

Project Code :

BITU 2913



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**  
**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY**

**WORKSHOP 1**  
**PROPOSAL FORM**

*[Incomplete form will be rejected]*

<b>A</b>	<b>TITLE OF PROPOSED PROJECT:</b> <i>Tajuk projek yang dicadangkan :</i> <b>Travel Express Bus Reservation System</b>  <b>Project Domain:</b> <i>Domain Projek:</i> <input type="checkbox"/> BUSINESS & SERVICES <input type="checkbox"/> HEALTHCARE <input checked="" type="checkbox"/> TRANSPORTATION <input type="checkbox"/> COMMUNITY SERVICESS <input type="checkbox"/> AUTOMOTIVE <input type="checkbox"/> AGRICULTURE <input type="checkbox"/> OTHERS : _____
<b>B</b>	<b>DETAILS OF STUDENT / MAKLUMAT PELAJAR</b>
<b>B(i)</b>	<b>Name of Student: Identity card no.:</b> <i>Nama Pelajar:No. Kad Pengenalan :</i> <b>Waleed Isskandar Alawi Almandari - 11924775</b> <b>Student matric no.:</b> <b>No. Matrik Pelajar : B032220031</b>  <b>Programming Technique (BITP 1113) Grade :</b> <i>Gred Teknik Pengaturcaraan (BITP 1113) :</i> <input checked="" type="checkbox"/> A <input type="checkbox"/> A- <input type="checkbox"/> B+ <input type="checkbox"/> B <input type="checkbox"/> B- <input type="checkbox"/> C+ <input type="checkbox"/> C <input type="checkbox"/> C- <input type="checkbox"/> D
<b>B(ii)</b>	<b>Correspondence Address : Melaka – Ayer Keroh – Bukit Beruang – University Green Aparments</b> <i>Alamat Surat Menyurat :</i>
<b>B(iii)</b>	<b>Course:</b> <i>Kursus:</i> <input type="checkbox"/> BITC <input type="checkbox"/> BITZ <input type="checkbox"/> BITE <input checked="" type="checkbox"/> BITI <input type="checkbox"/> BITM <input type="checkbox"/> BITS <input type="checkbox"/> BITD
<b>B(iv)</b>	<b>Home Telephone No.:</b> <i>No. Telefon Rumah:</i>  <b>Handphone No.:</b> <i>No. Telefon Bimbit:</i> <b>01111602030</b>

B(v)	<b>E-mail Address:</b> <i>Alamat e-mel: B032220031@STUDENT.UTEM.EDU.MY</i>
C	<b>PROJECT INFORMATION / MAKLUMAT PROJEK</b>
C(i)	<b>Duration of this project:</b> <i>Tempoh masa projek ini:</i>  <div style="margin-left: 40px;"> <b>Duration:</b> <u>14 Weeks</u>  <i>Tempoh :</i> </div> <div style="margin-left: 40px;"> <b>From</b> : <u>9/03/2024</u>  <i>Dari</i> : </div> <div style="margin-left: 40px;"> <b>To</b> : <u>14/6/2024</u>  <i>Hingga</i> : </div>
C(v)	<b>Executive Summary of Project Proposal (maximum 300 words)</b> <b>(Please include the background of project, problem statements, objectives, scope and project significance from the project)</b>  <i>Ringkasan Cadangan Eksekutif Projek (maksima 300 patah perkataan)</i> <i>(Meliputi latar belakang projek, pernyataan masalah, objektif dan kepentingan projek)</i>  <b>Background:</b>  <p>Our project aims to develop a user-friendly bus booking system using C++ to address the shortcomings of existing systems in Malaysia, which often lack comprehensive features and user-friendliness.</p> <b>Problem Statements:</b>  <p>Current bus booking systems suffer from limited functionalities, poor user interfaces, and inefficient administrative processes, resulting in dissatisfaction among users and operational inefficiencies.</p> <b>Objectives:</b>  <ol style="list-style-type: none"> <li>1-Develop a user-friendly system for booking trips to various Malaysian destinations.</li> <li>2-Implement seamless seat selection and booking features.</li> <li>3-Enable easy ticket cancellation with appropriate refund policies.</li> <li>4-Empower administrators with efficient trip management functionalities.</li> <li>5-Ensure robust security measures to protect user data and system integrity.</li> </ol> <b>Scope:</b>  <p>The system will include user interfaces for passengers and administrators, supporting trip browsing, seat selection, booking, and management. It will cover multiple destinations within Malaysia and provide real-time availability updates.</p> <b>Project Significance:</b>  <p>The developed system will revolutionize the Malaysian travel experience by offering a streamlined platform for booking bus tickets, enhancing user satisfaction, and improving operational efficiency for bus operators. It will contribute to the digitization of Malaysia's transportation sector, aligning with national goals for technological advancement and improved service delivery.</p>

C(vi)

**Detailed proposal of project:**

*Cadangan maklumat projek secara terperinci:*

**(a) Project background including Introduction and Problem Statements**

*Keterangan latar belakang projek termasuk pengenalan dan pernyataan masalah.*

1. **Introduction :** *Our project's goal is to use C++ to create a modern bus reservation system that will satisfy Malaysia's growing need for effective transit options. Using advanced technology and customer-centric design concepts, our goal is to provide a platform that makes booking easier and increases customer happiness in general.*
2. **Problem Statements:** *current bus reservation systems have drawbacks that affect both users and operators. Finding trips, navigating complex interfaces, and effectively managing reservations present difficulties for users. Manual administrative procedures take a lot of time and are prone to mistakes, like seat allocation and trip management. In order to improve Malaysia's bus service and improve the travel experience, solving these difficulties requires a strong system with advanced capabilities such as real-time seat availability and streamlined administrative procedures.*

