**CSE 299: Junior Design Course**

**Project Proposal**

Parking Space Sharing App

Section [9/10]

Team Number: 10

Team member

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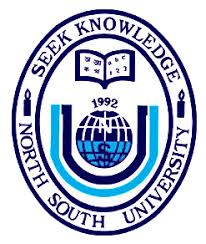
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**Overview:**

In summary our apps will have two different part to deal with renter (who will rent the parking space) and the driver/user (who will use the parking space as per his choice and other conditions).

Both sides apps page is discussed with possible diagrams in next pages:

**Driver side page flow to place and execute and execute a request of parking space:**

Welcome page (select login as user) -> login (mail and password) -> display available Parking spot (initially will display nearby location or the user will search for desired location) -> confirmation page after choosing a place -> map ( direction to the selected place) -> after arive to that location **time counter** page will appear that will just count the hour and minute until user cancels the request or exits the place -> after canceling a page with total staying time and the amount that should have to be paid will appear -> return to nearby location display place ( display available parking spot page mentioned earlier).

**Renter side page flow to process a request:**

Welcome page (login as renter) -> login (login with mail id, password and unique access code given previously) -> review available hour and make the space available like online and offline mechanism -> view requested user information -> view user who are staying at his parking space with all information like time passed and real-time bill.

**Feature name: Payment Page**

**Featured work: Charge or cost showing once all the procedure is done or cancelled at midpoint.**

Description: When the parking hour is done or a parking request is cancelled at midpoint once reserved, the driver’s app and parking owner’s app both will show the total cost calculated by multiplying a minimum wage and hour spent. The payment option will be in hand cash. So, the amount that the app will show should be same on the both app. We will also try to implement another option of cancellation. In a midpoint of request, if a driver choose to cancel his reservation, after a certain period of time the app will show a minimum amount due which h/she will have to pay in the future completed reservation. Though we aren’t yet going to give an option of online payment, but suddenly we will improve the app by adding online payment methods as Bkash, Rocket etc.

Here’s a demo design of our payment page and how the bars will look in the app:

Fig 1: Receipt when a parking is completed Fig 2: Receipt when request is cancelled at midpoint (USER)

NET PAYABLE

(Amount in BDT)

AMOUNT TO BE PAID IN ADDITION TO THE NEXT USAGE

DUE AMOUNT

(Amount in BDT)

RECEIPT:

RECEIPT:

**Feature name: Map page**

Featured work: Searching for an available parking space.

Description: Once logged in- a user or driver will find a page that have option to searches for available space. And it will show his current location on the background using google map and his device’s GPS location. Also, there will be an option in the search bar about his parking duration- how much time h/she wants to park. According to which the app will show a list of desired and available spaces in a list. When the user searches for a specific location where h/she wants to park, in addition, we want to design the map which will be able to show a fastest route from his current location to his desired location.

Here’s a demo design of our search page and how the bars will look in the app:

Fig 1: Search option when logged in Fig 2: A Sample Search by User

Find a spot:

List according to the availability:

1. House #28, Road #16
2. House #15, Road #5
3. Plot #21, Road #19

WHEN TO PARK

WHERE TO PARK

2 H

NIKUNJA-2

11 AM

HOW MANY HOURS

Find a spot:

(Google map that shows current location)

**Feature Name: Confirmation Page**

Feature Work: Confirm parking space and counting time

Description: Driver have to select a parking space from the list. Then he has to select a time slot for parking. Then he will see an estimated rent for this parking space. After checking everything he will confirm that parking space. After confirming the space, a stop watch will be activated automatically.

Here’s a demo design of page and how the bars will look in the app:

00:00:00:00

Timer

Stop

Confirm

Select Parking Space:

Select Time Slot:

Estimated Rent:

Activate

**Feature Name: Renter Login**

**Feature Work: Renter login and registration**

Description: Renter have to login to rent his parking lot. He has to create an account first and register all of his information. Then he has to login and give the details eg: how many parking spaces he will provide, selecting time slot, selecting vehicle type.

Here’s a demo design of page and how the bars will look in the app:

Create Account

Name:

Address:

Email:

Mobile No:

Password:

Parking Space Location:

Create

Login

Email:

Password:

Login

Create Account

Renter:

No. of Available Parking Space:

Location of Available Parking Space:

Allowed Vehicle Types:

Activate

After reviewing options like availability of parking spaces, allowed vehicle type etc. renter will make the space **Available** and the system will mark the space available until further change.