



## **Maintenance Manual**

**Project name:** \_\_\_\_\_ **Karmecca** \_\_\_\_\_

**Team name:** \_\_\_\_\_ **Team U-Can** \_\_\_\_\_

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## **1.0 Introduction**

This customer relationship management (CRM) software will allow Karmecca to streamline their administrative operations. With this CRM, Karmecca will be able to easily manage the applications for their events by providing the ability to add, delete, and edit applications.

## **2.0 Implementation Tools and Technologies**

Programming language: Typescript

Web Service: Mailjet

IDE: MS Visual Studio

Web technologies: HTML, CSS

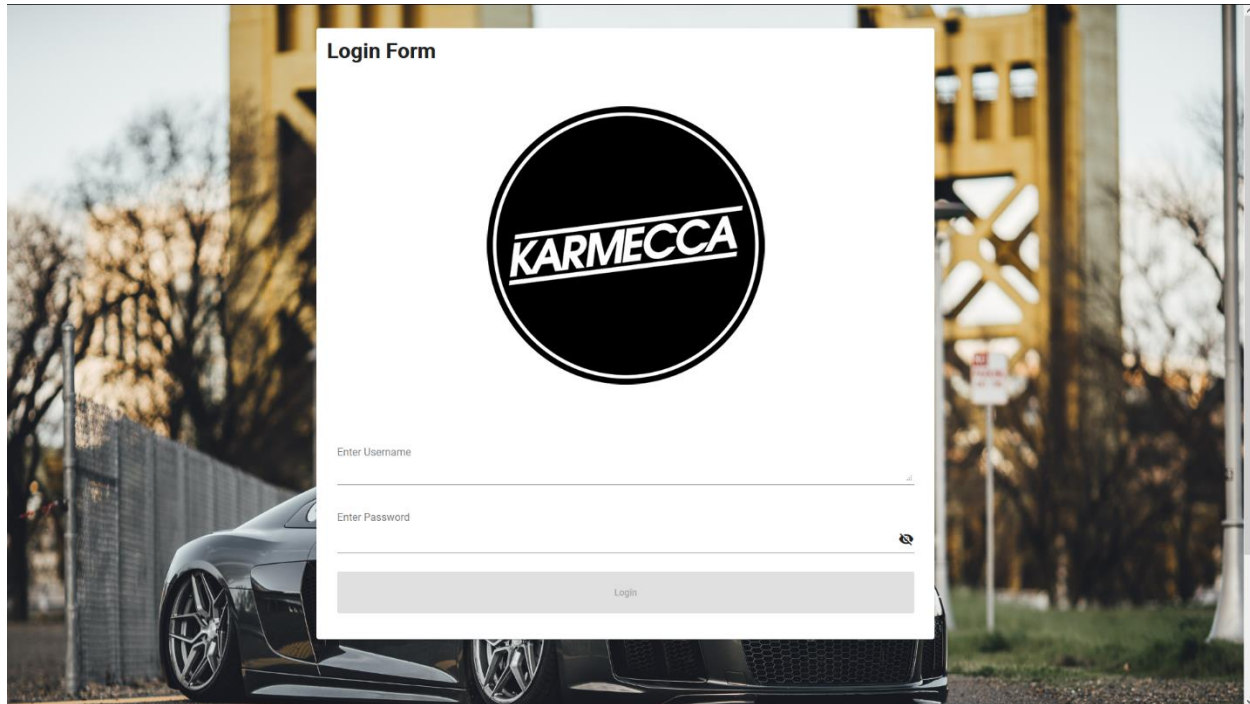
Database: MongoDB

Runtime environment: Node.js

Frameworks: Express.js, AngularJS

### 3.0 Authentication

Authentication is required by the administrators before being able to access the CRM. Valid credentials are expected to be successfully authenticated.



*Figure 1 Login Form*

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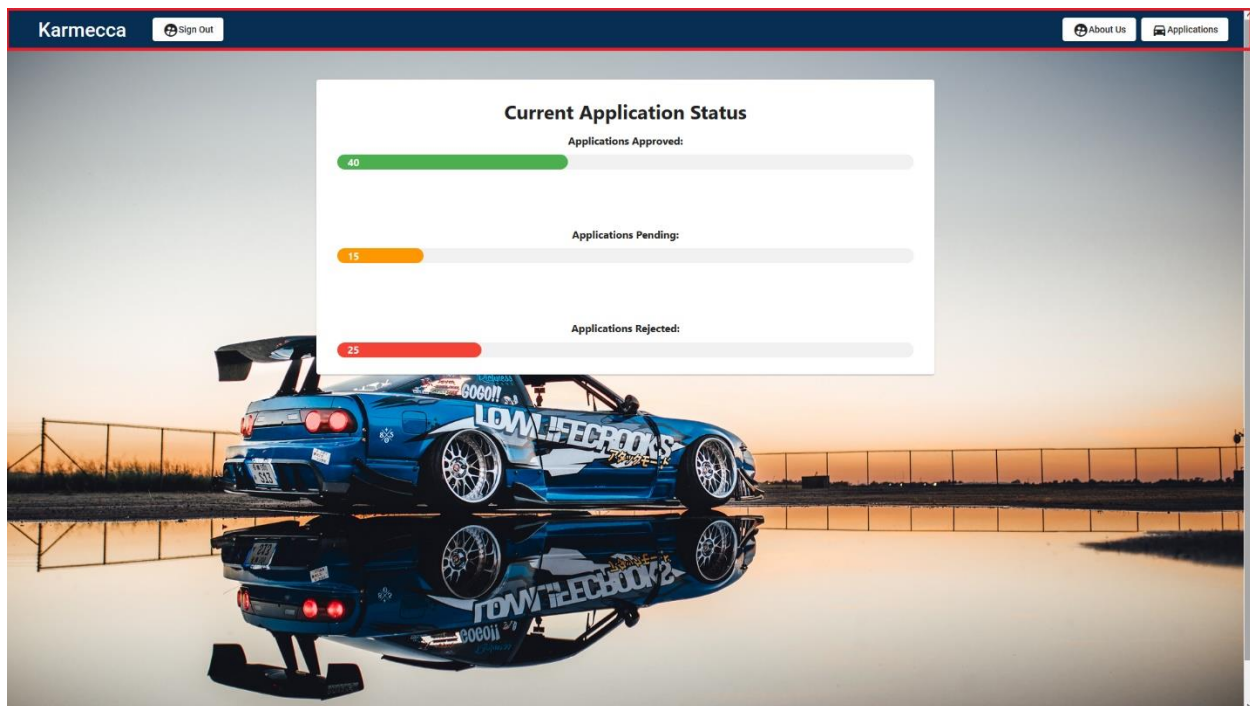
#### Issues:

- If any issues occur during authentication, then check the following files:
  - src -> app -> login -> login.component.html
  - src -> app -> login -> login.component.ts

## 4.0 Customer Relationship Management

### 4.1 Navigation

All navigation for the Customer Relationship Management software can be done through the navigation bar.



*Figure 2 Navigation Bar*

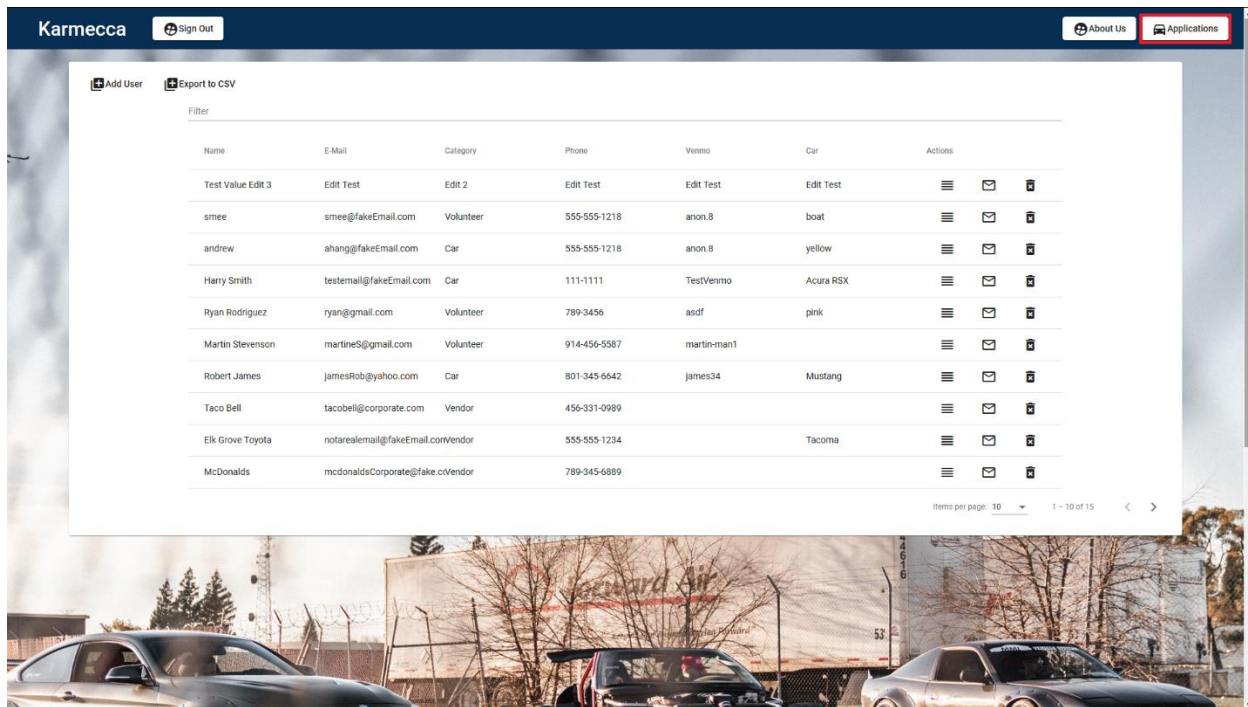
#### Issues:

- If any issues occur when navigating through the application, then check the following files:
  - src -> app -> hopbar -> hopbar.component.html
  - src -> app -> app.module.ts

## 4.2 Application Management

### 4.2.1 Viewing Applications

To view the applications page, click on the “Applications” button on the navigation bar from anywhere within the CRM. After navigating to the applications page, the table will be populated with data.



The screenshot shows the Karmecca web application interface. At the top, there is a dark blue navigation bar with the Karmecca logo, a 'Sign Out' button, and links for 'About Us' and 'Applications' (the latter is highlighted with a red box). Below the navigation bar, there is a white content area with a 'Filter' input field and two buttons: 'Add User' and 'Export to CSV'. The main part of the page is a table with 7 columns: Name, E-Mail, Category, Phone, Verno, Car, and Actions. The table contains 10 rows of data. Each row has three icons in the Actions column: a list icon, an envelope icon, and a trash icon. At the bottom right of the table, there is a pagination control showing 'Items per page: 10' and '1 - 10 of 15'.

