4) The Software Requirement Specification (SRS) of the Online Transportation Network System (OTNS) is as follows:

*Functional Requirements*:

R1 The OTNS must provide login page for the users

R1.1 The OTNS must provide a regular login display for every user

R1.2 The OTNS must display registration page for first time users

R1.3 The OTNS must provide a text button for driver login

R1.4 The OTNS must have predefined username for the drivers

R2 The OTNS shall display the user location on the map after login

R3 The OTNS must allow the customer to request driver

R3.1 The OTNS shall allow the customer to input address.

R3.2 The OTNS shall also have the option of auto address input based on location

R3.3 The OTNS shall display the estimated wait time for the customer

R4 The OTNS must provide the customer to choose between payment options

R4.1 The OTNS shall allow the customer to select cash option

R4.2 The OTNS shall allow the customer to select credit card option

R4.2.1 The OTNS shall allow the customer to select the card, if multiple card on

record.

R5 The OTNS must provide a sidebar with different options for the customer

R5.1 The OTNS must provide profile information

R5.1.1 The OTNS must provide profile edit option

R5.2 The OTNS shall provide promotional offer

R5.3 The OTNS must provide payment option information

R5.3.1 The OTNS must provide payment update option

R5.4 The OTNS shall provide the option to display ride history

R5.5 The OTNS shall provide a button to email the business directly

R5.5.1 The OTNS shall provide grievance email option

R5.5.2 The OTNS shall provide help email option

R5.5.3 The OTNS shall provide feedback/other email option

R5.6 The OTNS shall provide a safety mode button to customer

R6 The OTNS must provide address search bar to the customer

R6.1 The OTNS must allow the customer to enter own address manually

R6.2 The OTNS must allow the customer to drag location point

R6.3 The OTNS must allow the customer to enter the destination address

R6.3.1 The OTNS shall display the estimated ride cost

R7 The OTNS shall provide the customer with list of different cars

R7.1 The OTNS shall allow the customer to choose car based on luxury

R7.2 The OTNS shall allow the customer to choose car based on number of people/size

R8 The OTNS must provide relevant information once the customer request’s service

R8.1 The OTNS must provide the location of the car

R8.2 The OTNS must provide the estimated arrival time

R8.3 The OTNS must provide the car’s information

R8.3.1 The OTNS must provide the car’s make and model

R8.3.2 The OTNS must provide the car’s Registration Number

R8.3.3 The OTNS shall provide the car’s model photograph

R8.4 The OTNS must display the driver’s information

R8.4.1 The OTNS must provide the driver’s name

R8.4.2 The OTNS must provide driver’s phone number

R8.4.3 The OTNS shall provide driver’s photograph

R9 The OTNS must notify the customer of status changes

R9.1 The OTNS must notify the customer when the car is nearby

R9.2 The OTNS must notify the customer when the car has arrived

R10 The OTNS must notify the changes at the start of trip

R10.1 The OTNS must allow the customer to change the destination address

R10.1.1 The OTNS must confirm from the customer of destination change

R10.1.2 The OTNS must notify the driver with a tone of destination change

R10.2 The OTNS shall show the estimated route to the customer

R10.3 The OTNS shall show the estimated time of travel

R11 The OTNS must notify the customer of trip end and provide relevant information

R11.1 The OTNS must display the electronic invoice to the customer

R11.2 The OTNS shall allow the customer to give a feedback

R12 The OTNS must provide a sidebar with different options for the drivers

R12.1 The OTNS must provide an option to the driver to check dues

R12.1.1 The OTNS shall provide option to send request to clear dues

R12.2 The OTNS shall provide the ride history for the driver

R12.3 The OTNS shall provide an option to display the driver’s rating

R12.4 The OTNS shall provide an option to display weekly/daily earning

R12.5 The OTNS shall provide a button to email the business directly

R12.5.1 The OTNS shall provide grievance email option

R12.5.2 The OTNS shall provide help email option

R12.5.3 The OTNS shall provide feedback/other email option

R13 The OTNS shall display surge areas to the drivers

R14 The OTNS must provide driver with accept/decline request button

R14.1 The OTNS shall display the requesting customer’s location to the driver

R14.2 The OTNS shall display the estimated reach time to the customer

R14.3 The OTNS must hide the customer destination from the driver

R15 The OTNS must show relevant information after acceptance of the request

R15.1 The OTNS must show the route from the driver’s location to the customer

R15.2 The OTNS must display the estimated time to reach the customer

R15.3 The OTNS must display the customer’s information to the driver

R15.3.1 The OTNS must display the customer’s name

R.15.3.2 The OTNS must display the customer’s phone number

R.15.3.3 The OTNS shall display the customer’s photograph

R16 The OTNS must give relevant options to driver upon arrival

R16.1 The OTNS shall provide call/SMS option to the driver

R16.2 The OTNS must provide the button to start trip

R17 The OTNS must display relevant information after the start of the trip

R17.1 The OTNS must display the route to destination

R17.2 The OTNS shall display the estimated time of arrival at destination

R17.3 The OTNS shall provide an option to end trip

R18 The OTNS shall display another pickup request

R18.1 The OTNS shall only display the request if it is near the destination

R18.2 The OTNS shall only display the request if the arrival time is almost complete

R19 The OTNS shall provide with relevant options after end trip

R19.1 The OTNS shall display the money earned to the driver

R19.2 The OTNS shall provide option for customer feedbacks

*Non-Functional Requirements*:

R20 The OTNS shall be able to process 100,000 queries at a time

R21 The OTNS server shall be available 99% of the time

R22 The OTNS interface shall give different looks for driver and customer

R22.1 The OTNS shall be easy to navigate

R22.2 The OTNS shall have a simple and white themed look

R23 The OTNS response time shall be fast to provide good user experience

R24 The OTNS shall provide various safety measures for users

R24.1 The OTNS shall verify the driver’s and customer’s profile

R24.2 The OTNS shall keep emergency contacts of the users

R24.3 The OTNS shall provide a safety mode option to the users

R24.3.1 The OTNS shall track driver and customer location, if the safety mode is  
 on

R24.3.2 The OTNS shall use “Chilla” Application plugin to inform emergency   
 responders, if the safety mode is on

R24.3.3 The OTNS shall ask for PIN entering after trip completion to verify  
 if the user is safe, only is safety mode is on

R25 The OTNS must provide data security to the user’s information

R25.1 The OTNS will not give direct access to the database at any cost

R25.2 The OTNS shall provide temporary created contact number to the driver/customer

R25.3 The OTNS shall have many backups of the stored data to avoid hardware failure

R25.4 The OTNS shall have different servers at secure locations to break the   
 information and avoid data theft

R25.5 The OTNS will be hiring Security Firm to authenticate user login and tackle   
 potential intrusion into the servers.