SMART E-TUITION INFORMATION
SOFTWARE DEVELOPMENT PLAN (SDP)

Version 4.0

SEMESTER MARCH – AUGUST 2022

GROUP: CS1104D

SYAHRIL RUMIZAM BIN ABDUL RAZAK, 2020843956
MUHAMMAD KHAIRUL HAZIQ BIN MOHAMAD KHAIRI, 2020475884
MUHAMMAD HARITH IQBAL BIN MOHD HANIZUN, 2020450636
MUHAMAD ADIB ASYRAAF BIN AZIS, 2020868324

EN. SUHARDI HAMID

Revision History

Date	Version	Description	Author
19/04/2022	1.0	Gantt chart is made up first to help our team to plan work around deadlines and allocate resources properly.	Everyone
19/04/2022	1.1	Get to know more about our project and start writing minute details and information for the software development plan.	Everyone
20/04/2022	2.0	Started writing introduction and organizational chart.	Everyone
20/04/2022	2.1	Did the proposed project overview including the process, objectives, scopes, and entity relationship diagram.	Everyone
21/04/2022	3.0	Plan and made the project organization including the structure, roles, and responsibilities.	Everyone
21/04/2022	4.0	Check for grammars and finalize every information in the software development plan.	Everyone

Table of Contents

1. Introduction 1

    1.1 History of Organization 1

    1.2 Organizational Chart 2

    1.3 Current System Description 3

    1.4 Current System Problem 4

2. Proposed Project Overview 5

    2.1 Proposed System Process 5

    2.2 Proposed System Objectives 7

    2.3 Proposed System Scopes 7

    2.4 Proposed System Entity and Attributes 8

3. Project Organization 9

    3.1 Organizational Structure 9

    3.2 Roles and Responsibilities 10

4. Management Process 11

    4.1 Project Plan 11

Appendix 12

Software Development Plan

1. Introduction

1.1 History of Organization

In 2014, Let Us Score! Sdn. Bhd. was established. Operating ten tuition centres throughout Kedah, with over 4,000 students enrolled annually. In 2020, the pandemic struck. We are one of the few brands that has successfully converted approximately 100 students to online learning using the Smart E-Tuition System. Compared to offline operations, online operations are superior in terms of their utility and efficacy. The Smart E-Tuition System is the future at this time.

The pandemic halts face-to-face education worldwide, but time continues to pass. This creates a problem, as Malaysian students cease learning but continue to age. This will result in the birth of a "lost generation" in Malaysia if allowed to continue. Let Us Score intends to combat this by offering quality online classes.

In April of 2020, the Smart E-Tuition System was developed. Prior to this, we were recognised as one of the most prestigious tutoring facilities in Merbok, Kedah. Let Us Score! now has multiple teams, with three to five members on each team, all of whom work remotely from home. With these measures, we intend to achieve our objectives and become Malaysia's premier tutoring facility.