Name	E-Mail	Category	Phone	Verno	Car	Actions
Test Value Edit 3	Edit Test	Edit 2	Edit Test	Edit Test	Edit Test	[List] [Email] [Trash]
smee	smee@fakeEmail.com	Volunteer	555-555-1218	anon.8	boat	[List] [Email] [Trash]
andrew	ahang@fakeEmail.com	Car	555-555-1218	anon.8	yellow	[List] [Email] [Trash]
Harry Smith	testemail@fakeEmail.com	Car	111-1111	TestVerno	Acura RSX	[List] [Email] [Trash]
Ryan Rodriguez	ryan@gmail.com	Volunteer	789-3456	asdf	pink	[List] [Email] [Trash]
Martin Stevenson	martineS@gmail.com	Volunteer	914-456-5587	martin-man1		[List] [Email] [Trash]
Robert James	jamesRob@yahoo.com	Car	801-345-6642	james34	Mustang	[List] [Email] [Trash]
Taco Bell	tacobell@corporate.com	Vendor	456-331-0989			[List] [Email] [Trash]
Elk Grove Toyota	notarealemail@fakeEmail.comVendor		555-555-1234		Tacoma	[List] [Email] [Trash]
McDonalds	mcdonaldsCorporate@fake.cvVendor		789-345-6889			[List] [Email] [Trash]

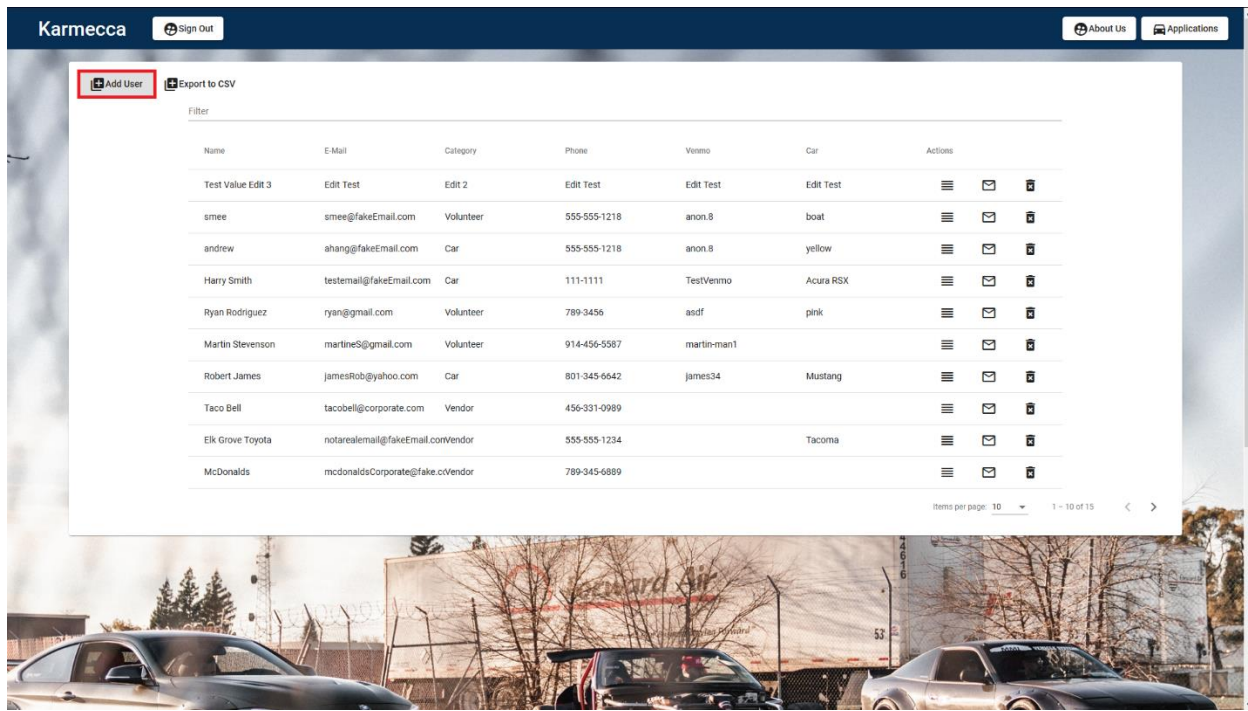
*Figure 3 Applications Page*

#### Issues:

- If any issues occur when viewing the applications page or during data population, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts

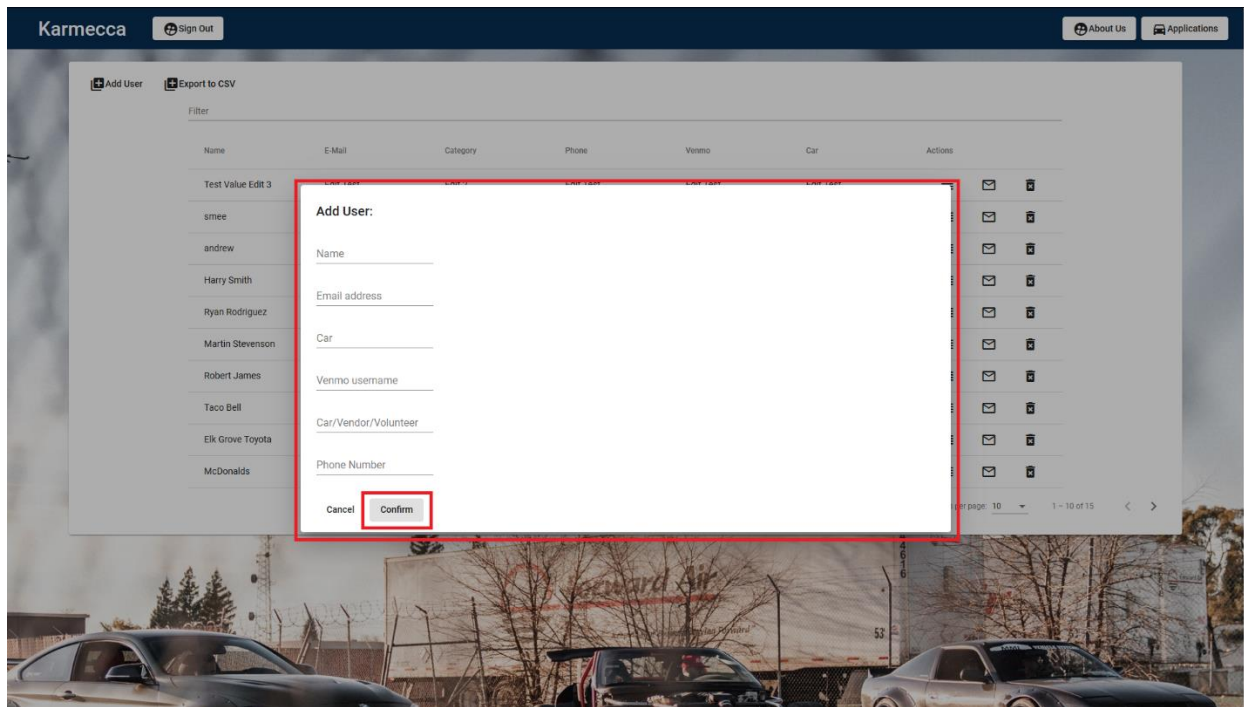
## 4.2.2 Adding an Application

To add an application, click on the “Add User” button to bring up the “Add User” form.



*Figure 4 Add User Button*

After filling out the form, click on the “Confirm” button.



*Figure 5 Add User Form and Confirm Button*

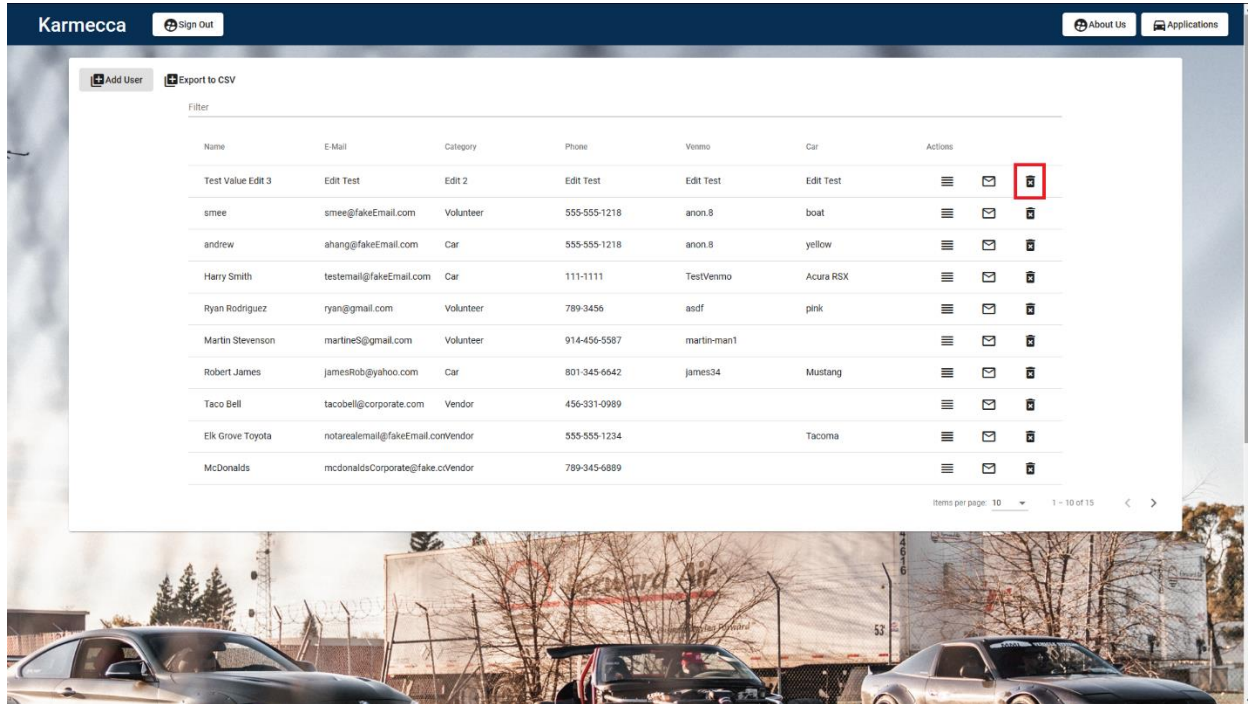
### Issues:

- If any issues occur when adding an application, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts
  - src -> app -> add-form -> add-form.component.html
  - src -> app -> add-form -> add-form.component.ts
  - Backend -> routes -> api.js
  - Backend -> routes -> authenticate.js



### 4.2.3 Deleting an Application

To delete an application, click on the “Delete” button, which is represented by a trash can icon, and then refresh the page.



