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CSE311L.10

Project Requirement Analysis

Project Title: NSU Shuttle Service

Group No. 7

Project members:

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NSU Shutter Service

Objective and Features:

As the number of cases and the fatality rate of the coronavirus decreases, everything starts to reopen and go back to the usual routines prior to the pandemic. In doing so, a few problems arise like the transportation problem. Many students who enrol in North South university come from various districts outside Dhaka City, which is why when they move to Dhaka, they are compelled to use public transport like bus and CNG Taxis, while some use apps like Uber, Pathao etc. During rainy weather, it becomes difficult to find taxis and Uber cars, the price also increases under such circumstances. As a result, students and faculties might be late for class. This is also true for those who do not own any personal vehicle and also face the same issue.

This project has been designed to provide a solution for the aforementioned problem. It aims to make it easier for students and faculties to attend their classes without having to worry about the next day's mode of transport. The NSU Shuttle Service provides all the information required such as bus routes with pick-up points and drop off points along the route, the vehicles and drivers being used as well as the arrival and departure timings of the shuttle all in one place. It will also calculate and show the total cost of using the NSU shuttle on that particular day from their preferred pick-up points or drop-off points to or from the university respectively. These costs will be automatically added to the semester fees, which can be paid either at the end of the semester or at the start of the semester.

If a person wants to access this software, all they have to do is login to the website using their NSU ID and Password in the same way they log into the NSU RDS. This procedure is the same for all the students, faculty and staff, who want to use the service. As soon as the person logs in, they will be able to see from the database all the routes and all the related information as mentioned above (previous paragraph). After that, the user can select their preferred pick-up and drop-off points. As soon as they do this, the system will automatically calculate the total cost of the journey and show it to the user.

At the back end, the admin can speculate all the user logins as well as the number of users booking the service, the number of buses and drivers available on that day and add new vehicles or drivers if needed. The admin's main duty will be to maintain the software, change the information where needed (like changes in route or stoppage times) and fix any bugs or lags in the system.

Project Plan:

Welcome Page		
	This page will have 3 buttons: "Sign Up", "Sign in" and "Admin Login"	
Sign Up		
	Registration as Student, Faculty or Staff:	
		The signing up procedure is the same for all. They need to login with their NSU ID and password in the same way they log into NSU RDS.
Sign In		
		Once the registration is complete, they can enter the website just by using their NSU ID and password.
	Admin Sign In	
		Admins will login with the username and password provided NSU.

Account Home	
First page	
	<p>The first page (as soon as the user logs in) will contain all the information in a database like the route taken, pick-up points, drop-off points, departure and arrival times as well as vehicle and driver info.</p> <p>The user can then select his/her preferred route. As soon as they do this, the system will calculate the total cost of the journey.</p>
Second Page	
	<p>The second page will show the cost of the total journey, which the user has to confirm just by clicking on "OK" button on that page.</p> <p>When the user clicks on that button, the following message will be shown: "The booking has been confirmed."</p> <p>This action will also directly log out the user.</p>

Admin	
Duties	
	<p>Monitor user logins, total bookings. Check the number of buses and drivers available. Add new vehicles or drivers if needed. Maintain the software Change the information where needed. Fix any bugs or lags in the system.</p>
Admin Home Page	
	<p>This page will contain the entire database which will allow the admin to see the list of users who signed in and all the relevant information mentioned before.</p> <p>There will be four buttons "Add New", "Change Info", "Remove" and "Log Out".</p> <p>When "Add New" is clicked the admin can add new information like new driver, new vehicle or new route.</p> <p>When "Change Info" is clicked, the admin will change existing information.</p> <p>When "Remove" is clicked, the admin can remove existing information.</p> <p>Clicking on "Log out" will log the admin out of the system.</p>