

# EZ Garage

## User Manual

Justin Kramer  
Michael Scales  
Jared Frank  
Kyle Thorpe  
Matt Choi

## 1. Product Overview (See Requirements Spec., page 2)

EZ Garage will simplify and automate the processes of traditional parking garages. The product will recreate systems that handle parking and create a new system for garage visualizations. The system will allow the user to 'reserve' a space within the garage that the system is implemented on. At this point the user will be able to park the vehicle that is linked to their account in the selected space.

Once the user has confirmed that they are parking in the space, they will be informed of the price per hour that the spot costs and be given a ticket that will need to be returned in order to leave the spot. A user may view their reserved spaces on their profile. After the user is finished parking their vehicle in the garage they will return the ticket to the kiosk, and their cost accrued will be calculated and the spot that they had reserved will be opened up within EZ-Garage to be selected by another user.

A garage owner may create and manage their garages, as well as collect money that comes from people reserving spots at their garages. They can view their garages on their profile. When a user first enters the web application, they must register for an account. This registration will differ based on if the user is a driver or garage owner.

## 2. Getting Started (See Requirements Spec., pages 2-4)

### 2.1. Logging In

#### **User Parking a Car**

To login to EZ-Garage the user must enter in both their email and their password that is associated with the account that they have created. If the user has not created an account within the system they must go to the 'Create Account' page and select the 'Driver' checkbox. Within the form they must also enter in an email, their legal name, license plate, state they reside in currently, a password for the account, and a valid method of payment to use.

#### **Garage Owner**

To login to EZ-Garage the user must enter both their email and their password that is associated with their account. If the garage owner has not created an account they must go to the 'Create Account' page and select the 'Garage Owner' checkbox in the form. After they have selected this they must enter an email, password, and payment information.

### 2.2. User Help

If a user needs assistance using the software, they can access the Frequently Asked Questions page within the application which contains other issues and questions that previous users have run into while also using the software. There will

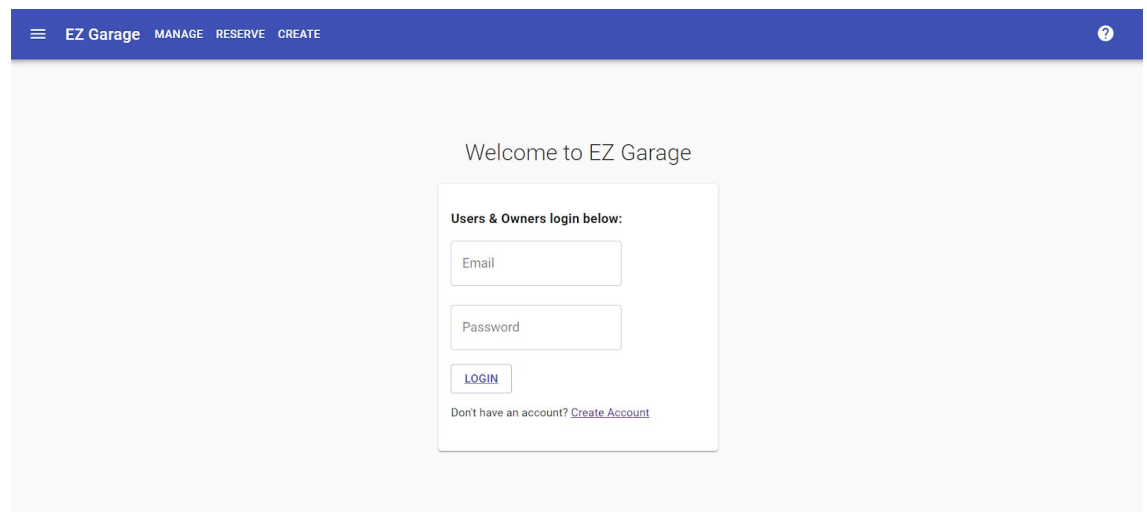
also be questions that developers expect that users might have during their usage of the software.

This page will be accessible to all users through a question mark that resides on the top right of each page. This way users can easily access help at any time while using the application.

## 2.3. Sample Run (See Requirements Spec., pages 2-4)

- Driver/Owner Logs In:

To begin using our web application, a user starts at the login page. If they need to make an account, they will be navigated to the create account page after clicking the create account button. On the create page, a driver will enter the appropriate information and an account will be created for them. The same goes for owners. Once the profile has been created in the database, the user can come back to this login screen, enter their email and password into the appropriate text boxes, and click login to begin using the application.