*Figure 6 Delete Button*

#### Issues:

- If any issues occur when deleting an application, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts
  - Backend -> routes -> api.js
  - Backend -> routes -> authenticate.js

## 4.2.4 Viewing More Application Details

To view more details for an application, click on the “View More Details” button, which is represented by an icon with 4 lines.

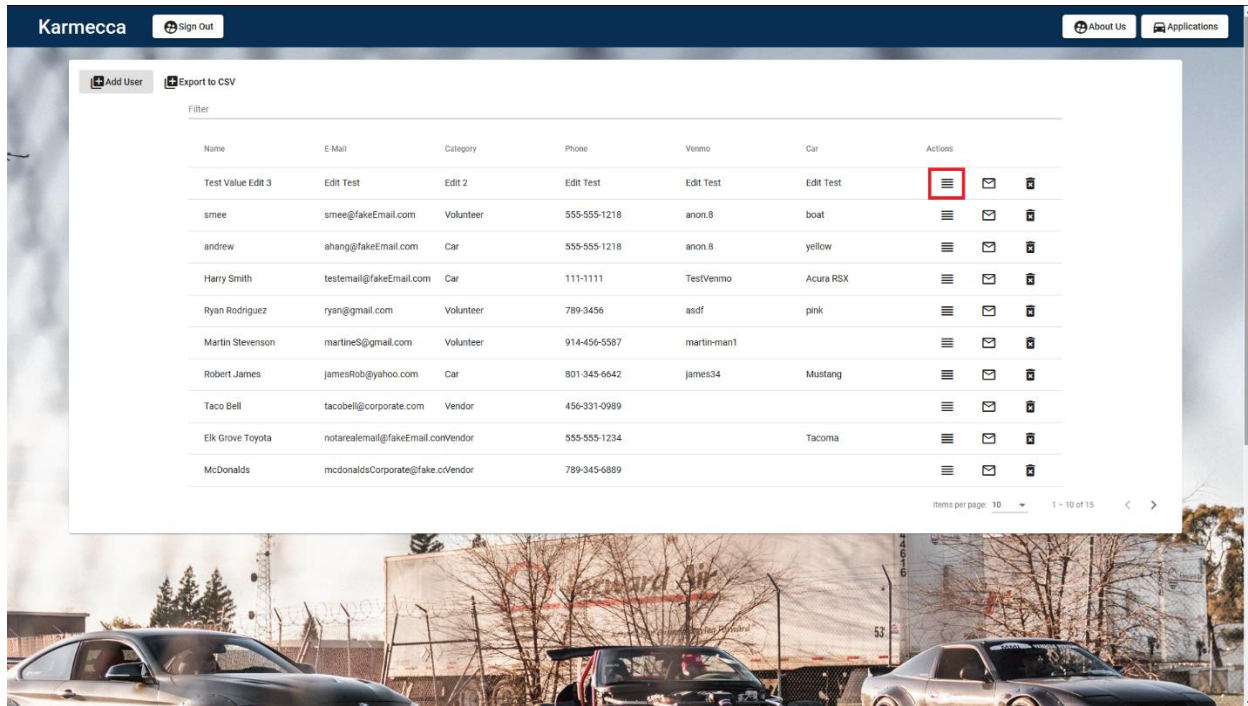


Figure 7 View More Details Button

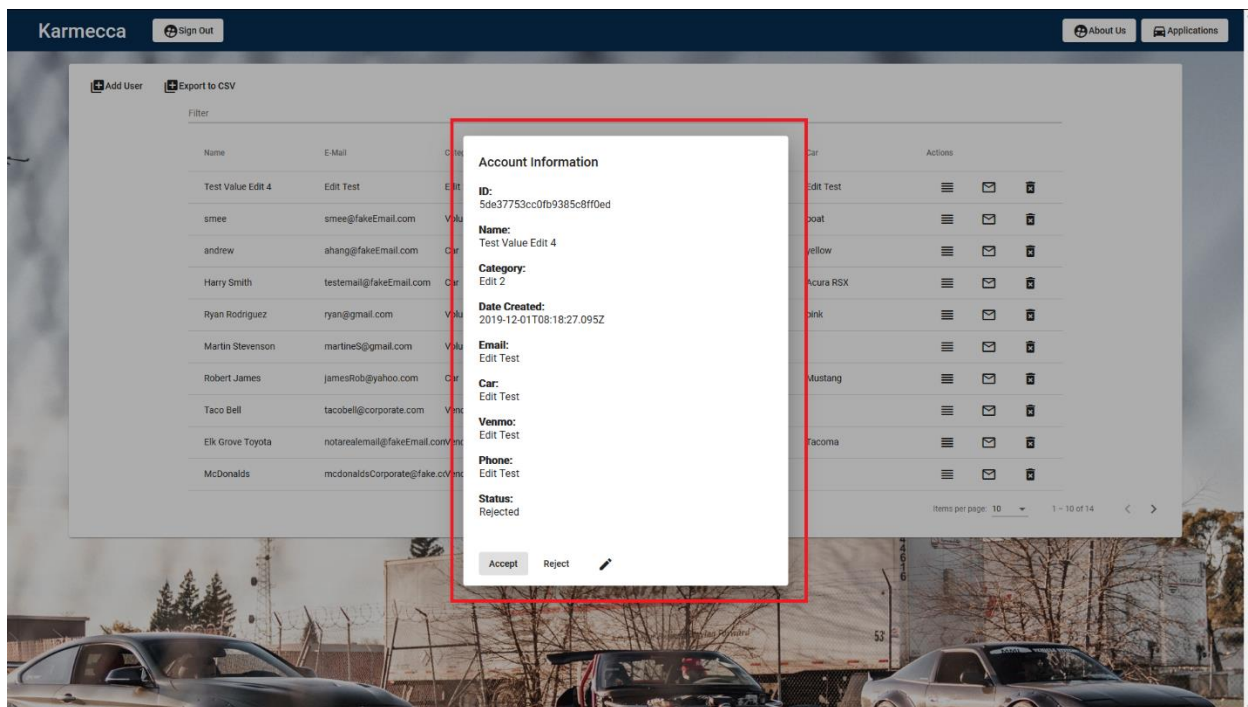


Figure 8 View More Details Pop Up Window

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**Issues:**

- If any issues occur when viewing more details for an application, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts
  - Backend -> routes -> api.js
  - Backend -> routes -> authenticate.js
  - src -> app -> modal -> modal.component.html
  - src -> app -> modal -> modal.component.ts

## 4.2.5 Editing an Application

To edit an application, click on the “View More Details” button to bring up the pop up window.

