

Web Application Project Progress

CSE309 - Sec-4

Autumn 2024

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Project Supervisor	Email	Contact

*Write supervisor's information. Check group wise supervisor list for details

Project Title: (Write your project title here)
Routewise - A Dhaka Intra City Travel Assistance Platform
Abstract: (Write your project idea including problem statement, solution of the problem, impact of the solution to the user and challenges faced for further development)
<p>Routewise is a comprehensive user-friendly and responsive website designed to provide detailed public transport information for commuters in Dhaka, Bangladesh. The platform focuses on guiding users through intra-city public bus and rapid transit systems while offering valuable resources catered to locals and foreigners. An overview of the website's functionality and components include:</p> <ul style="list-style-type: none">• An engaging homepage with feature to find the right bus on the right route, with applicable filters• Ability to purchase a monthly bus pass for unlimited rides on purchased routes• Local bus routes information with detailed listings• Information on Bus Rapid Transit (BRT) and Mass Rapid Transit (MRT) lines• Dedicated transit-related information pages, such as interactive maps, a foreigner guide, and safety notices.• Contact Us page for platform-related queries

Tentative Task List for the Project:

(List all breakdown of tasks to complete your project. Try to break tasks in smallest unit possible)

SI	Task Name	Start date	End Date	Comment
1	Brainstorm for ideas and decide project topic	30/Sep/24	8/Oct/24	
2	Review existing literature, perform real-life scenario observations, and conduct interviews by purposive sampling	9/Oct/24	16/Oct/24	Requirements Elicitation
3	Compile gathered info. to finalize project scope and requirements; Set SMART objectives and ensure requirements are consistent, traceable, verifiable, and feasible.	17/Oct/24	19/Oct/24	Requirements Analysis
4	Write introduction section of System Requirements Specification (SRS)	20/Oct/24	21/Oct/24	Requirements Specification
4	Design the website homepage with main functionality in HTML for rough idea. Decide on consistent styling to maintain a universal css file for the whole website.	22/Oct/24	24/Oct/24	Prototyping
5	Write Overall (Product) Description section of SRS document (doc.)	25/Oct/24	26/Oct/24	Requirements Specification
6	Write System Features section of SRS doc.	27/Oct/24	28/Oct/24	
7	Write External Interface Requirements section of SRS doc.	29/Oct/24	30/Oct/24	
8	Write Non-Functional and Other Requirements, and complete Appendix sections of SRS doc.	31/Oct/24	1/Nov/24	
9	Complete front-end design for homepage and main functionality	2/Nov/24	4/Nov/24	Front End Design and Framework
10	Complete front-end design for Local Bus Routes page	5/Nov/24	5/Nov/24	
11	Complete front-end design for Information section including Map	6/Nov/24	7/Nov/24	

	of Dhaka, Safety, and Foreigner Guide pages			
12	Complete front-end design for Rapid Transit section including MRT and BRT pages	8/Nov/24	8/Nov/24	
13	Complete front-end design for About Us and Contact Us pages. Make final CSS and mobile responsiveness adjustments.	9/Nov/24	9/Nov/24	
14	Ready presentation for SRS document and project front-end demonstration	10/Nov/24	11/Nov/24	Initial Presentation and Demo
15	Make minor adjustments based on presentation feedback	12/Nov/24	14/Nov/24	
16	Convert .html files to .php to handle dynamic data and changes	15/Nov/24	16/Nov/24	Back-end Functionality with Modifications and Restructuring based on Feedback
17	Integrate minor javascript functionality to improve styling and user friendliness	17/Nov/24	18/Nov/24	
18	Formulate relational schema to map relevant data and tables to maintain data	19/Nov/24	21/Nov/24	
19	Modify SRS document to include Bus Pass functional requirement, and consequential changes as per feedback	21/Nov/24	25/Nov/24	
20	Implement back-end to maintain bus and bus route data through CSV file reading and editing via php	26/Nov/24	30/Nov/24	Redundant, refer to SI.21
Started Progress Document; Start of Final Term				
21	Reimplement back-end using mySQL to maintain data on buses and bus routes.	1/Dec/24	5/Dec/24	Database Schema Implementation
22	Implement JavaScript code for filtering of buses and routes	6/Dec/24	8/Dec/24 (Revised: 15/Dec/24)	Implementation of Feature Updates and Restructuring based on
22	Add front-end features and relevant pages for bus pass functionality.	9/Dec/24	12/Dec/24	