1.2 Organizational Chart

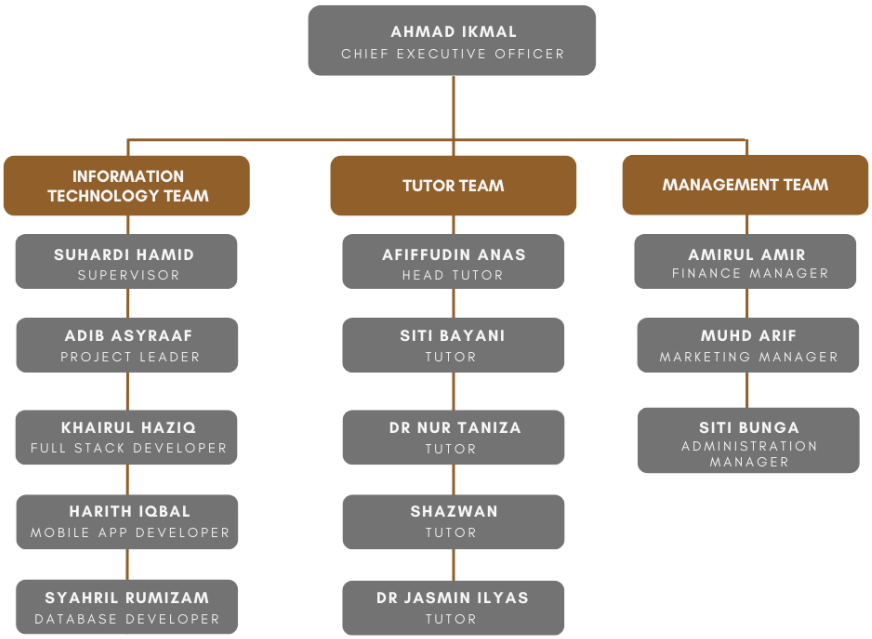

Figure 1: Organizational Chart of Let Us Score! Sdn. Bhd.

Figure 1 depicts the organizational structure of Let Us Score! Sdn. Bhd. The organization consists of three teams: the IT team, the tutor team, and the management team. Each team consists of between three and five members and has its own responsibilities and roles.

Each role in the chart is essential for maintaining the organization and functionality of Smart E-Tuition. A chief executive officer, who oversees the organization's overall operations, sits atop the organizational structure. Next, the information technology (IT) team maintains the organization's computer infrastructure, including the creation of databases, websites, and mobile applications.

Furthermore, the tutor team is the linchpin of the organization, as they are the ones who instruct our students through the tuition system. And finally, there is the management team, which formulates strategies based on their respective roles to meet the organization's requirements.

1.3 Current System Description

Every detail or piece of information in the current system description must be handwritten. The student must first go to the registration counter and speak with the person in charge in order to enroll in any subject. On the other hand, the person in charge must fill out and categorize the necessary documents for the classes taken. These two tasks require both parties' participation.

In addition, the current system description indicates that students pay in cash at the registration counter. When registering at the counter, students converse with the cashier and pay according to the subject they choose. Anyone who physically handles a large sum of money carries a high risk of an unfavorable occurrence.

Every class must physically meet at the designated location in order to function. This means that the tutor and students of a particular class must meet in person. As this is tuition-based learning, more attention will be paid to the individual needs of each student than in a typical classroom setting.

1.4 Current System Problem

As explained in 1.3 about the current system description, when physical activities are involved, a great deal of energy is required from every parties to carry out the operation. All of these factors result in a mountain of documentation for managing the physical system. Thus the problem is that each registration necessitates substantial effort and time from both the student and the employee.

In addition, the current system lacks a suitable online data management system. We now live in a world where the internet seems to be inseparable from virtually everything. It is now essential for every company, regardless of industry, to have a recognisable online presence and a system. These types of online systems can benefit a company or project in a variety of ways and improve its efficiency. Allowing workers to manually manage every piece of data can be somewhat burdensome. Consequently, a database system may be required to solve the problem in managing data.

In addition, having an ample supply of cash on hand exposes the individual and the business to a substantial risk. There are threats or dangers everywhere, and anything can occur at any time. A high level of security is required to prevent the occurrence of these issues. And this solution involves a highly dependable and secure online payment gateway system. For instance, one of the most reliable online payment gateway system is the FPX payment.

2. Proposed Project Overview

2.1 Proposed System Process

- For admins, the processes are login, manage tutor data, manage student data, manage class verification, manage class details, and view reports on student feedback.
- For tutors, the processes are logging in, managing personal data, and viewing class details.
- For students, the processes are to register, login, make class registration, view class details, manage personal data, and give student feedback.

All these processes are shown in Figure 2 below:

