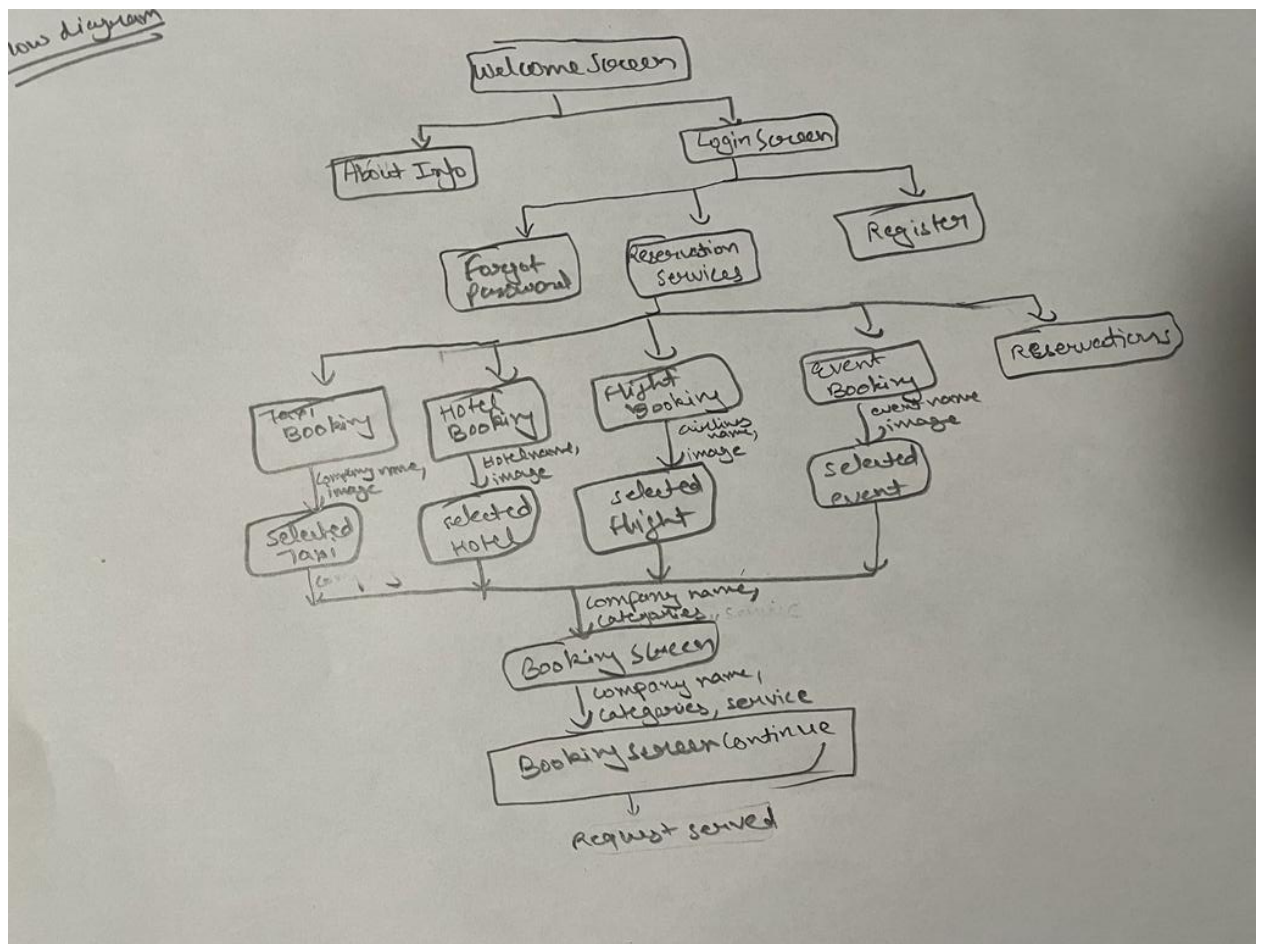
- 1) Register Screen: If the user doesn't have an account in the application, It must need one to enter into the system. So, once user filled the data, application will insert that data into LoginCredentials table.