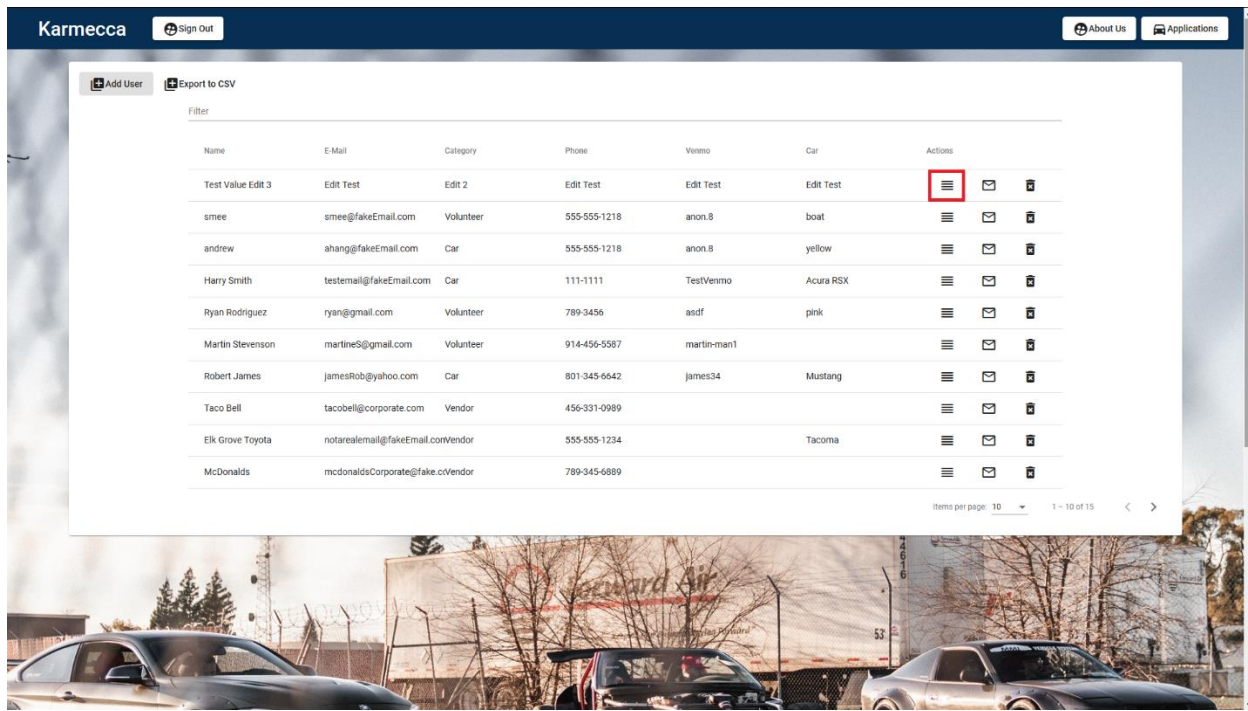


Figure 9 View More Details Button

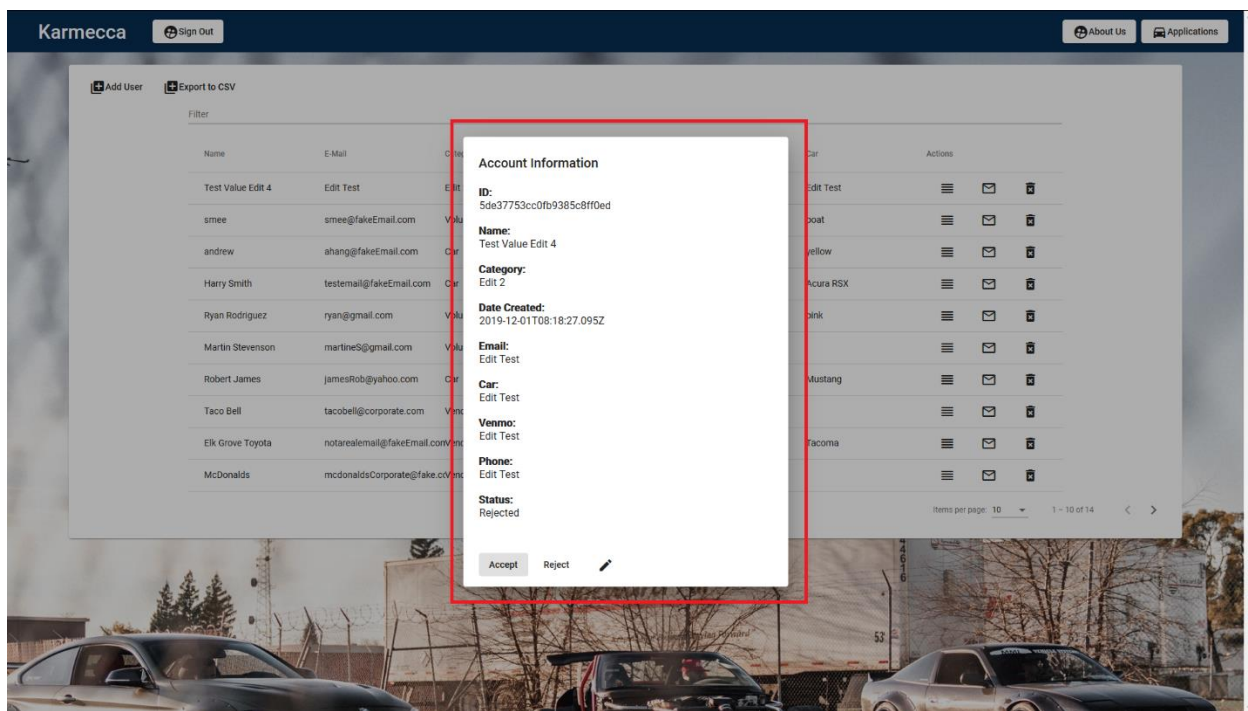


Figure 10 View More Details Pop Up Window



Clicking on the “Edit” button within the pop up window will allow to the administrator to edit the application.

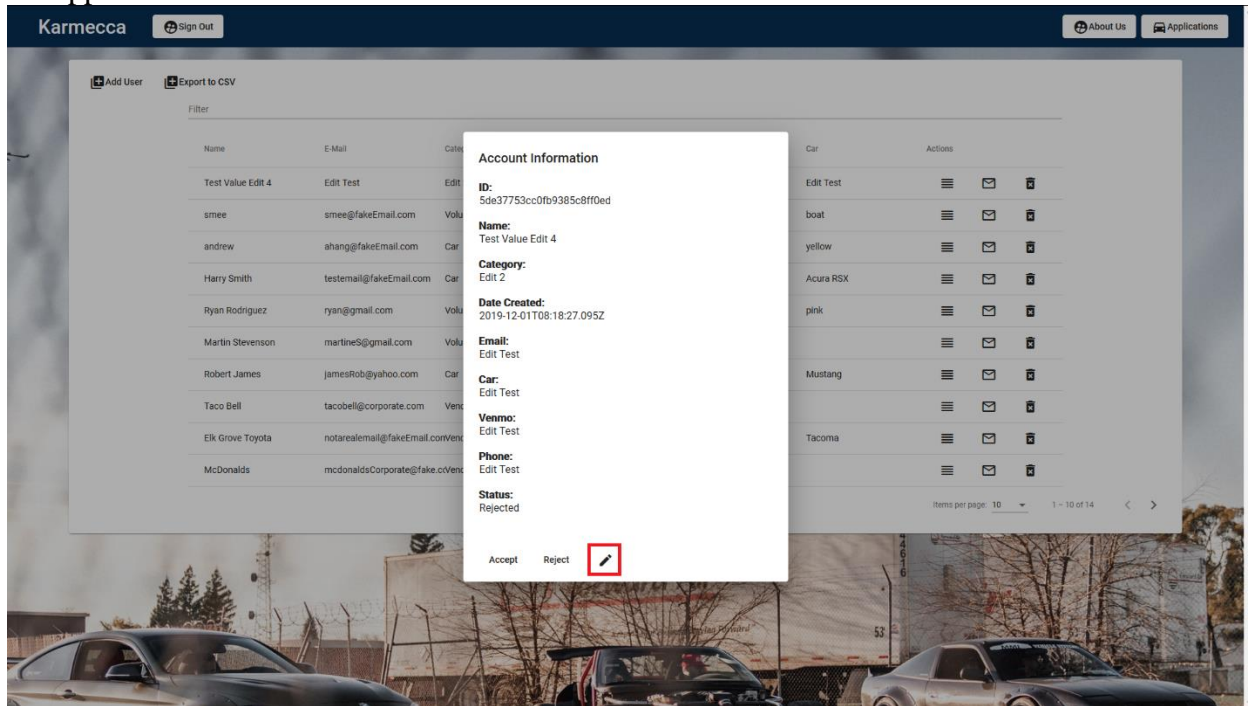


Figure 11 Edit Button

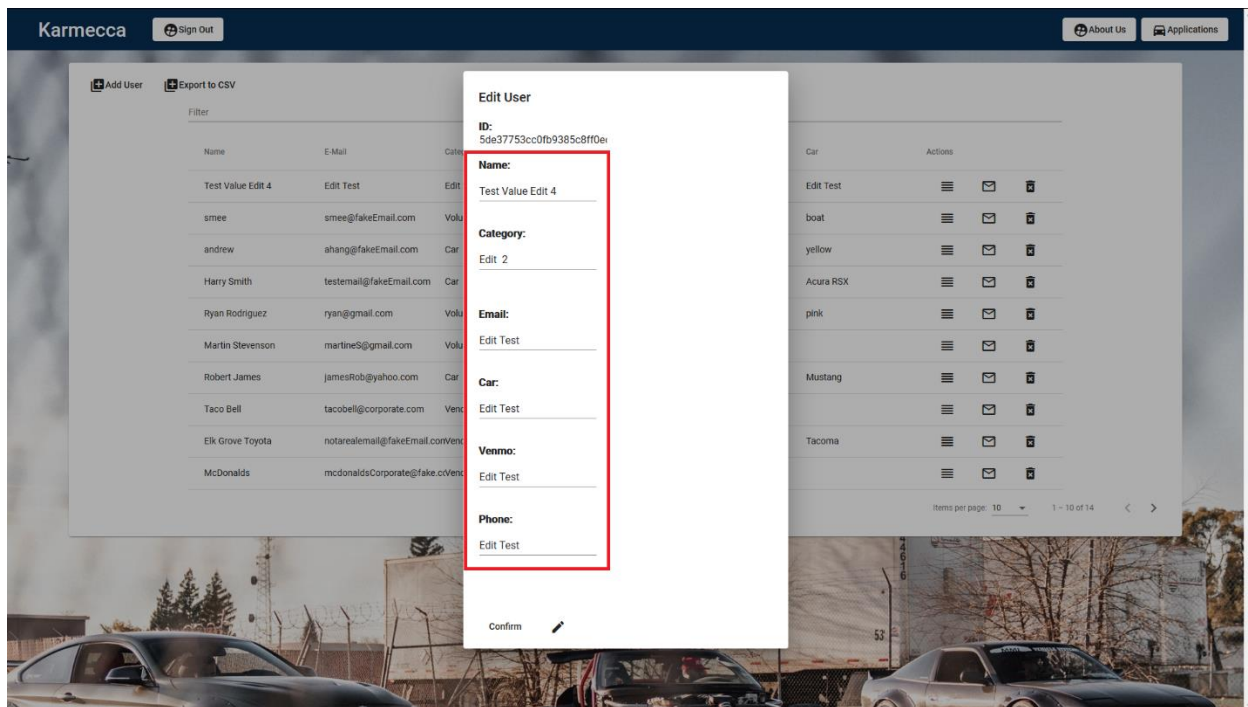
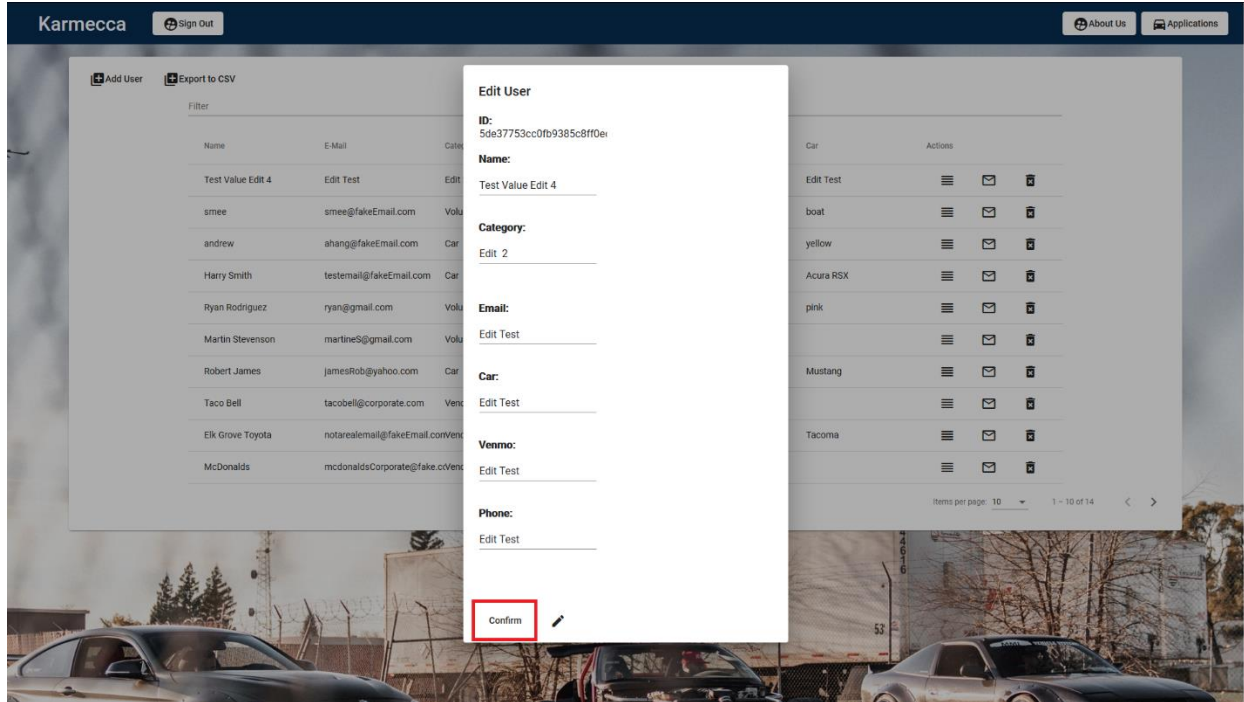


Figure 12 Fields Available to Edit

Click “Confirm” to save the changes.