EZ Garage MANAGE RESERVE CREATE ?

Welcome to EZ Garage

Users & Owners login below:

Email

Password

LOGIN

Don't have an account? [Create Account](#)

- Driver Reserves Spot:

Once a driver is logged in, they can press the reserve button on the navigation bar to go to the reserve page. Once on the reserve screen, a user will select which garage they want to reserve a parking spot at, based on information provided about that garage. Once the user has selected a garage, they will see a screen displaying the first floor of the garage. This display will show which spots are available, as well as the option to view other floors of the garage to look

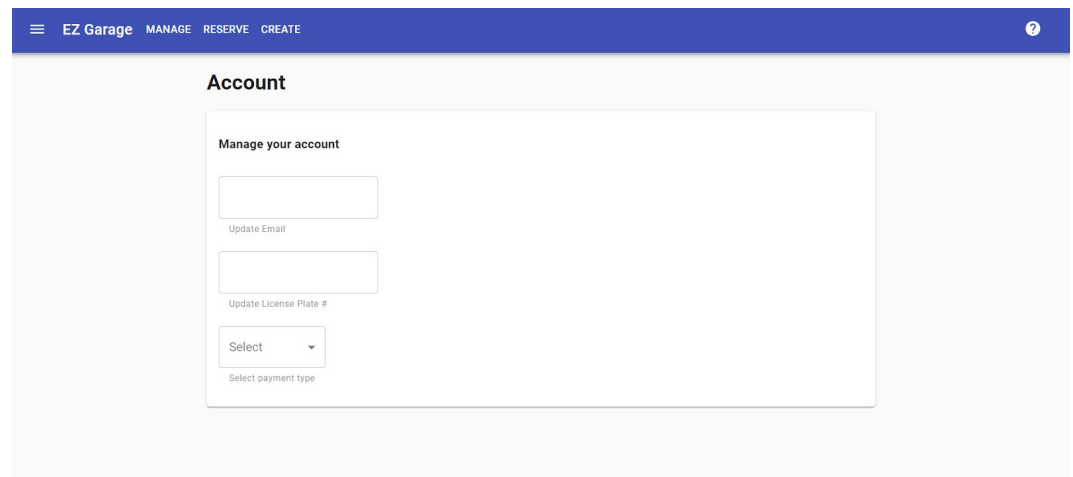
for an available spot. For a user to reserve a handicap spot, they may press the handicap spot button on the left side-bar to display available handicap parking spots. We also include the ability for a user to click the “closest spot” button to automatically reserve an available parking space that is closest to an exit. Once the user reserves a space, they may then pick up their ticket at the kiosk of the parking garage when they arrive and login.

- Driver/Owner Needs Help:

When a driver or owner is confused about how to use the program, they can click the question mark in the top right of the screen to access the FAQ page. Here, we display frequently asked questions that both drivers and garage owners have in order to decrease support questions directed towards us. The questions are clearly broken down into two categories, one for drivers and the other for garage owners. A user can click each question to reveal the answer.

- Driver/Owner Manages Account:

When a user wants to change something about their account, they can click the manage button on the navigation bar to go to the manage account page. Once a user is at the manage account page, they can enter the relevant information that they want to edit and press enter to change it. Once the user presses enter, their information on their profile will be updated. For changing email and license plate, the user can enter their information in the text boxes and press enter. For changing payment info, the user will have to click the select button to edit a certain payment method.



The screenshot shows the 'Account' management page of the 'EZ Garage' application. The top navigation bar is blue with the text 'EZ Garage' and buttons for 'MANAGE', 'RESERVE', and 'CREATE'. A help icon is on the right. The main content area is titled 'Account' and contains a section 'Manage your account'. This section has three input fields: a text box for 'Update Email', a text box for 'Update License Plate #', and a dropdown menu labeled 'Select' for 'Select payment type'.

- Owner Creates a Garage:

When a user that is a garage owner wants to enter in a garage that they own so that people can reserve spaces in their garage, they need to press the create button to create their garage. Once on the create garage page, the garage owner must enter the garage name, address, number of floors, and date of creation. When they have entered this information into the text boxes, they can click create garage. This will fire off a request to add a garage to both their profile and to the available garages that drivers can reserve spaces in. Once the garage is in the database, it will be viewable to both garage owners and drivers.

