



# North South University

## Department of Electrical & Computer Engineering

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### *PROJECT PROPOSAL*

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#### ***NSU Shuttle System***

Course Title: Software Engineering

Course Code: CSE327

Section Number: 07

#### **Submitted To:**

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**Problem statement:** The students & faculties of NSU faces issues just due to the lack of computerization. At present the student & faculties are facing lack of safe transportation while commuting from and to NSU.

### **NSU Shuttle System Objective**

- **Computerization** –Transportation service will be computerized.
- **Easy Interaction** – In today's busy lifestyle, it is difficult for students to wait for a public transportation. This service system will make transportation easier for the students; in fact it will be easier for each individual person who is associated with the system.

### **Key Features of NSU Shuttle System**

- Easy log-In System
- Responsive User Interface
- Transport Management

### **Technology stack**

- HTML
- CSS
- Python- Django framework
- React JS framework

### **Functional requirements**

- Create an account
- Manage account
- Log in to the system
- Select route
- Select pick and drop timing
- Set pickup address
- Book a seat
- Change the route
- Trip cancellation
- Show the vehicle timetables
- Real time vehicle tracking
- Confirmation sent to the specific contact details

### **NSU Shuttle System Description**

There are two types of main users will be involved in the NSU management system: Each of the users are an important entity of this management system.

- Admin (Shuttle)
- Student

## Admin

- Admin has the power to create, update or delete any record of the system under their domain.
- The admin will be able to see all the details under their domain.
- The admins of this system are like service providers; thus, they will manage all the services under each admin domain.

## Faculty

- **Transportation:** The faculties can book their ride from or to NSU through the service.

## Student

- **Transportation:** The students can book their ride from or to NSU through the service.

## Getting Started

- **Registration:** The service system will have an easy registration system; students will have to use the first 7 digits of their NSU ID & the faculties will use their initials and then they will use a password to register. The eligibility for the entered information in order to be able to register to the system will be verified and the registration will be completed.
- **Login:** After successful completion of the registration process, the user can log in to their account by entering the NSU ID and the password their provided at the time of registration. If a valid ID and according password is provided on then the user is granted access.
- **Forgot Password:** There may be a possibility that a user forgets their password. The user will be able to recover his login credentials. The user will have to enter his ID on the portal and some sequence of instructions will be sent to their NSU email ID. The user simply has to follow those instructions in order to recover the credentials.
- **Change Password:** This is also a necessary feature for the system. The user may feel that it is time to change the password for security reasons. The user can change their password whenever they want. First, they have to login into the system and provide the old password and new password.

**Conclusion:** The NSU Shuttle System is a Web application meant for easing the services for the Students and Faculties. This web application will help to run the daily Transport service smoothly. The NSU services system is developed to help the student to safely reach at NSU on time, help students and teachers save time, cut costs. This will help the students and faculties in order to managing transportation.