**(b) Objective (s) of the Project**

*Objektif Projek*

**Example / Contoh:**

***This project embarks on the following objectives:***

- 1-*To develop a user-friendly bus booking system using C++, ensuring a streamlined booking process and enhanced user satisfaction.*
- 2-*To assess current shortcomings in bus booking systems, identifying areas for improvement.*
- 3-*To recommend enhancements based on the assessment, improving features like real-time updates and efficient trip management for better user experience and operational efficiency.*
- 4-*Provide suitable refund rules to facilitate simple ticket cancellations.*

**(c) Scope:**

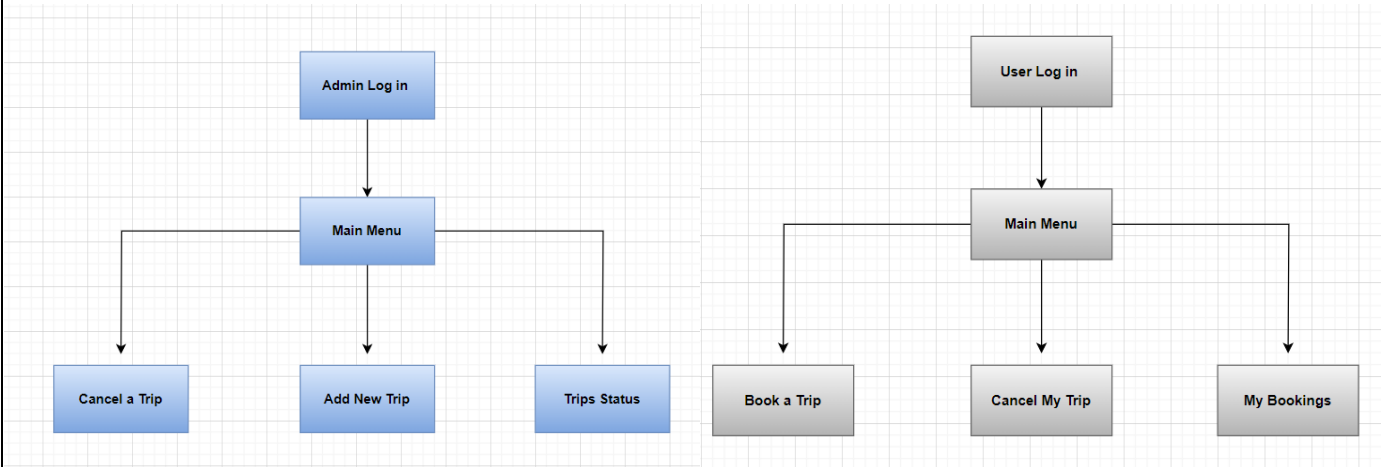
- 1-*Develop user interfaces for passengers and administrators*
- 2-*Enable booking, seat selection, and cancellation functionalities.*
- 3-*Provide tools for efficient trip management for administrators.*
- 4-*Cover multiple destinations within Malaysia.*
- 5-*Implement real-time updates on seat availability and trip status.*

**(d) Problem Decomposition Description**

*Deskripsi Penguraian Masalah*

- 1-*Designing user interfaces.*
- 2-*Implementing booking functionalities.*
- 3-*Developing administrative tools.*
- 4-*Planning destination coverage.*
- 5-*Integrating real-time updates.*

(e) **Structured Chart**  
Carta Berstruktur



(f) **Project Significance**  
Kepentingan projek

This project is important because it aims to provide an easy-to-use bus booking system, therefore changing the travel experience in Malaysia. Our goal is to improve customer satisfaction, improve operating procedures for bus operators, and streamline the booking process, all while addressing the issues administrators and passengers face with current systems. In line with national goals for technological advancement and better service delivery, we hope to make travel easier and more efficient by promoting the adoption of digital technology in the transportation industry.


(g) **Gantt Chart of Project Activities**  
Carta Gantt Aktiviti Projek

no.	task	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
1	PROPOSAL														
2	ANALYSIS														
3	PROGRESS1														
4	PROGRESS2														
5	PROGRESS3														
6	PRESENTATION														
7	FINAL REPORT														

**D REFERENCES**

- Programming Technique (BITP 1113)
- Data Structure And Algorithms (BITP1123)
- Database (BITP1323)
- Malik, D. S., "C++ Programming: Program Design Including Data Structures", 8th edition, Cengage Learning, 2018.

<b>E</b>	<b>ACCESS TO EQUIPMENT AND MATERIAL (PLEASE LIST IN DETAIL) / KEMUDAHAN SEDIA ADA UNTUK KEGUNAAN BAGI PROJEK INI (SILA SENARAikan DENGAN TERPERINCI)</b>	
	<b>University</b> <i>Universiti</i>	<b>Other Sources or Places</b> <i>Lain-lain tempat/sumber</i>
	<b>Example / Contoh:</b>  <b>Software:</b>  <i>ER Assistant, Microsoft Visual C++, Microsoft Visual Basic, Microsoft Access</i>	

<b>F (i)</b>	<b>Declaration by student/ Akuan Pelajar</b>
	<div> <div> <b>Date :</b>  <i>Tarikh : 18/03/2024</i> </div> <div> <b>Student's Signature :</b>  <i>Tandatangan Pelajar :</i>  </div> </div>