23	Implement back-end tables in MySQL for bus pass, Make Bus Pass Operations Functional	11/Dec/24	15/Dec/24 (Revised: 17/Dec/24)	Feedback
24	Add Functionality for Identifying Recommended/Fastest Route	16/Dec/24	17/Dec/24 (Revised: 20/Dec/24)	
25	Make new features mobile responsive	18/Dec/24	20/Dec/24	
26	Populate database: Add buses and stations for proper functionality	20/Dec/24	20/Dec/24	CRUD Implementation
27	Create Admin CRUD Pages for feedback handling, database management	21/Dec/24	27/Dec/24	
28	Break for New Years, Holidays and Studying for Final Exams	28/Dec/24	3/Jan/25	
29	Final touch ups and testing	4/Jan/25	6/Jan/25	Testing and Deployment
30	Create Final Presentation and Adjust Final SRS Document as per newly given format	7/Jan/25	9/Jan/25	Final Presentation and Demo

Task Progress & Evaluation for (up to) 4th December 2024 (Mid-Term) :

(Write your progress from last update till date)

From Date:	30th September 2024	To Date:	4th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Project Topic Selection and Requirements Elicitation	Narrowing down the project topic, finding research papers relevant to Bangladesh, finding a diverse set of people to interview, and managing conflicting requirements.	Done	30th September to 16th October
Requirements Analysis and SRS Documentation	Difficulty in ensuring consistency across the project, its use cases, and requirements. Also hard to assess feasibility before implementation.	Done	17th October to 1st November
Front-End Development	Ensuring design consistency, handling map API integration, resolving responsive design issues. Some parts are difficult to envision without back-end integration.	Done	2nd November to 9th November
Preparation of Presentation and Demo	Difficult to reduce lots of content from SRS to a few slides and translate technical information into comprehensible ideas and features.	Done	10th November to 11th November
Addition of New Features after Feedback and JavaScript Integration	Remodifying the SRS document and maintaining consistency, restructuring webpages to accommodate new	Ongoing (Update: Done)	12th November Onwards

	features.		
Back-End Integration	Had to switch from CSV based data management to mySQL, Mapping out relational schema, Integrating SQL code with project files	Ongoing (Update: Done)	26th November Onwards

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
So far, I have been able to learn a lot about both technical and non-technical aspects of project development, including the importance of time management, step-by-step development, and the ability to adapt based on feedback. I am happy with my current progress and pace, but I recognize there are still areas, particularly in back-end integration and optimization, that I still need to work on. Moving forward, I aim to continue to focus on delivering a well-rounded and fully integrated project.	

Task Progress & Evaluation for 5th-8th December 2024 :

(Write your progress from last update till date)

From Date:	5th December 2024	To Date:	8th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Reimplement Backend (Creating Tables and Establishing Connections)	Creating the tables in mySQL based on my originally designed relational schema, Connecting mySQL with my web application, ensuring CRUD queries work as expected	Done	1st December to 5th December
JavaScript for filtering busses and routes	Difficulties in coding as it was my first time working with JavaScript. Currently stalled and focusing on learning JS.	Ongoing (Update: Done)	6th December +

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
Although I encountered challenges with the JavaScript components, I successfully reimplemented the backend with MySQL, and ensured connectivity with my web application for CRUD operations. I am satisfied with the backend progress as it has made the website a lot more complete and created the foundation to fulfill my functional requirements. In the meantime, I hope to improve my skills in JS to implement the remaining planned features.	

Task Progress & Evaluation for 9th-12th December 2024 :

(Write your progress from last update till date)

From Date:	9th December 2024	To Date:	12th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Front-end Features and relevant Pages for Bus Pass including mock Payment Gateway, Application, Verification, and Download Pass Page	Did not face any challenges	Done	9th December to 12th December
Implement back-end tables in mySQL for bus pass services and write code to create bus pass, verify bus pass, print bus pass	Just started; no challenges yet	Ongoing (Update: Done)	11th December +

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
<p>During this period, I successfully completed the front-end features for bus pass services, which included developing key pages like the form, payment gateway, verification process, and the ability to download the pass. This was accomplished without significant challenges, given most styling related work was completed in mid-term.</p> <p>The back-end implementation for bus pass services, involving MySQL table creation and coding functionalities for creating, verifying, and printing passes, is currently ongoing. Progress has been steady so far, and I</p>	

anticipate completing this task soon.	
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Task Progress & Evaluation for 12th to 15th December 2024 :

(Write your progress from last update till date)

From Date:	12th December 2024	To Date:	15th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
JavaScript for filtering busses and routes	Had to get used to coding with JavaScript and DOM mechanics. Conflicting scripts prevented some other functionalities in navbar; had to be fixed.	Done	6th December - 15th December
Implement back-end tables in mySQL for bus pass services and write code to create bus pass, verify bus pass, print bus pass	Some persistent conflicting scripts and complications in joining tables to get the expected results when submitting the form. Figuring out how to integrate payment as well.	Ongoing (Update: Done)	11th December +

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
This week marked significant progress in JavaScript functionality, where I successfully implemented filtering for buses and routes. While learning JavaScript and managing DOM mechanics was challenging, resolving script conflicts in the navbar was a valuable learning experience that improved my understanding of script integration in a web application.	

