Sri Lanka Institute of Information Technology

PROJECT CHARTER

The purpose of this form is to allow 2nd year students of the B.Sc. (Hon) degree program to enlist in the 2nd year project group. The description of the project entered on this form will not be considered as the formal project proposal. It should however indicate the scope of the project and provide the main potential outcome.

PROJECT TITLE	Train Ticketing and Tracking mobile application

GROUP NUMBER	PEP_10

PROJECT GROUP MEMBER DETAILS: (Please start with group leader's details)

	STUDENT NAME	STUDENT NO.	CONTACT NO.	EMAIL ADDRESS
1	Widanage W.T.N.	IT21377426	0705240051	it21377426@my.sliit.lk
2	H.K.K.T. Bandara	IT21176074	0774530171	it21176074@my.sliit.lk
3	M.M.R.S. Costa	IT21212154	0767091471	it21212154@my.sliit.lk
4	Perera M.R.D.	IT21359088	0776929394	it21359088@my.sliit.lk
5	S.M.T.S. Senarathna	IT21337512	0713556355	it21337512@my.sliit.lk

PROJECT DETAILS

1. INTRODUCTION

1.1 Purpose of Project Charter:

The Train Ticketing and Tracking mobile application project charter documents and tracks the necessary information required by decision maker(s) to approve the project for funding. The project charter should include the needs, scope, justification, and resource commitment as well as the project's sponsor(s) decision to proceed or not to proceed with the project. It is created during the Initiating Phase of the project.

2. BRIEF DESCRIPTION OF YOUR PROJECT

2.1 Project description

The Train Ticketing and Tracking mobile application is a user-friendly platform that enables train passengers to purchase tickets and track their trains in real-time. The application is targeted towards commuters who rely on trains as a mode of transportation. It will be available for download on Android platforms. The project will be developed by a team of 2nd year undergraduates, and it is scheduled to launch within the next 6 months. The application will be accessible to users in Sri Lanka, with a primary focus on regions with high demand for train travel.

2.2 Project objectives

To create a user-friendly mobile application that allows users to purchase train tickets and track trains in real-time, achieve a user count of 10,000 and sell a minimum of 10,000 train tickets per month, all within one year of launching the application.

3. JUSTIFICATION

3.1 Business Need

By creating a mobile application that meets the needs of train passengers, the project can help increase the overall efficiency of train travel, improve the customer experience, and increase customer loyalty. Additionally, by providing accurate tracking information, the application can help reduce the number of customer service queries and complaints, which can result in cost savings for train operators. Ultimately, the business need for the project is to provide a reliable and convenient ticketing and tracking system that meets the needs of both train passengers and train operators.

3.2 Business Impact

The Train Ticketing and Tracking mobile application can have a positive impact on the business by improving customer satisfaction, increasing revenue, and providing a competitive advantage.

4. SCOPE

4.1 Description of the Solution:

1. Ticket booking: The application will allow users to search for available train schedules, select their desired travel dates and times, and book their tickets. Users will be able to choose from different fare classes and seating options.
2. Payment gateway integration: The application will be integrated with a payment gateway, allowing users to make secure payments directly from the application using their preferred payment method.
3. Train tracking: The application will integrate with train tracking systems, enabling users to track the status of their trains in real-time. Users will be able to view train schedules, departure and arrival times, and delays.
4. User account management: Users will be able to create and manage their accounts, view their booking history, and save their payment and travel preferences.
5. Admin panel: The client will have access to an admin panel that will allow them to manage ticket sales, view analytics, and make changes to the application.

4.2 Main Expected Outcomes of the Project:

1. Improved customer experience: The application will provide a user-friendly platform for train passengers to purchase tickets and track their journey progress, leading to an improved customer experience.

2. Increased efficiency: By providing accurate tracking information, the application can help reduce the time and effort required for train operators to manage customer service queries and complaints, leading to increased efficiency.

3. Increased revenue: The application aims to sell a minimum of 10,000 train tickets per month, leading to increased revenue for train operators.

4. Increased customer loyalty: By meeting the needs of train passengers and providing a reliable and convenient ticketing and tracking system, the application can help increase customer loyalty.

4.3 Boundaries:

The inclusive boundaries of the Train Ticketing and Tracking mobile application project are focused on the development of a user-friendly platform for train passengers to purchase tickets and track their journey progress in. The following items fall within the scope of the project:
1. Development of the mobile application for Android platforms
2. Design of a user-friendly interface and user experience
3. Integration with tracking systems for train schedules and delays
4. Testing, bug fixing, and deployment of the application
However, there are certain items that fall outside the scope of the project and are considered exclusive boundaries. These include:

1. Physical infrastructure or hardware required for train travel, such as the trains themselves, ticket counters, or ticket validation machines.
2. Marketing and advertising campaigns to promote the application to potential users.
3. Integration with third-party applications or systems that are not directly related to the functionality of the application, such as hotel booking or car rental services.
4. Legal compliance and regulations related to train travel, such as government regulations or data privacy laws.
5. Customer support and maintenance of the application after the launch phase.

