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Student Reference Number: 10898586

Module Code: PUSL2021	Module Name: Computing Group Project
Coursework Title: Tuition Class Management System	
Deadline Date: 25/10/2023	Member of staff responsible for coursework: Mr. Pramudhya Thilakarathne
Programme: Computing Group Project	
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<p>Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.</p> <p><u>Group 82</u>  10898586 - Thuduwe Pehesara  10898418 - Hetti Avishka  10898708 - Ramboda Wijerathna  10899688 - Wickramaarachchige Sayuranga  10899581 - Dushan Karunathilaka</p> <p><b><i>We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.</i></b></p> <p>Signed on behalf of the group:</p>	
<p>Individual assignment: <b><i>I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.</i></b></p> <p>Signed :</p>	
<p>Use of translation software: failure to declare that translation software or a similar writing aid has been used will be treated as an assessment offence.</p> <p>I *have used/not used translation software.</p> <p>If used, please state name of software.....</p>	
<p><b>Overall mark</b> _____ <b>%</b>      <b>Assessors Initials</b> _____      <b>Date</b> _____</p>	

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# Tuition Class Management System

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## Computing Group Project

PUSL 2021

Plymouth Badge 11

(Group 82)

10898586 - Thuduwe Pehesara

10898418 - Hetti Avishka

10898708 - Ramboda Wijerathna

10899688 - Wickramaarachchige Sayuranga

10899581 - Dushan Karunathilaka

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# Overview / Introduction

## Tuition Class Management System

We present to you a project proposal aimed at ushering in a new era of tuition management where education in Sri Lanka embraces modern technology and innovation. Our team introduces a software that will redefine the field of assisted education.

Our team's primary objective is to add new technology to traditional tuition institutions. We expect this project to empower tuition institutions in Sri Lanka to operate with high accuracy, unmatched efficiency and remarkable speed. The project will simplify administrative processes for teachers and institutions while ensuring a seamless process for every student.

The origins of this project lie in our experiences as former tuition students. Let's understand things like waiting in long queues for manual attendance marking, tuition fee errors and sudden class cancellations. These experiences have motivated us to make a difference in students and institutions.

The first step in our team's project is to mark attendance. This happens automatically. We use a smart card for this. This system allows for quick and accurate marking of student attendance, replacing the manual processes of marking class cards and ensuring that students are no longer burdened in long queues.

Here we create a profile related to the student in the software. All the student's details and parents' details are included in that profile.

It is related to the student's smart card. When the card is scanned, the administrator will be able to know all the details of the student.

This software introduces a comprehensive tuition fee management system. This software allows you to accept payments and track payment history. Administrators will no longer have to rely on paper records, streamlining payments across the entire financial side of tuition management.

Apart from this, parents can know about their child's arrival, departure and class fee payment from home without visiting the institute.

# Objectives

This project aims to achieve the following objectives:

## Students

- To develop a mobile application for the students to mark their attendance and departure.

## Parents

- Develop this application to send a message to the parent after the monthly payment furthermore a message was also sent to a parent if the payment was not paid at end of the month.

## Institute admin

- With this application, when the card is punched, the admin can get all the details of the students.
- Also, Admin can calculate the total attendance of the students at the end of the class.
- Admins can calculate their profit at the end of the month.

## Target Users

- Students
- teachers
- Parents
- Institute admin

## Application Features and Description

### Smart card

Features	Description
To mark attendance	Students should punch the card when entering to the class.
	When student punched the card, automatic message sent to their parents with class fees details, time of arrival and departure of the class and special information about the class

### Mobile and Desktop Application

Features	Description
Student profile	Student details Students' parent's details What Classes he/she joined.
Teacher profile	Teachers' details
Payment gateway	Profit report for the admin panel. Students can pay via the application. Students and parents can see payment details.
Attendance report	Admin panel can see student attendance sheets to make decisions.
Timetable	Teachers and students can see the times for their classes. Admin panel can arrange their class via seen this timetable. Parents also can their students class time. If there are no class all the users can see it.
Alerts and Notifications	If there is a special alert, all the users can reach easily.