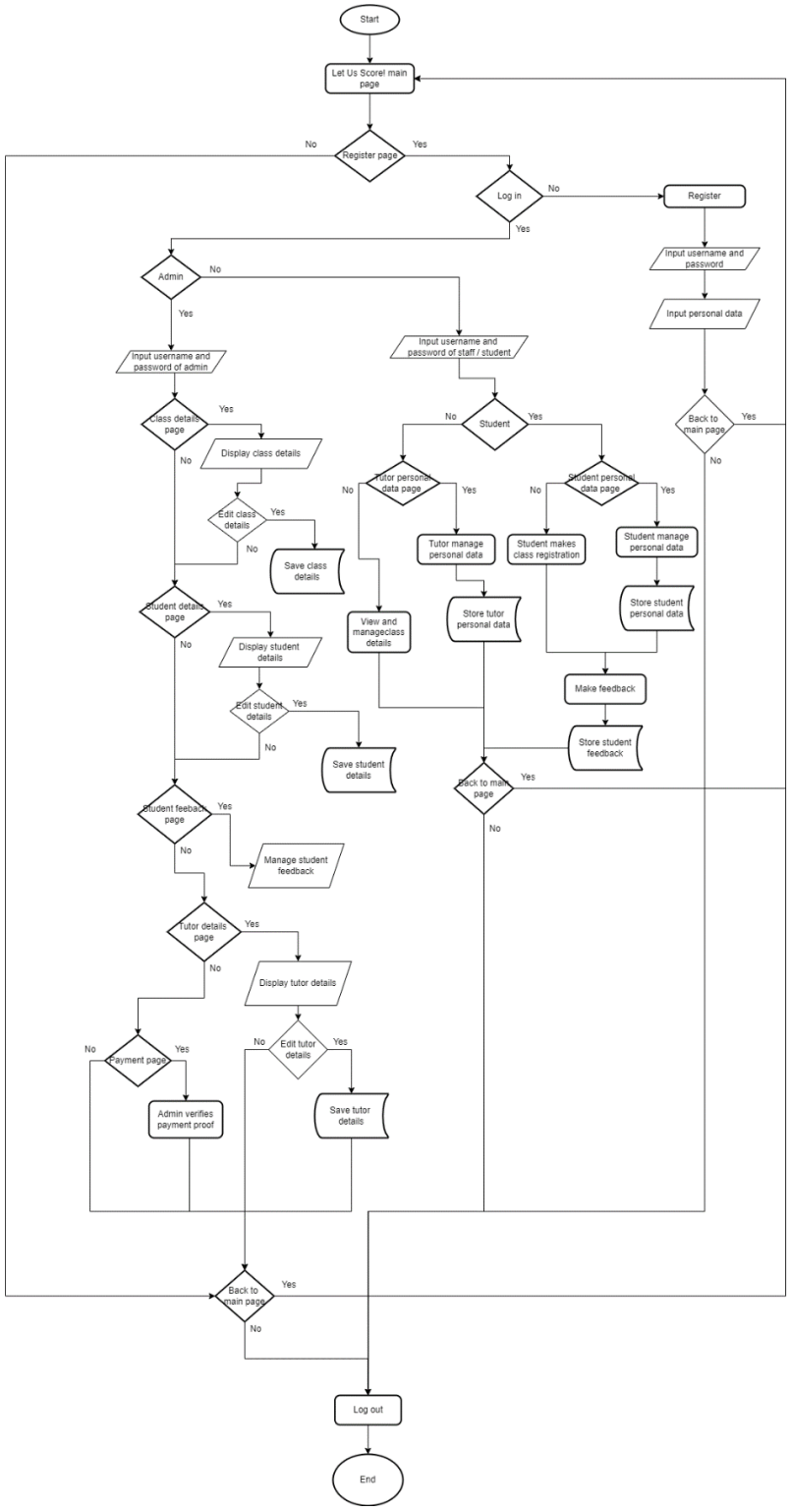

Figure 2: Users' Process (System Flow Diagram)

2.2 Proposed System Objectives

- To make the procedures and actions required by a student to enroll in tuition as straightforward as possible.
- To guarantee every output that is needed by the user can be easily processed and obtained.
- To ensure the process of handling tuitions through online is well organized and user friendly.

2.3 Proposed System Scopes

Each user must use their own username and password to access the system, based on the role type they have been assigned. If an invalid username and password are input, an error message will be displayed and will be redirected to the login page again. If the login is successful, they will be redirected to the dashboard based on their role type, whether a student, tutor, or administrator.

The class registration system is accessible only once per year per student. For instance, if the student is currently in form four, he or she will be in form five the following year and will be eligible to register for a new session. This prevents multiple occurrences or fraudulent payments that could occur if the registration system is not disabled after a student has registered on their account.

Tutors can only view their students' information and manage the details of their assigned class. For their accessibility, only the class link can be modified when managing class information.

All student data information will be displayed in the student dashboard and made available for the student's convenience only after an administrator has verified the student's class registration. This includes the presentation of their current classes, tutor details, and a link to the online class meeting.