**My Garages**

Backend Garage

**Create Garage**

**Details**

Name

Address

Levels

**Fares**

Monday  Tuesday  Wednesday  Thursday

Friday  Saturday  Sunday

- Owner Reports A Stolen Space:

When a user notices that their reserved space in the parking garage has been stolen by another person, they can log onto the application and report this. All they need to provide is the parking space id, the license plate of the thief, and their name. Once the garage owner has received this information, they can verify the crime and handle it accordingly.

**Reports On Your Vehicles**

License Plate	Date	Person Who Reported	Parking Spot	Fee Paid?
test1234	2019-10-21	Justin	265	No
test1234	2019-10-21	SK CHANG	265	No

**File A Stolen Spot Complaint**

License plate number

What spot was taken by this vehicle?

Enter your name

**SUBMIT REPORT**

### 3. Modes of Operation

- General Operations Overview
  - Hardware
    - Computer
    - Keyboard
    - Mouse
    - Monitor
    - Garage kiosk with touch screen
  - Software
    - Browser (Chrome, Firefox, etc...)
    - Internet connection
  - Dialogue With System
    - Navigation bar to the correct page containing the desired action
    - Text boxes to enter data
    - Buttons to submit entered data
    - Functional interfaces to filter and choose desired actions
  - Reports
    - Confirmation of received commands with pop-up dialog
    - Email of reservation details after reservation

#### Commands:

- Driver Mode
  - Create Account Command
    - Click the “Create Account” link on the Login page
    - A new user will select create an account, where they will set up their account using an email, password, and a selection to be a driver or garage owner.
  - Login Command
    - After creating an account the user will log in to the app with their email address and password through entering the proper information in the text boxes
    - Clicking the login button
  - Reserve Command
    - Click the “Reserve” navigation bar option
    - The user will be brought to a “Space Selection” page, where they are able to reserve an open space at a garage.
    - They select which floor of the parking garage by the side display of the floor numbers

- They select a regular parking spot, or press the handicap space button to view handicap parking spaces
  - A driver can press the closest spot button to instantly reserve the closest space to the exit on that floor
  - Once a spot is selected, the driver can view their reserved space on their profile
- Manage Command
  - A driver can edit their account information after pressing the “Manage” navigation bar option. This will take them to a screen that allows them to change their login information or license plate number. These updates are executed through entering the new information in the appropriate text boxes and pressing enter
- Report Command
  - A driver can report that another driver stole their reserved space.
  - The driver enters their name, the parking spot id, and the license plate that stole their space.
  - It is up to the garage owner to deal with the stolen space complaint when it is forwarded to them.
- Garage Owner Mode
  - Create Account Command
    - A new user will select create an account, where they will set up their account using an email, password, and a selection to be a garage owner
    - On the login page, pressing create account will take them to this screen
  - Log in Command
    - After creating an account the user will log in to the app with their email address and password in the appropriate text boxes
  - Manage Command
    - The garage owner will be brought to a “Manage” page, where they are able to change their account information. From this page, an owner can edit their account details by filling in the appropriate text box of information that they want to change and pressing enter
  - Create Garage Command
    - The user can select to create a new garage, where they are able to customize garage details and add it to their account. They use their mouse to select the “Create Garage” button to confirm their garage.



## Installation Procedure

1. If running on the web, simply visit [www.EZGarage.com](http://www.EZGarage.com)
2. If not running on the web
  - a. Acquire the file system located at <https://github.com/kjustin2/1530-group-project>
  - b. cd into 1530-group-project on command line
  - c. Ensure that NPM is installed
  - d. Run npm install concurrently
  - e. Run npm run install\_all
  - f. Run npm run dev
3. Now the application will run in your local browser at <http://localhost:3000/>

## Maintenance Procedure

For Front-end changes:

1. Change code in the “client” folder
  - a. Go into the src folder
  - b. Go into the Components folder
  - c. Add your new component to app.js
  - d. Create your component .js and .css files
  - e. Ensure back-end works with front-end changes

For Back-end changes:

1. Change code in the “server” folder
  - a. Go into the routes folder
  - b. Add your new route
  - c. Add the new route to app.js in the folder above the routes folder
  - d. Ensure that any database accesses work properly through testing
  - e. Ensure that back-end changes connect to a route called through Axios by the front-end

All other files and folders are configuration files, do not edit them unless you want to change the core of what the program runs upon.