Cost Estimation

	Estimated Cost (LKR)
Smart card	Rs 300.00*10 = Rs 3,000.00
NFC reader	Rs 15,000.00
Bar code reader	Rs 10,000.00
Server	Rs 10,000.00
<u>Total</u>	<u>Rs 38,000.00</u>



# Time Frame (Gantt Chart)

## Project: Computing Group Project

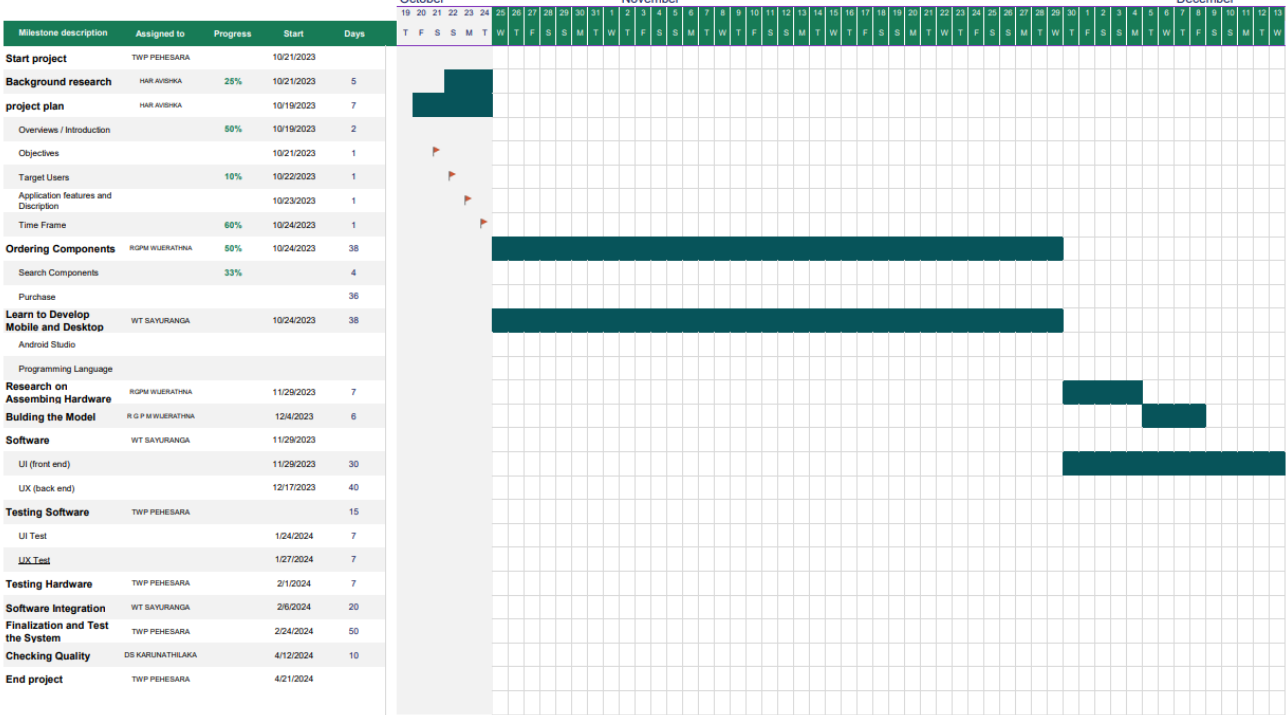
### PROJECT LEAD

TWP Pehesara

Project start date: 10/19/2023

Milestone marker: 1

Scrolling increment: 0



## Project: Computing Group Project

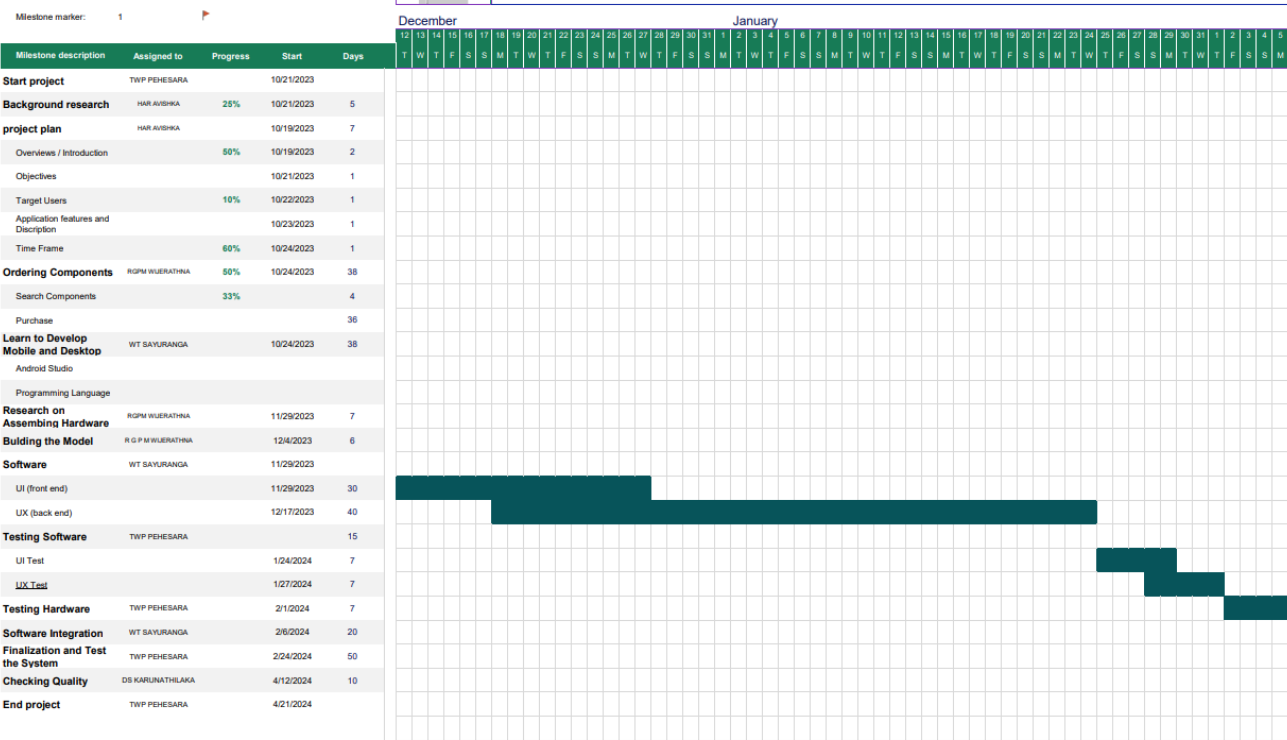
### PROJECT LEAD

TWP Pehesara

Project start date: 10/19/2023

Milestone marker: 1

Scrolling increment: 54



## Project: Computing Group Project

PROJECT LEAD	
TWP Pehesara	

Project start date: 10/19/2023 Scrolling increment: 109

Milestone marker:		1		🚩		February		March																																																							
						5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

[illegible]

Start project	TWP PEHESARA		10/21/2023	
Background research	HAR AYUSHA	25%	10/21/2023	5
	HAR AYUSHA		10/19/2023	7
project plan	Overviews / Introduction	50%	10/19/2023	2
	Objectives		10/21/2023	1
	Target Users	10%	10/22/2023	1
	Application features and Description		10/23/2023	1
	Time Frame	60%	10/24/2023	1
	Ordering Components	RUPM WUERATHNA	50%	10/24/2023
Search Components		33%		4
Purchase				36
Learn to Develop Mobile and Desktop	WT SAYURANGA		10/24/2023	38
Android Studio				
Programming Language				
Research on Assembling Hardware	RUPM WUERATHNA		11/29/2023	7
Building the Model	R G P M WUERATHNA		12/4/2023	6
Software	WT SAYURANGA		11/29/2023	
UI (front end)			11/29/2023	30
UX (back end)			12/17/2023	40
Testing Software	TWP PEHESARA			15
UI Test			1/24/2024	7
UX Test			1/27/2024	7