2.4 Proposed System Entity and Attributes

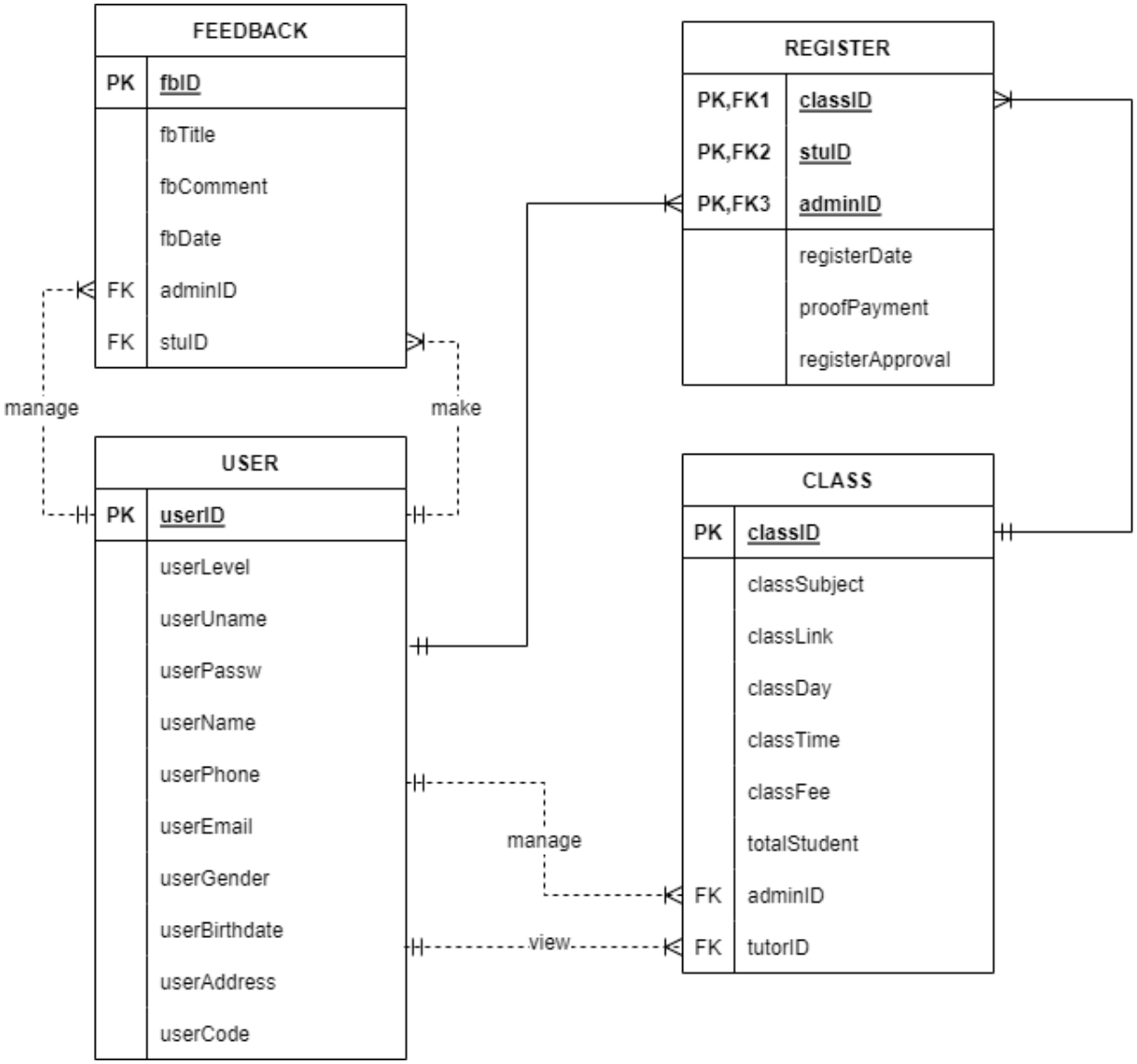

Figure 3: Entity Relationship Diagram (ERD) for proposed system

3. Project Organization

3.1 Organizational Structure

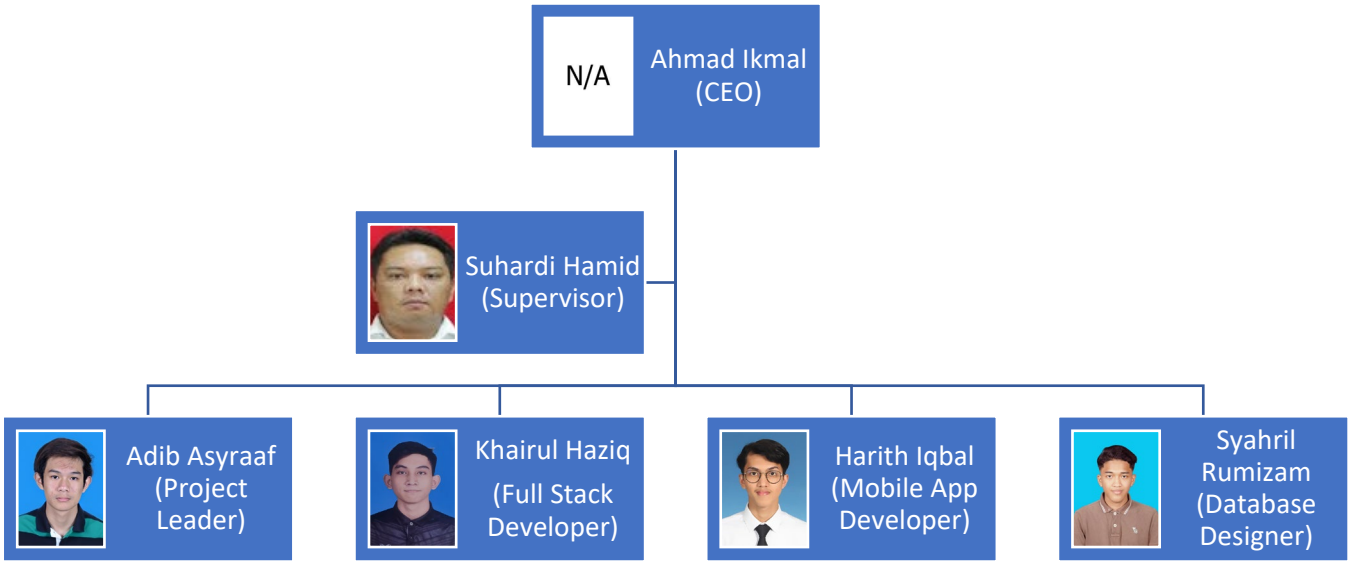

Figure 4: Project Team Organizational Structure

3.2 Roles and Responsibilities

MEMBER	JOB	DESCRIPTION
Ahmad Ikmal	CEO	Responsible for managing a company's overall operations.
Suhardi Hamid	Supervisor	Responsible for the day-to-day performance of our small team including organizing and monitoring work processes.
Muhamad Adib Asyraaf bin Azis	Project Leader	Responsible in developing team schedules and assist in the successful onboarding and training of team members.
Muhammad Khairul Haziq bin Mohamad Khairi	Full Stack Developer	Responsible for participating in both the front-end and back-end development processes.
Muhammad Harith Iqbal bin Mohd Hanizun	Mobile Application Developer	Responsible for creating, maintaining, and implementing the source code for mobile app and mobile platform development using computer programming languages to meet the needs and requirements of clients.
Syahril Rumizam bin Abdul Razak	Database Developer	Responsible for developing database and ensure the proper functioning of the database. He also handles the physical and logical models of the database.