- 2) Forgot Password Screen: If the user forget password, it still can be changed using the forget password screen. Here, once user entered the information, the application first fetch the data from the database and check is there any same email exists in the database or not. If there will not be, then nothing will happen except just showing the invalidation error message. However, if there is any, it will update the database
- 3) Reservation Services: This is the screen which will be taking the user further in the application. Here the user can select any of the five buttons for the corresponding action:
 - a. Taxi Booking
 - b. Hotel Booking
 - c. Flight Booking
 - d. Event Booking
 - e. Reservation

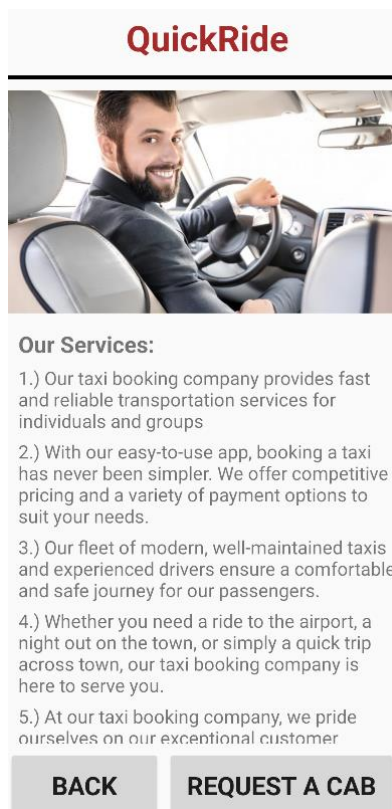
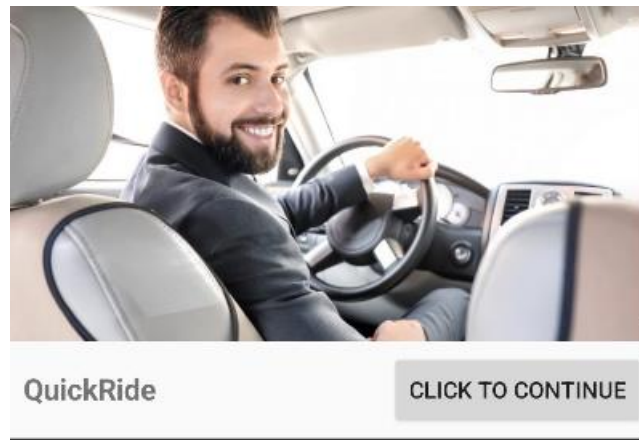
This booking screen will also have an search message where the application again has to look for the same row in the database and return the result accordingly.

Once they selected, they have to continue to the Booking Screen, where they have to put details, as mentioned in the above section. And after that, if everything seems fine, it will append the requested service in the Reservation table for the future reference of the customer, which also user can delete, if he is not longer interested in that same service.

Flow of the Application:



This above is the flow diagram of my application. This application also involves sending the values from one screen to another. As we can see we are passing the company name, and its image to the next screen, so that if the user selects some particular screen, it will then pass the company name and image to get the personalized experience. Here are some screenshots of these screens and how they are passing the data:



As we can see, its sending the same company name and same image to the next screen and also to the rest of the screens while filling the form, for example.

Validation & Test Document:

This application was tested and validated with different kind of inputs. These tests were to make sure everything goes smoothly without the database and variables storing illegal values. And only authenticate the user who have registered. For example, In the

login screen, we can't just put any random email and password and it will allow us. No, that's not possible, so we must register first.



Email ID* : uwhde@hsh.cdc

Password* :

Invalid messages: EmailID or Password didn't have any matching in the database

And also while registering, we can't put any random email format, they must of the following types:

- atul.kumar@algomau.ca
- atulkumar01@algomau.ca

Full Name* : hufhe

Email ID* : dcchdu@.cd

Password* :

Invalid messages: Accepted email format(may contain numbers): abc@hotmail.com or abc.bde@hotmail.com

Same validation goes on the BookingScreen where we can't put random things, just the required format like the following:

Music Festival

Atul

atulkumar01@algonau.ca

abcdefghij

Senior

4/10/2023

9:00 PM

Invalid Message: Invalid Phone Number

NEXT

Likewise, we can't put the past date, because there is no way to serve the order on the past dates, so application also checks for the past date and time and respond appropriately.

Music Festival

Atul

atulkumar01@algonau.ca

1234567890

Senior

4/4/2023

9:00 PM

Invalid Message: Invalid Date/Time selected (order in past time can't be made)

NEXT

And finally we check for the last screen while providing the card numbers, whether they are valid or not. If any of the field like card number, expiry date won't be fine, then it will respond to the user appropriately like the following:

Music Festival

Please fill the card details:

123456

10/24 458

Invalid Message: Value is not valid

CONFIRM

<< BACK

Future Enhancements:

I would like to make a server side of this application in near future, where I could add more services, more companies and even more flexibility for the user like guest mode, incognito mode, etcetera.

Also I will be looking after some tools that will increase the attractiveness of the UI of this application.

Conclusion:

This course provides very good tools to make the application working with different databases and that's what motivated me to use the databases as much as possible for making this application and also motivated me to carry out this project further for making it more sophisticated.