*Figure 13 Confirm Button*

## Issues:

- If any issues occur when editing an application, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts
  - Backend -> routes -> api.js
  - Backend -> routes -> authenticate.js
  - src -> app -> modal -> modal.component.html
  - src -> app -> modal -> modal.component.ts

## 4.2.6 Accepting and Rejecting Applications

To accept or reject an application, click on the “View More Details” button to bring up the pop up window and then click on the “Accept” or “Reject” button.

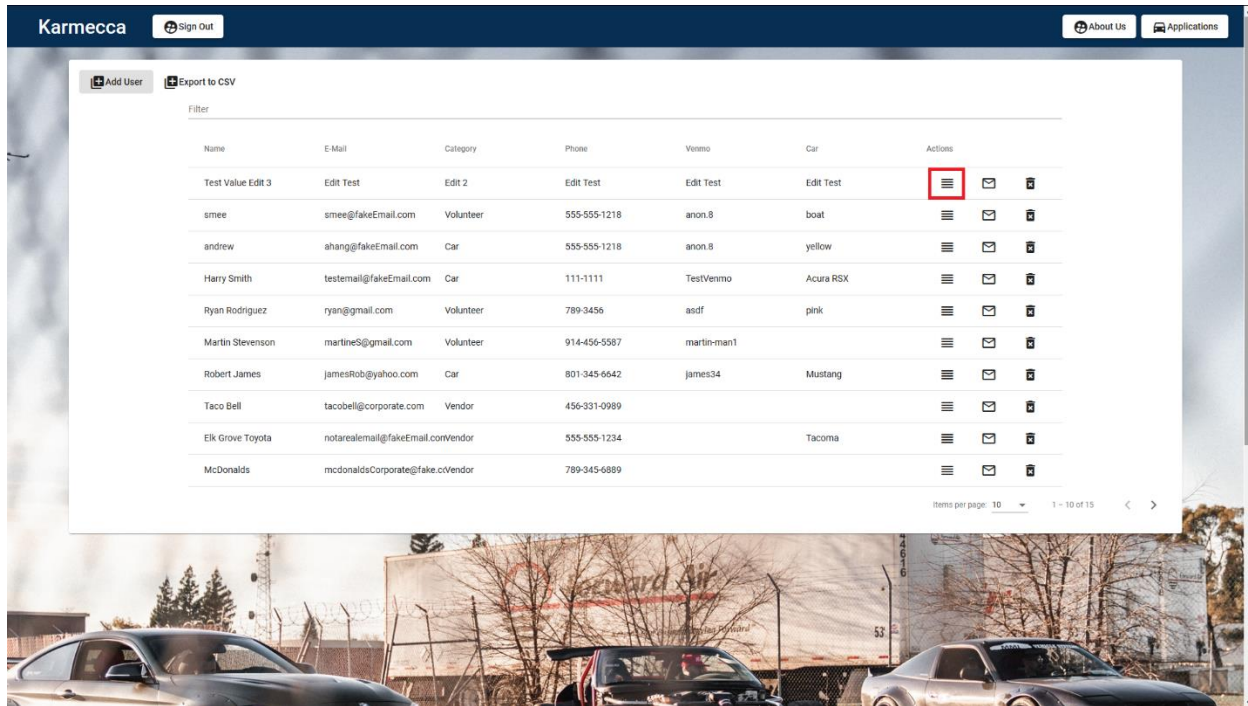


Figure 14 View More Details Button

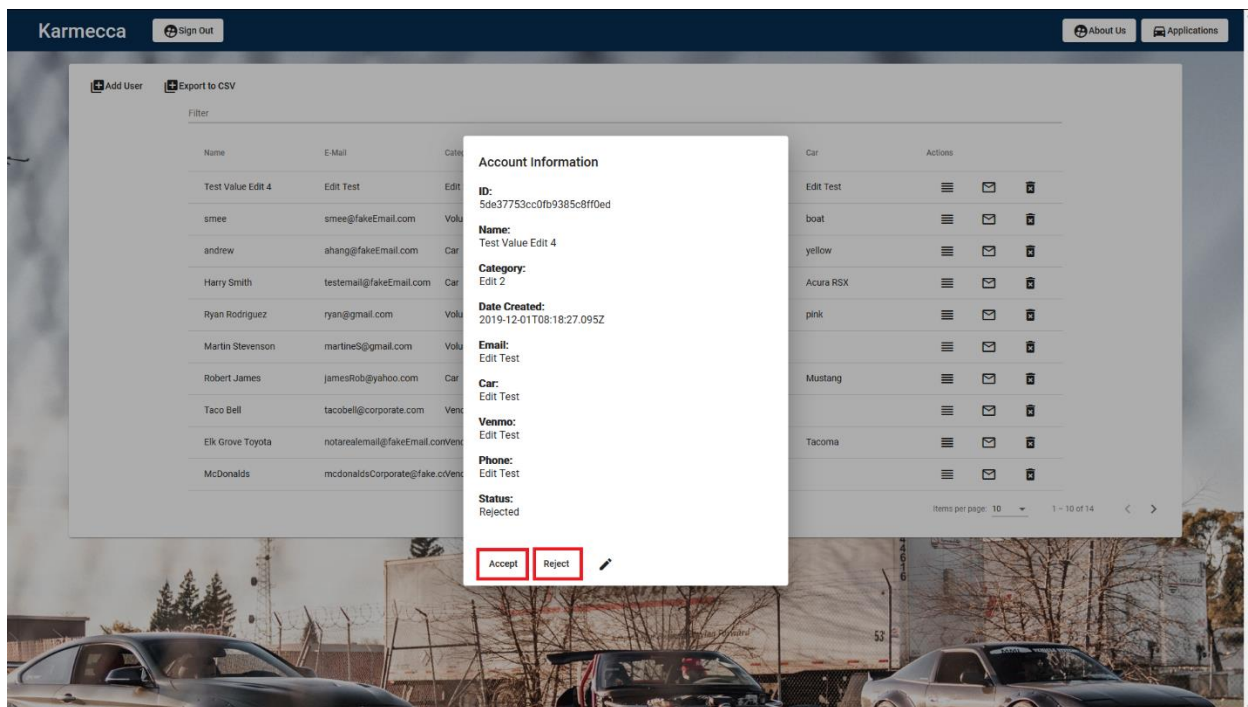


Figure 15 Accept and Reject Buttons

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**Issues:**

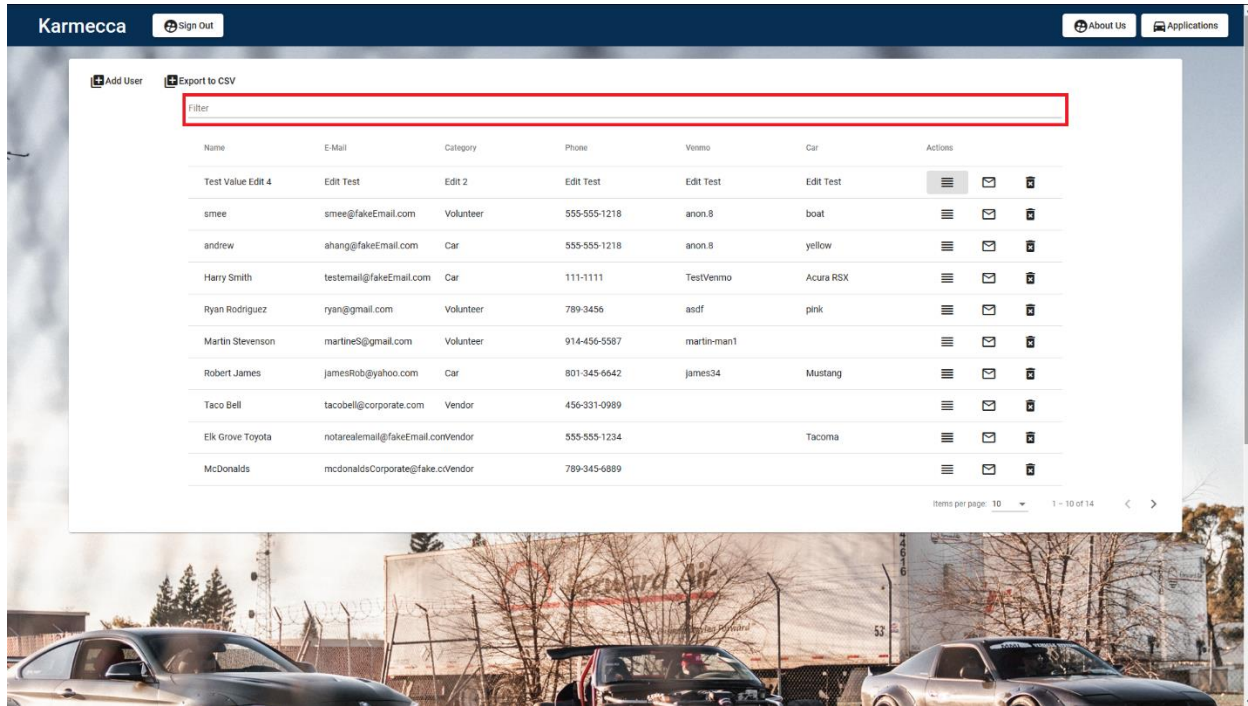
- If any issues occur when accepting or rejecting an application, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts
  - Backend -> routes -> api.js
  - Backend -> routes -> authenticate.js
  - src -> app -> modal -> modal.component.html
  - src -> app -> modal -> modal.component.ts



## 4.3 Other Table Features

### 4.3.1 Filtering Application

To filter the applications table, enter the desired keyword into the “Filter” field.



**Figure 16 Filter Field**

#### Issues:

- If any issues occur when filtering the applications table, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts

### 4.3.2 Sorting Application

To sort the applications table, click on the desired column header to sort the table in ascending or descending order by that column.





