4. Management Process

4.1 Project Plan

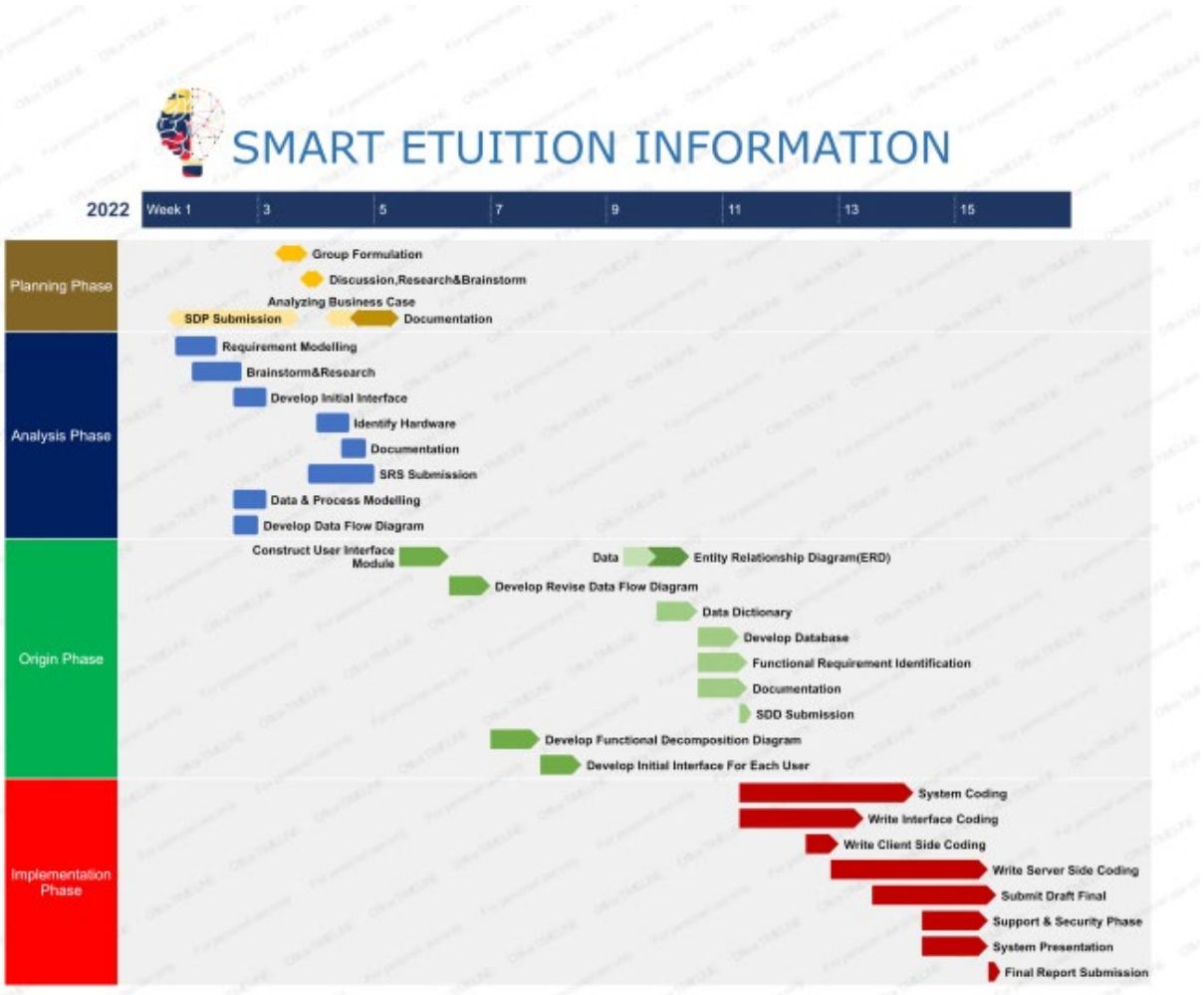

Figure 5: Gantt Chart for proposed system

Appendix

***Name**: Mr. Xxxxxxx xxxxx*

***Address**: xxxxxxxxx*

***PHONE NO.**: xxxxxxxxxx*

Student Registration Form

Candidate Name:

School Name:

Affix a recent passport size photo of candidate with signature

Class: Section: Roll No.:

Area of Interest:

Session for: (At least for One month)

Candidate Signature in Running Hand

Date of Joining: (dd/mm/yyyy)

Date of Birth:

Contact Number:

Residential Address:

Father's Name:

Monthly Income:

Respected Guardians,

I beg to state that your child is wiling to join in my coaching on from __/__/____ date, So I am looking forward to this. Wishing you and your family a good luck and also wishing a bright future for your child.

Thanking You,

Best Regards From,

XXXXXXXXX

DATE:

PLACE:

Figure 6: Example of current system registration form