Testing Hardware	TWP PEHESARA		2/1/2024	7
Software Integration	WT SAYURANGA		2/6/2024	20
Finalization and Test the System	TWP PEHESARA		2/24/2024	50
Checking Quality	DS KARUNATHILAKA		4/12/2024	10
End project	TWP PEHESARA		4/21/2024	

## Project: Computing Group Project

PROJECT LEAD	
TWP Bohosara	

Project start date: 10/19/2023  Scrolling increment: 164

[illegible][illegible]

Start project	TWP PEHESARA		10/21/2023	
Background research	HAR AYDIKHA	25%	10/21/2023	5
project plan	HAR AYDIKHA		10/19/2023	7
Overviews / Introduction		50%	10/19/2023	2
Objectives			10/21/2023	1
Target Users		10%	10/22/2023	1
Application features and Discription			10/23/2023	1
Time Frame		60%	10/24/2023	1
Ordering Components	RIPM WUERATHNA	50%	10/24/2023	38
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## Contribution

NSBM ID	PLYMOUTH ID	NSBM Name	PLYMOUTH Name	Leaders	Contribution
25427	10898586	TWP Pehesara	Thuduwe Pehesara	Project Leader  Testing and Maintenance Leader	<ul style="list-style-type: none"> <li>• Gantt Chart</li> <li>• Application Features and Description</li> <li>• Contribution</li> </ul>
25551	10898418	HAR Avishka	Hetti Avishka	Planning Leader	<ul style="list-style-type: none"> <li>• Gantt Chart</li> </ul>
25922	10898708	GPM Wijerathna	Ramboda Wijerathna	Technical Leader	<ul style="list-style-type: none"> <li>• Cost Estimation</li> </ul>
25535	10899688	WT Sayuranga	Wickramaarachchige SSayuranga	Programming Leader	<ul style="list-style-type: none"> <li>• Introduction</li> </ul>
27227	10899581	DS Karunathilaka	Dushan Karunathilaka	Quality Leader	<ul style="list-style-type: none"> <li>• Objectives</li> <li>• Target Users</li> </ul>