Software Requirements Specification (SRS)

DIU Transport

Rifat Bin Saleh

IT BANGLADESH

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MD Arafat

Managing Director

DIU Transport System

Daffodil smart city, Ashulia,Savar,

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Dear M D Arafat,

I am pleased to present the Software Requirements Specification (SRS) for the University Transport System app. This document describes the features, requirements, and acceptance criteria for the app.

The University Transport System app is a mobile application that provides students, faculty, and staff with a convenient and efficient way to get around campus. The app allows users to track buses in real time, see estimated arrival times, and plan their trips. The app also provides information about other transportation options on campus, such as bike rentals and ride sharing.

The SRS is a critical document for ensuring that the University Transport System app meets the needs of all users. I encourage you to review the SRS and provide any feedback or suggestions.

To approve the SRS, please reply to this email with your signature. If you have any questions or concerns, please do not hesitate to contact me.

Thank you for your time and consideration.

Yours Truly,

Rifat Bin Saleh

Head

Application Development Brach

IT Bangladesh

Product Name: DIU Transport

Version: 1.0

Date: 2023-09-21

1.INTRODUCTION

This SRS document specifies the software requirements for a mobile application that will provide students and staff at Daffodil International University with access to the university's transportation system. The app will allow users to:

- View real-time bus arrival times and locations
- Plan their journey and track their bus in real time
- Purchase and manage tickets
- Receive notifications about service changes and disruptions
- Provide feedback on the transportation system

1.1. OVERALL DESCRIPTION

The University Transport System App will allow users to:

- View real-time bus arrival and departure information

- Track the location of buses on a map

- Plan routes and receive travel time estimates

- Purchase bus passes and tickets

- Report problems with buses or bus stops

2. SYSTEM REQUIREMENTS

2.1. THE UNIVERSITY TRANSPORT SYSTEM APP MUST BE COMPATIBLE WITH THE FOLLOWING DEVICES:

- iOS devices running iOS 12 or higher

- Android devices running Android 6 or higher

2.2. THE APP MUST ALSO BE COMPATIBLE WITH THE FOLLOWING WEB BROWSERS:

- Google Chrome

- Mozilla Firefox

- Microsoft Edge

- GPS location

- Push notifications

- Internet access

3. FUNCTIONAL REQUIREMENTS

The following are the functional requirements for the University Transport System App:

- User authentication: Users must be able to create an account and log in to the app.
- Bus arrival and departure information: Users must be able to view real-time bus arrival and departure information for all bus stops on campus.
- Bus tracking: Users must be able to track the location of buses on a map.
- Route planning: Users must be able to plan routes between bus stops and receive travel time estimates.
- Ticket purchase: Users must be able to purchase bus passes and tickets using the app.
- Problem reporting: Users must be able to report problems with buses or bus stops using the app.

4. NON-FUNCTIONAL REQUIREMENTS

The following are the non-functional requirements for the University Transport System App:

- Performance: The app must be able to handle a large number of users and requests concurrently.
- Security: The app must protect user data from unauthorized access.
- Reliability: The app must be reliable and available to users 24/7.
- Usability: The app must be easy to use and navigate.

5. USE CASES

The following are some of the use cases for the University Transport System App:

- A student wants to check the arrival time of the next bus to their class.
- A staff member wants to plan a route to a meeting off campus.
- A faculty member wants to purchase a bus pass for the semester.
- A student wants to report a problem with a bus stop.

6. OTHER REQUIREMENTS

The University Transport System App must be compatible with all major mobile operating systems. The app must also be accessible to users with disabilities.

7. ACCEPTANCE CRITERIA

The University Transport System App will be accepted when it meets the following criteria:

- All functional and non-functional requirements are met.
- All use cases are implemented and tested successfully.
- The app is compatible with all major mobile operating systems.
- The app is accessible to users with disabilities.

8. PRIORITIZATION

The following features are prioritized as follows:

- Real-time bus tracking
- Estimated arrival times
- Trip planning
- Information about other transportation options

9. SCHEDULE

The University Transport System app is scheduled to be released in Q4 2024.

10. RESOURCES

The following resources will be required to develop and maintain the University Transport System app:

- 2 developers

- 1 QA engineer

- 1 project manager

11. RISKS

The following risks have been identified for the University Transport System project:

- The project may be delayed due to unexpected technical challenges.

- The project may exceed budget due to unforeseen costs.

- The app may not be well-received by users if it does not meet their needs.

12. MITIGATION STRATEGIES

The following mitigation strategies will be used to address the identified risks:

- The project team will develop a detailed project plan and track progress closely to identify any potential delays early on.

- The project team will develop a risk management plan and identify contingency plans for mitigating potential risks.

- The project team will conduct user testing throughout the development process to ensure that the app meets the needs of users.

13. DEPLOYMENT PLAN

The University Transport System App will be deployed to the Google Play Store and the Apple App Store. The app will be available for free download.

14. MAINTENANCE PLAN

The University Transport System App will be maintained by the university's IT department. The IT department will be responsible for fixing bugs and adding new features to the app.

15. APPROVALS

This SRS must be approved by the following stakeholders:

- University CIO

- University Transportation Director

- Student Government Association President

- Faculty Senate President

16. CHANGES

Any changes to this SRS must be approved by the stakeholders listed above.

17. CONTACT US

You can get in touch with us in any of the below ways:

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By Email:
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Agreement Signed By:

……………………………   …………………………..   ………………………

Client Signature   **Order Provider Signature**   **Authority Signature**

MD Arafat   Akber Ahmed   Rifat Bin Saleh

Managing Director   **Officer**   **Head**

DIU Transport System **IT Bangladesh**   **Application Development Brach**

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