Our user interface(reservation), console interface and manager interface and navigation algorithm are locally connected and share the same database.Though we did not have specific program to test the website, we manually tested it. And a mamp or xampp is needed for this process.

 (Account.sql needs to be imported to phpmyadmin for the first step.)The login website is designed for the customer to log into the garage homepage to accomplish other operation. At the lower right corner, there has a register button, a new customer need to register to log in.To accomplish the registration, the user will be notified to enter the first name,last name,password,email address,phone number and license plate number. The website will show a error message when the confirmation password is different with the password entered at the first time. Next, the system will connect to the database to check whether the email address has already been used. When the double check finish, the new customer information will be uploaded to the account database.And this specific information about the customer is recorded in the table for later use.

Then we imported garage.sql (it is under 1-code/Reservation & Console Interface) to phpmyadimin. Run localhost/garage/index.php.(username:test Password:test) and we could see the homepage.To test " make reservation" we clicked on " Make Reservation" and chose " Begin Time" and " End Time" ,the map-view of the whole garage was displayed and only green spots can be selected. After clicked on one green spot," Reservation success" and the confirmation number was displayed. And this reservation is recorded in database which can be read from localhost/phpmyadmin/ . It is under garage database in "reservation" table. The next step is to see if the console interface can respond to this reservation when the user arrives at the garage.

The console interface is built to simulate the actual interaction between the garage and the coming user, the interface could be accessed using the webpage address /garage/console/index.php, the only input the system needed is a plate number, which in reality should be a signal sent from the plate reader. After the system reads the plate number, it will identify the incoming customer and display different content based on the role of the customer, if the customer is a registered user, the system will automatically check the avaliability of user's reservation and provide the entrance; if the plate number is not recognized, the system will provide the option for user the enter the confirmation number and validate the confirmation number.

When logged in manager webpage "manager.php" (under ManagerWeb(Zhiheng) file), managing functions can be tested. Run init.php to initialize database before test the managing functions. On the manager page, click find user to test user searching either enter a user's name or plate number, then the user's information displays. To add a user into the database, click add user, and then enter user's information including user's name, plate number, and

password. After doing above functions, manually go to database to check if the user's information is added and displayed successfully.

Navigation Algorithm function will be integrated with the user interface of the mobile application in the future. What's more, it's gonna be a while to integrate this feature with the whole project.