Name	E-Mail	Category	Phone	Venmo	Car	Actions
Test Value Edit 4	Edit Test	Edit 2	Edit Test	Edit Test	Edit Test	 
smee	smee@fakeEmail.com	Volunteer	555-555-1218	anon.8	boat	 
Andrew	ahang@fakeEmail.com	Car	555-555-1218	anon.8	yellow	 
Harry Smith	testemail@fakeEmail.com	Car	111-1111	TestVenmo	Acura RSX	 
Ryan Rodriguez	ryan@gmail.com	Volunteer	789-3456	asdf	pink	 
Martin Stevenson	martineS@gmail.com	Volunteer	914-456-5587	martin-man1		 
Robert James	jamesRob@yahoo.com	Car	801-345-6642	james34	Mustang	 
Taco Bell	tacobell@corporate.com	Vendor	456-331-0989			 
Elk Grove Toyota	notarealemail@fakeEmail.comVendor		555-555-1234		Tacoma	 
McDonalds	mcdonaldsCorporate@fake.cvVendor		789-345-6889			 

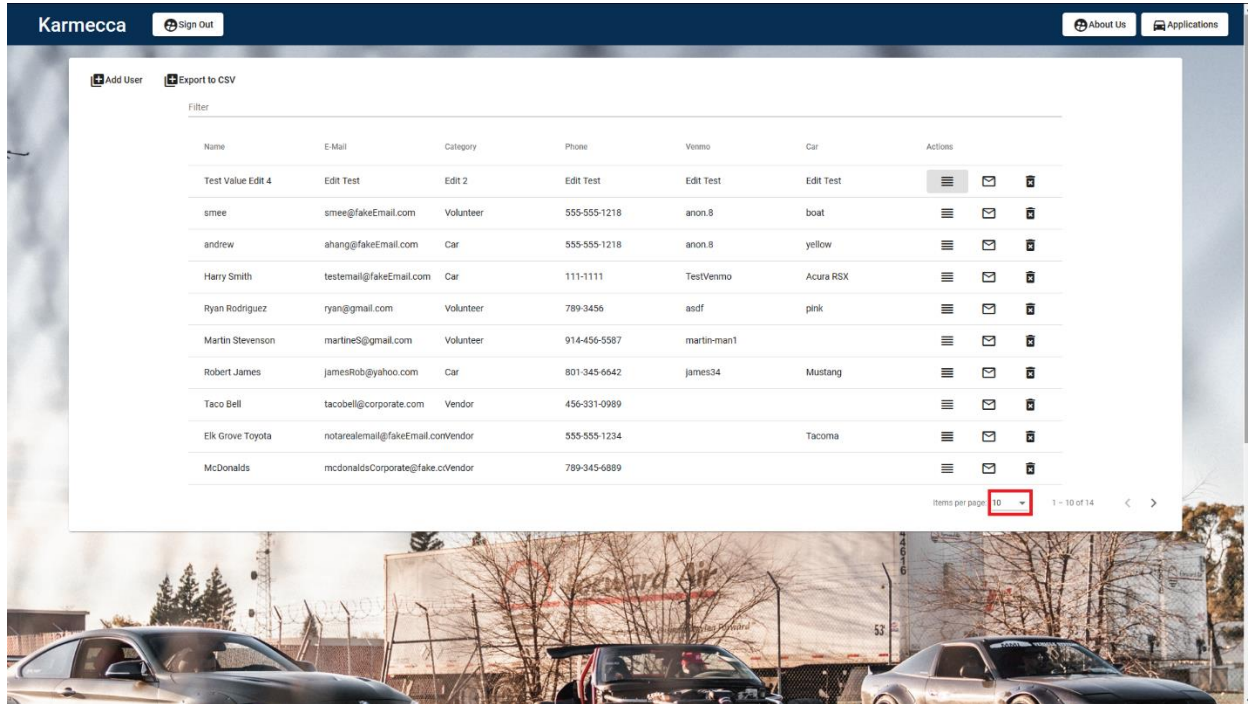
Figure 17 Sortable Column Headers

#### Issues:

- If any issues occur when sorting the applications table, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts

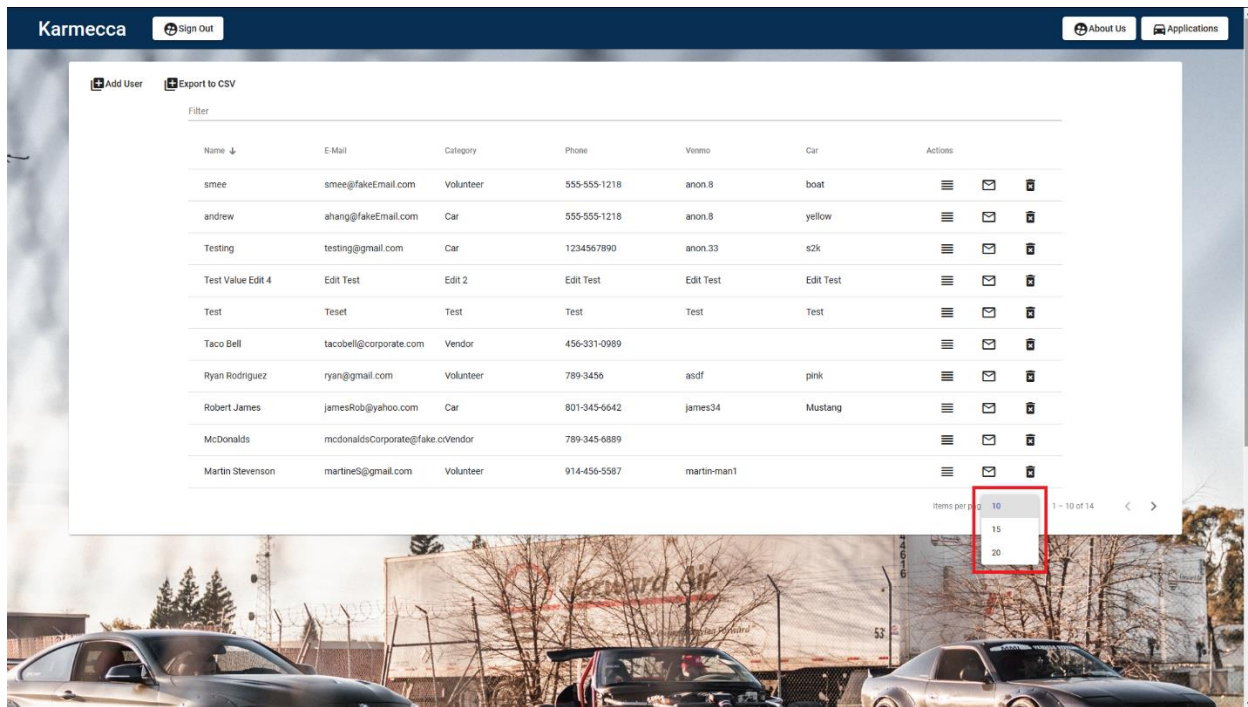
### 4.3.3 Changing Pagination

To change the pagination of the table, click on the number next to the text “Items per page” at the bottom of the table.



**Figure 18** *Pagination Dropdown Button*

Click on the desired number in the dropdown menu to change the pagination.



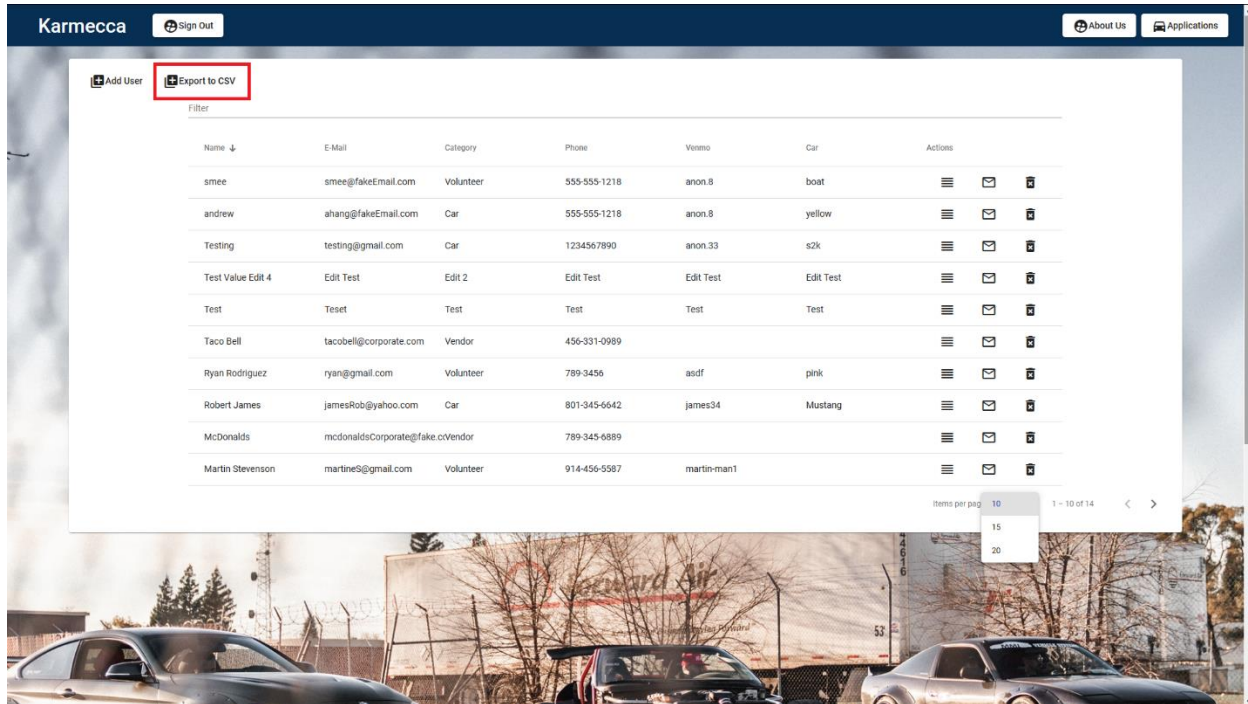
*Figure 19 Pagination Dropdown Menu*

## Issues:

- If any issues occur when changing the pagination of the applications table, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts

## 5.0 Exporting Applications

To export the table of applications, click on the “Export to CSV” button in the “Applications” page to be prompted with a download.



*Figure 20 Export to CSV Button*

### Issues:

- If any issues occur when exporting the applications table, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts



## 6.0 Emailing Applicants

To email an applicant notifying them of their application status, navigate to the “Applications” page and click on the “Email” button, which is represented with an envelope icon.

