DESIGNING THE ARCHITECTURE OF THE SYSTEM

<<Bus Management Application>>

List of members

01

Nde Dilan

02

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Noah Frederic

Madick Cesar

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Yann

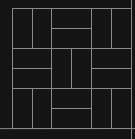
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Joshua

1 What's the project's goals and objectives?

Designing an application always start with settling goals and objectives:

 The goal of the project is to design and develop software for managing the bus service at our university. To accomplish this goal, we have a set of objectives. Initially, we aim to create a comprehensive service subscription system for students, allowing them to easily enroll in the bus service through their preferred channels, such as online payment or cash. As a secondary goal, we intend to enable students and the university to effortlessly locate and track the bus in real-time using the software.



1 Identifying the tasks and activities that need to be completed oin order to complete project's objectives?

To complete those two objectives, we divided them into O5 tasks for the first objective which WaS < Establish a Complete Service Subscription System for Students > and O7 tasks for the second one which was <Enable Real-Time Localization and Tracking of the Bus >.

Stages		Week 1	Week 2	Week 3	Week 4
1	December	Design User In			
2	December	Develo			
3	January	Impleme	ent Subscription Re	cord Management	System
4	January				

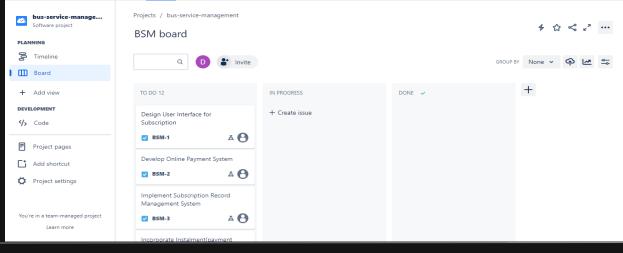
Enable Real-Time Localization and Tracking of the Bus>.

Stages		Week 1	Week 2	Week 3	Week 4		
1	December	Develop Bus Info					
2	December	Create System	n				
3	December	Impleme					
4	January						

OS Creating a schedule for the tasks and activities.

Every project need a schedule, it's why our team used the Jira software and its tools to create our own and to manage the project.

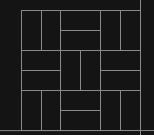
Bus Management System Jira Workspace





O4 Estimating the time and resources needed to complete the project

To estimate the time and resources needed to complete our project, we used a PERT and a GANT chart.



Develop Online Payment Mon 25/12/ Wed 27/12/ Implement Subscription Record Management Validate Student Design User Interface for Eligibility Subscription Fri 22/12/23 Mon 25/12/ 23 Wed 27/12/ Thu 28/12/ Tue 02/01/ Wed 03/01/ Incorporate Instalment Payment Option

Fri 29/12/23 Mon 01/01/

PERT Chart

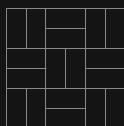
Management System Fri 05/01/24 Tue 09/01/

24

Develop Bus Information

Create Driver and Conductor Information Wed 10/01/ Fri 12/01/24 Implement Real-Time Bus Define Bus Stops and Tracking System Mon 15/01/ Thu 18/01/ Fri 19/01/24 Mon 22/01/ 24

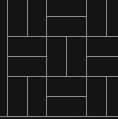
Analyse Bus Departure Fri 26/01/24



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GANT Chart

					January 2024				`										
Task Name ▼	Duration -	Start -	Finish 🔻	Predecessors ▼	10 2	1 23	1 25 1	27 29				1.08	10 1	2 14	16	18	20	22 2	M 26
Design User Interface for Subscription		Fri 22/12/23	Mon 25/12/23	Predecessors V	15 2	- 23		27 23	75.	- 02 · 0.	00	- 00	70	- 14	10	-10	20		
Develop Online Payment System	3 days		Wed 27/12/23																
Implement Subscription Record Management System	2 days	Wed 27/12/23	Thu 28/12/23																
Incorporate Instalment Payment Option	2 days	Fri 29/12/23	Mon 01/01/24																
Validate Student Eligibility	2 days	Tue 02/01/24	Wed 03/01/24																
Develop Bus Information Management System	3 days	Fri 05/01/24	Tue 09/01/24																
Create Driver and Conductor Information System	3 days	Wed 10/01/24	Fri 12/01/24											ı					
Implement Real-Time Bus Tracking System	4 days	Mon 15/01/24	Thu 18/01/24											•					
Define Bus Stops and Routes	2 days		Mon 22/01/24																
Analyse Bus Departure Algorithm	4 days	Tue 23/01/24	Fri 26/01/24																

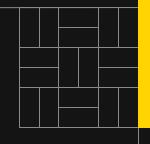


List of resources

The following is the list of our needed resources

Name	Description	Unit Price	Quantity	Total Price		
Computers	4Gb at least and 2,31Hz	200000	200000 20			
Modem	4G Network , High Speed	20000	10	200000		
GPS	High Quality	45000	15	675000		
Chairs	Good quality office chairs	150000	19	2850000		
Cables	100 meters long each	50000	10	500000		
Total		465000	74	34410000		

So the budget of our project is estimated to 34,410,000 FCFA



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Thanks for your kind attention.