<p>The back-end work for bus pass services remains a work in progress due to challenges in joining tables and achieving the desired results on form submission. Additionally, integrating the payment gateway has introduced new complexities, which I am actively working to resolve. Overall, the project is advancing steadily, with major milestones achieved and ongoing efforts to address back-end challenges.</p>	
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Task Progress & Evaluation for 16th to 20th December:

(Write your progress from last update till date)

From Date:	16th December 2024	To Date:	20th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Add Functionality for Identifying Recommended/Fastest Route	Had to find a way to update recommended route after filtering results already filtered and retrieved from database	Done	16th December - 20th December
Make new features mobile responsive	Had forgotten about making pages responsive, so had to spend a decent amount of time to make all pages consistently responsive	Done	18th December - 20th December
Populating the database	Was a bit tedious to add all the stations in order for each bus in the database, but worth it since it is a one-time effort	Done	20th December

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
This week focused on improving user experience by adding functionality to identify the recommended or fastest routes, populating the database, and making the site mobile responsive. Both tasks presented challenges: the recommended route feature required handling dynamically filtered data,	

while ensuring consistent responsiveness demanded revisiting all pages and making adjustments.

Despite these challenges, both tasks were completed successfully within the planned timeframe. These improvements significantly enhance the project's usability and accessibility. Overall, I am satisfied with this week's progress as it has made the project more refined and closer to being finished or "deployment-ready".

Task Progress & Evaluation for 21st to 27th December:

(Write your progress from last update till date)

From Date:	21st December 2024	To Date:	27th December 2024
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Create Admin Page for CRUD Operations on buses table	Had to develop a new stylesheet for admin pages. Had to ensure that inputs were collected and sent in correct formats according to how tables in database were created for successful operations.	Done	21st December - 27th December
Create Admin Page for CRUD Operations on stations table	Fairly easy after making the CRUD page for buses table		
Create Admin Page for CRUD Operations on bus_stations table			
Create Admin Page for viewing feedback and contacted messages from contacts table			

Evaluation of Project Progress:

Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
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This week, I dedicated extra time and effort to tackle multiple tasks, aiming to complete most or all of the remaining project components before the holiday season and final exams. The focus was on creating admin pages for CRUD operations and feedback management, which are critical for project functionality.

While the buses table CRUD page required more effort due to styling and data formatting challenges, the experience streamlined the creation of similar pages for the stations and bus_stations tables. Viewing feedback and contact messages was a straightforward task that completed the admin interface.

Completing these tasks marks a significant milestone in the project, with the foundation for admin-side functionality fully established. I am satisfied with this week's progress, as it positions the project for a smooth wrap-up in the coming weeks.

Task Progress & Evaluation for 28th December to 3rd January 2025:

(Write your progress from last update till date)

From Date:	28th December 2024	To Date:	3rd January 2025
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Break for Studying for Final Exams, Holidays, New Years	N/A	Done	28th December - 03rd January 2025

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)
<p>Given the extra effort I put in last week, I was able to finish a lot of tasks ahead of schedule. That made it easier to step away from the project for a bit to focus on final exams and deadlines as well as celebrating the new year.</p> <p>Overall, I feel good about the current state of the project. The project is almost complete, and I'm ready to continue after the break.</p>	

Task Progress & Evaluation for 4th to 8th January:

(Write your progress from last update till date)

From Date:	4th January 2025	To Date:	9th January 2025
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Progress Details			
Task Breakdown (task from the breakdown list)	Challenges (during working on the task)	Status (Ongoing/Done)	Comment
Final Testing and Minor Edits	Debugging edge cases like unexpected input and navigation during testing took longer than expected. Small UI inconsistencies had to be fixed for a polished look.	Done	4th January - 6th January
Adjust Final SRS Document as per newly given format	Reorganizing content to fit the new format required attention to detail to ensure all key information was included and updated consistently.	Done	7th January - 8th January
Create Final Presentation	Did not face any challenges	Done	7th January - 9th January

Evaluation of Project Progress:	
Self-evaluation (Write your own evaluation)	Project Supervisor (Evaluation by the supervisor)

This week was focused on wrapping up the project. Final testing revealed a few bugs and UI concerns, but those were quickly resolved. Updating the SRS document and preparing the final presentation took time, as I wanted to ensure everything was consistent and well presented.

Overall, I'm proud of how the project turned out. It was a challenging but rewarding experience as it taught me a lot from backend development and database design to improving my JavaScript and front-end skills.