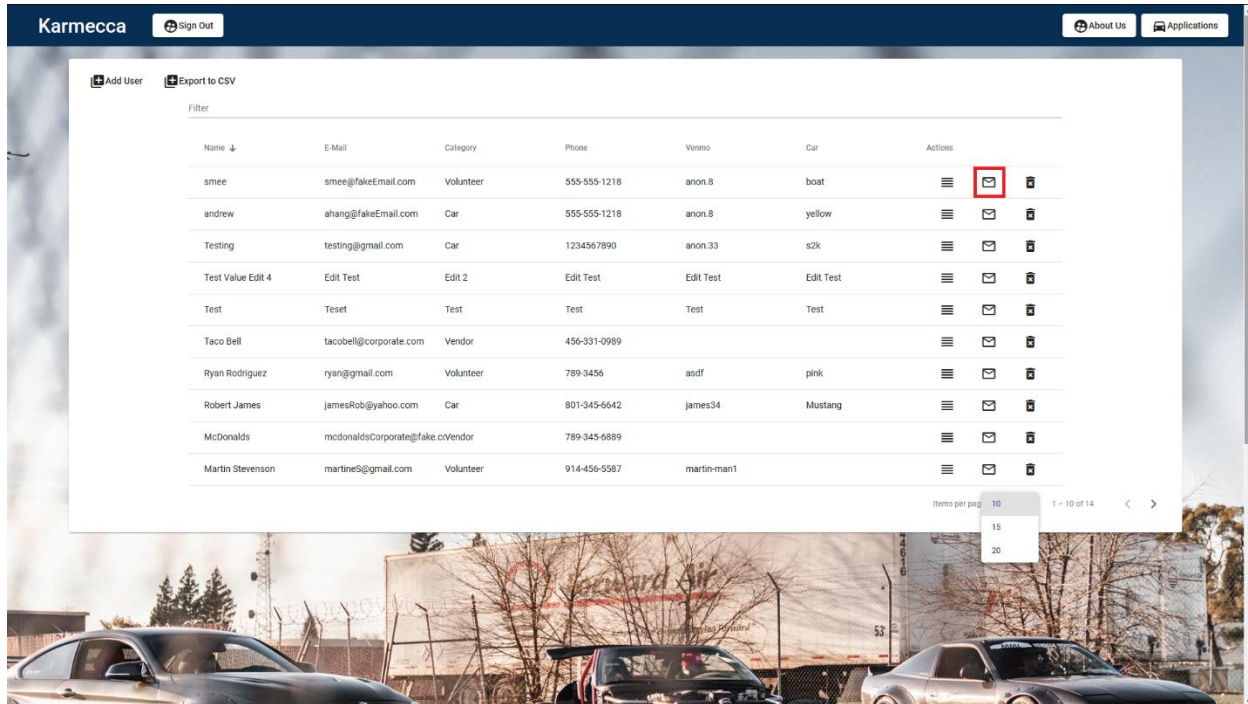


Figure 21 Email Applicant Button

### Issues:

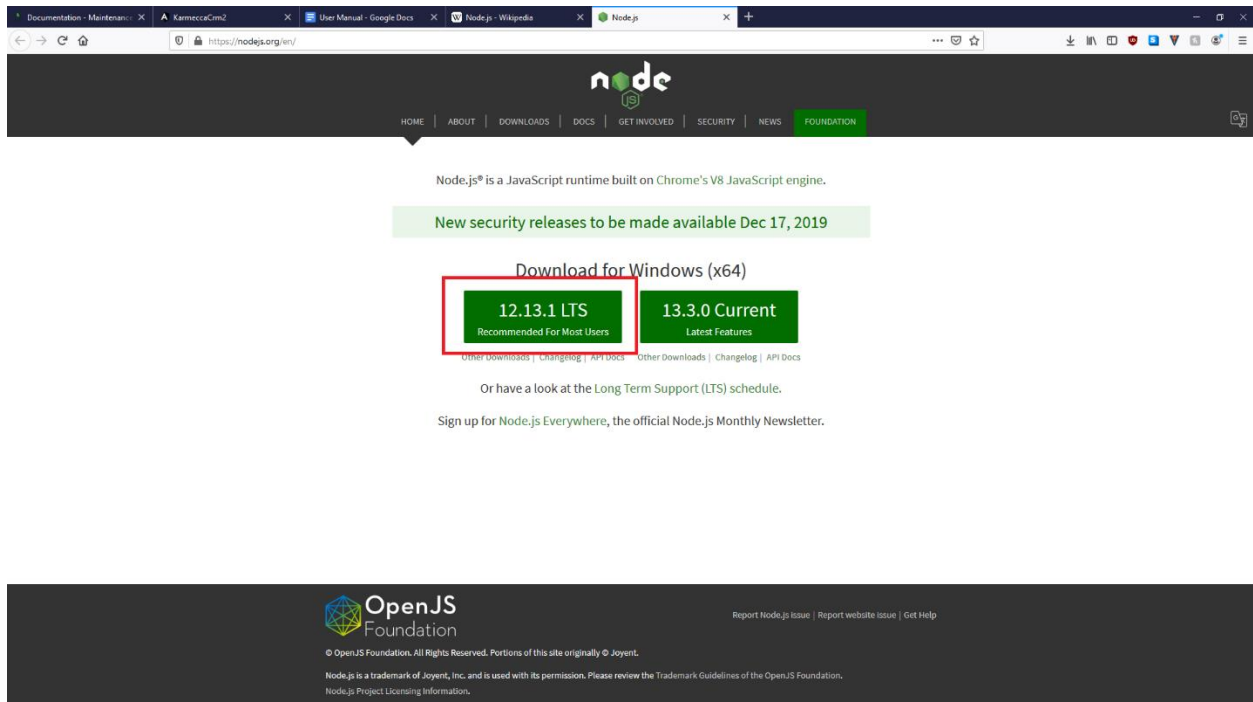
- If any issues occur when exporting the applications table, then check the following files:
  - src -> app -> components -> usertable -> usertable.component.html
  - src -> app -> components -> usertable -> usertable.component.ts

## 7.0 Appendices

### 7.1 Appendix A: Installation Instructions

#### 7.1.1 Installing Node.js

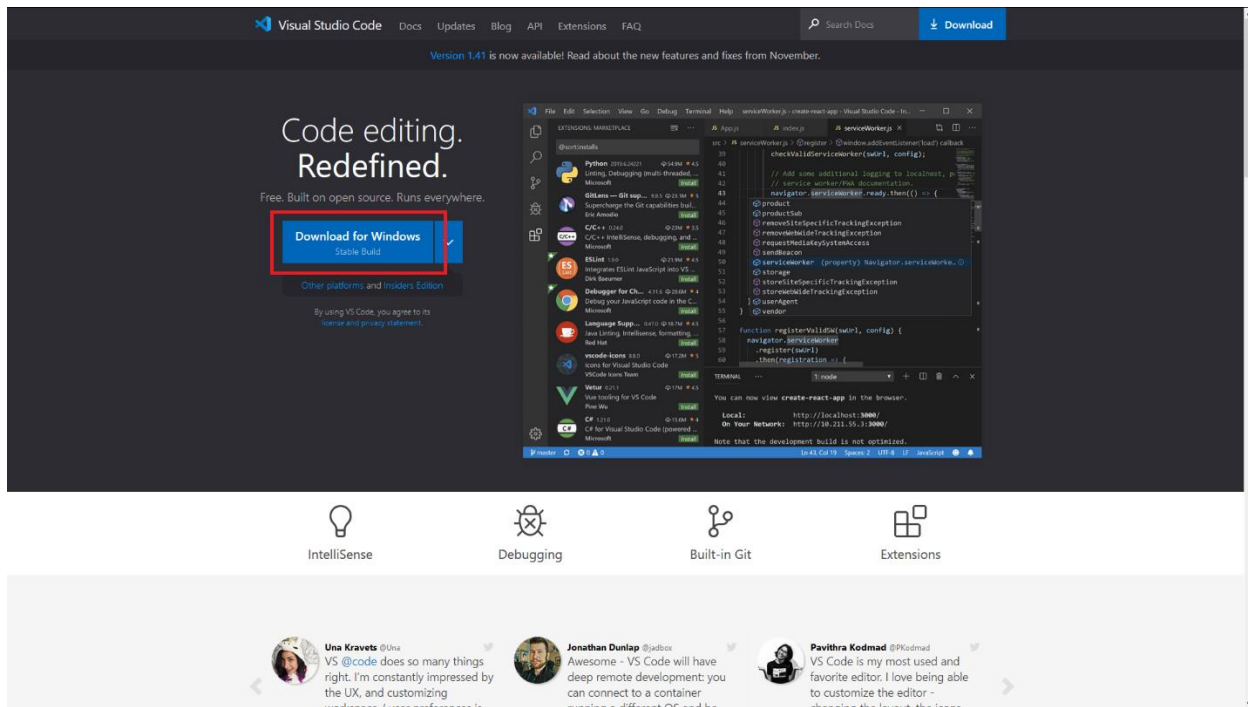
Node.js is required to run the Karmecca CRM web application. Node.js can be downloaded from the official website, <https://nodejs.org/en/>.



Installing Node.js with the default installation options should be sufficient to properly run the application.

#### 7.1.2 Installing Visual Studio Code

Visual Studio Code is the integrated development environment (IDE) used to maintain the CRM. The IDE's terminal can also be used to install other packages that are required for the CRM to run. Visual Studio Code can be downloaded from the official website, <https://code.visualstudio.com/>.

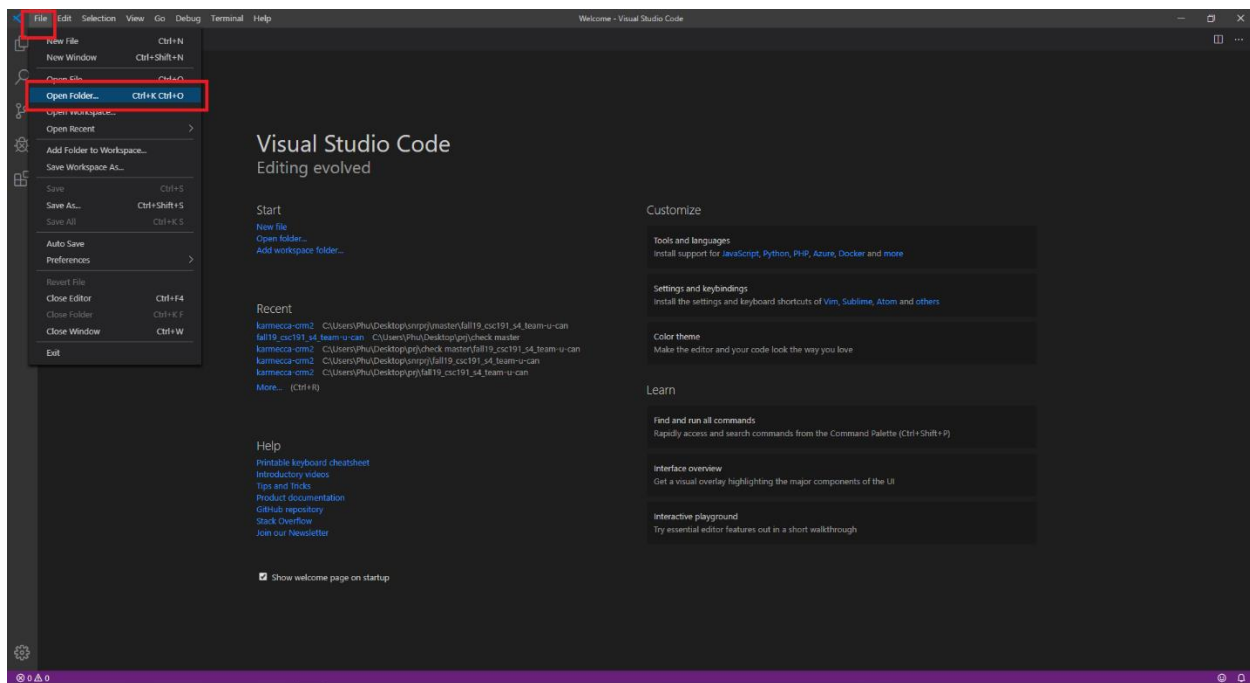


Installing Visual Studio Code with the default installation options should be sufficient to properly run the application.