These items are considered out of scope and will not be included in the project plan, budget, or timeline. However, they may be considered for future enhancements or updates to the application.

5. BUDGET & TIME ESTIMATIONS

5.1 Executive Milestones:

1. Project Planning and Design (3 weeks): This phase involves defining project objectives, creating a project plan, designing the user interface and user experience, and identifying the required resources for the project.
2. Development (6 weeks): This phase involves the actual development of the mobile application, including coding, integration of payment gateway, integration of tracking systems, and implementation of push notifications.
3. Testing (2 weeks): This phase involves testing the application for bugs, errors, and performance issues. It includes user acceptance testing, functional testing, and performance testing.
4. Deployment (3 weeks): This phase involves deploying the application to the app store, making it available for download to users worldwide.

However, these timelines are subject to change based on unforeseen circumstances, such as technical difficulties, delays in testing, or changes in user requirements.

5.2 Budget Estimation:

Object Code	Budget Item	Total
11/12	Development cost	$30,000.00
20	Printing cost	$20.00
21	Internet bill and other utilities	$120.00
22	Transportation of things…..	$500.00
23	Rent, Telecom, Other Comm & Utilities…..	$250.00
24	Printing & Reproduction……	$50.00
26	Supplies……	$20.00
31	Equipment……	$60.00
41	Grants/Cooperative Agreements……	$80.00
	Total	**$31,100.00**

6. ASSUMPTIONS, CONSTRAINTS AND RISKS

Assumptions:

1. Availability of required resources: The project assumes the availability of required resources such as human resources, technology, and financial resources.
2. Availability of train tracking systems: The project assumes the availability of train tracking systems and APIs that can be integrated with the application.
3. Compatibility with different devices and operating systems: The project assumes that the application will be compatible with different devices and operating systems.
4. User adoption: The project assumes that there will be a sufficient number of train passengers who are willing to use the application.

Constraints:

1. Technical limitations: The project may be constrained by technical limitations such as limited server capacity or outdated technology.
2. Legal compliance: The project must comply with relevant laws and regulations such as data privacy laws, and this may impose certain constraints on the project.
3. Time constraints: The project must be completed within the given time frame and budget, which may impose certain constraints on the project.
4. Integration with third-party systems: The project may face constraints in integrating with third-party systems that are not compatible with the application.
5. Availability of train schedules and delays: The project may be constrained by the availability and accuracy of train schedules and delays.

Risks:

1. Technical risks: There may be technical risks associated with the development of the application, such as security breaches or server downtime.
2. User acceptance: There may be a risk that train passengers may not adopt the application, resulting in lower-than-expected usage and revenue.

3. Legal risks: There may be legal risks associated with compliance with relevant laws and regulations, such as data privacy laws or intellectual property laws.

7. WORKLOAD ALLOCATION (Please provide a brief description about the workload allocation)

MEMBER 1	IT21337512 - S.M.T.S. Senarathna
Perform CRUD operations for passenger app	

MEMBER 2	IT21176074 - H.K.K.T. Bandara
Perform CRUD operations for admin app	

MEMBER 3	IT21359088 - Perera M.R.D.
Database handling & Testing and deployment	

MEMBER 4	IT21377426 – Widanage W.T.N.
Design and implement user interface of system	

MEMBER 5	IT21212154 - M.M.R.S. Costa
Database handling & Testing and deployment	

DECLARATION

"We declare that the project would involve material prepared by the Group members and that it would not fully or partially incorporate any material prepared by other persons for a fee or free of charge or that it would include material previously submitted by a candidate for a Degree or Diploma in any other University or Institute of Higher Learning and that, to the best of our knowledge and belief, it would not incorporate any material previously published or written by another person in relation to another project except with prior written approval from the lecturer of the module and that such unauthorized reproductions will construe offences punishable under the SLIIT Regulations.

We are aware, that if we are found guilty for the above-mentioned offences or any project related plagiarism, the SLIIT has right to suspend the project at any time and or to suspend us from the examination and or from the Institution for minimum period of one year".

	STUDENT NAME	STUDENT NO.	SIGNATURE
1	Widanage W.T.N.	IT21377426	
2	H.K.K.T. Bandara	IT21176074	
3	M.M.R.S. Costa	IT21212154	
4	Perera M.R.D.	IT21359088	
5	S.M.T.S. Senarathna	IT21337512	