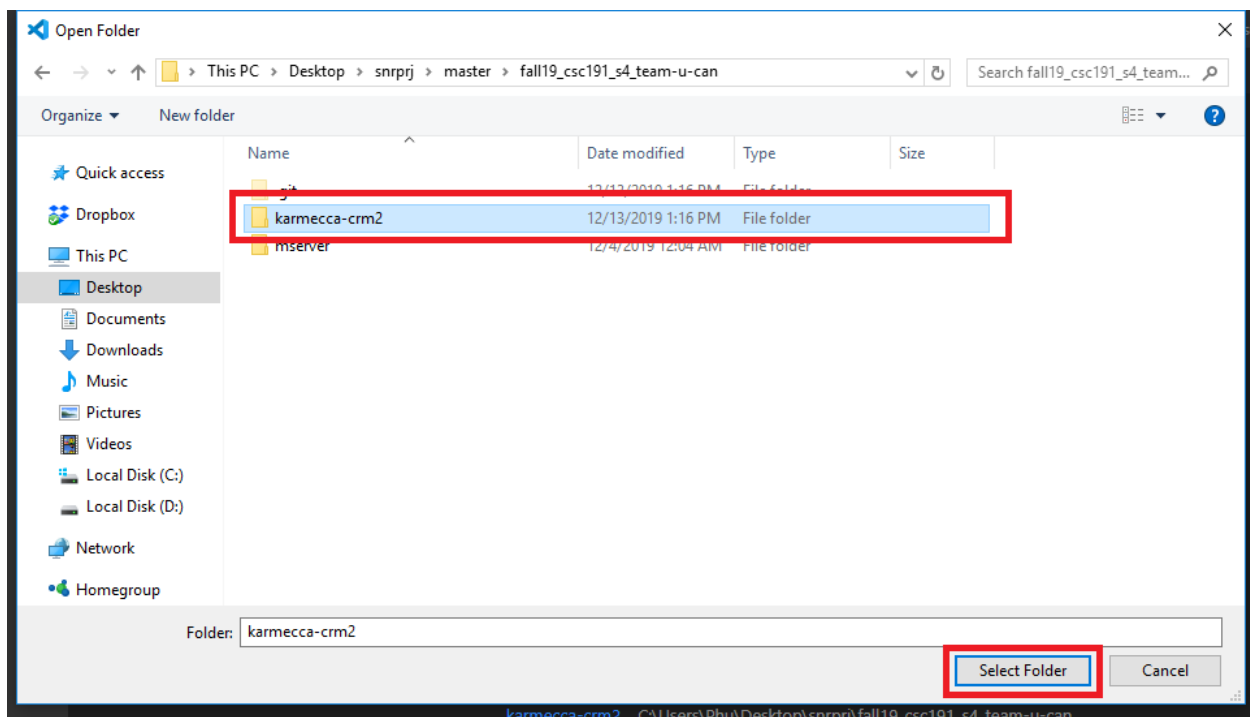
### 7.1.3 Installing the Karmecca Dependencies

For the Karmecca CRM to properly run, the packages that are required must be first downloaded and install. To do this, open Visual Studio Code and navigate to “File” in the header bar and click “Open Folder” in the File menu.

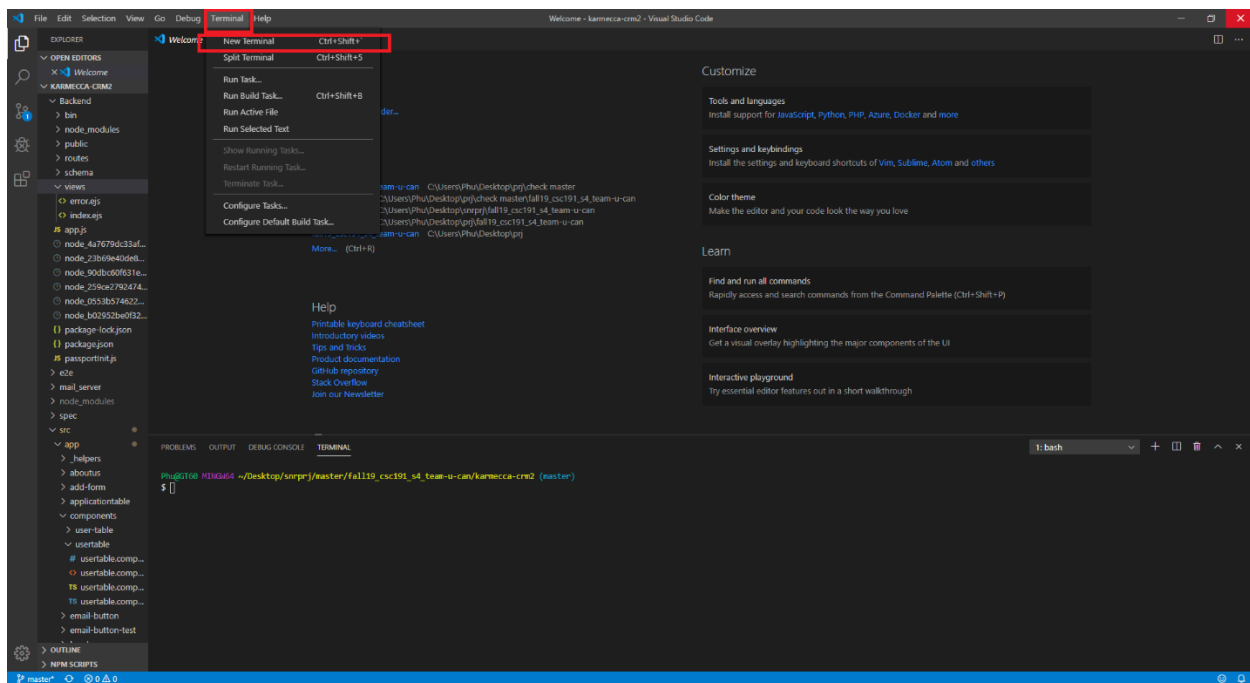




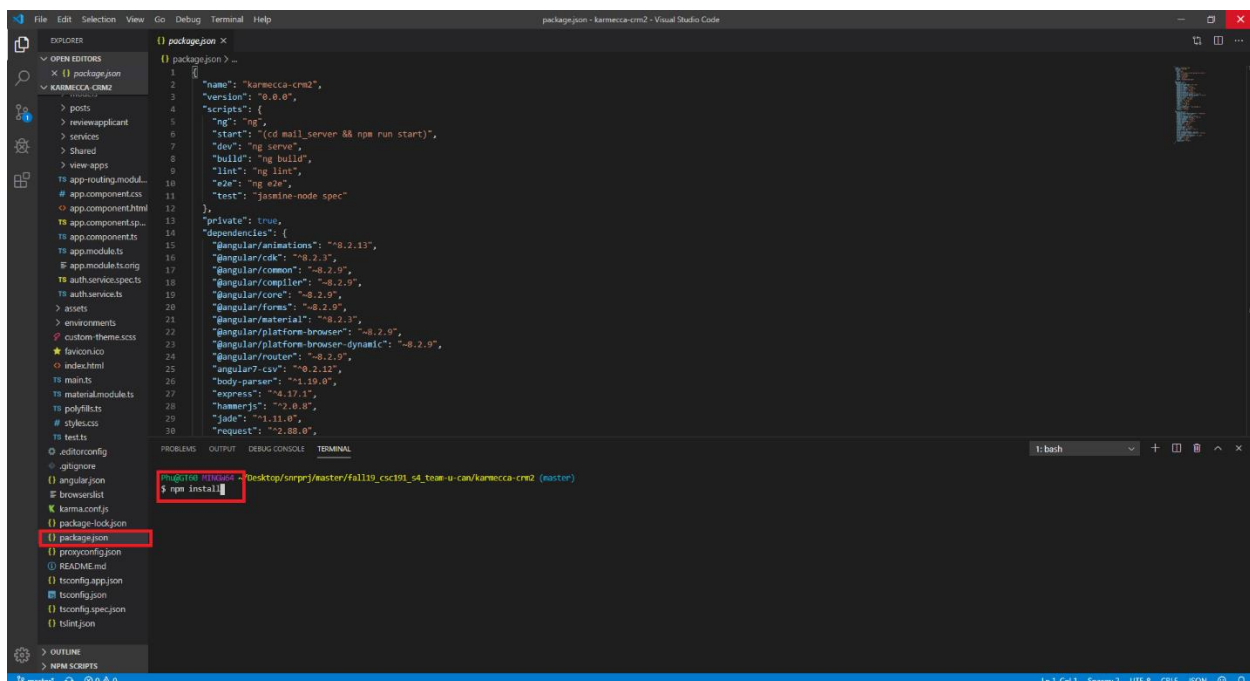
In the pop up window, navigate to the karmecca-crm2 folder and select it. Then click on the “Select Folder” button to open the folder in Visual Studio Code.



The karmecca-crm2 folder should now be opened in Visual Studio Code. If a terminal is not already open, then navigate to the “Terminal” button in the header bar, and click on “New Terminal”.



Click within the terminal window below to start typing. If a terminal is opened right after opening the karmecca-crm2 folder, then the terminal should be in the proper folder to install the required packages. It is required for the file “package.json” to be in the correct folder for this step to work. Typing in “npm install” and then pressing “Enter” should then downloading and then installing all the required packages for the CRM.



After installation of the required packages is complete, the CRM should now be completely installed and ready to run.

## 7.2 Appendix B: Database

User
username
password
created_at

Customer
name
email
category
phone
venmo
car
approved
created_at

Data Tables	
USER	CUSTOMER
username	name
password	email
created_at	category
	phone
	venmo
	car
	approved
	created_at

### 7.3 Appendix C: *TreeView* the software components

- Karmecca CRM
  - User Login Screen
    - Credentials
    - Submit Login
  - Admin Dashboard View
    - Admin Dashboard
    - Sign Out
    - About Us
    - Applications
  - About Us View
    - About Us
    - Home
    - Sign Out
    - Applications
  - Applications View
    - Application Table
    - Sign Out
    - About Us
    - Add User
    - Export to CSV
    - Filter
    - Sort
    - Edit
    - Email
    - Items per page
    - Page navigation