



**DEPARTMENT OF COMPUTER SCIENCE AND
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Report 01

Problem Definition Document (PDD)

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SchoolHub

1. Introduction:

A **SchoolHub** refers to a system which is used for communicating with parents and teachers about students' class performance, results, shortcomings, co-curricular activities, result and their progresses by school authorities. Also parents can update their offspring why they are absent in class and discuss with school authorities about their scarcity. Currently, parent and teacher communication way is done manually, which is both time consuming and insufficient. This application solves this problem and helps upgrade student academic performance. It is designed to efficiently handle processes like upload data of a student's overall activities.

The project is summarized through 5 sections which are briefly described as following:

Section 2 describes the problems with current communication way between parent and teacher. The purpose of this project is described briefly in Section 3. Section 4 provides and discusses preliminary solutions to this problem. Scope and limitations of this project is described in Section 5. Section 6 presents the estimated cost and required time for the feasibility studies.

2. Problem Statement:

Education is important for student because they are future of the world. They are pillar of world. Results are key feature to judge their potential. Results are also used to judge the performance and quality of an educational institute. For this reason teacher and parent interact is necessary for a student. But manual communication way (Face to face conversation or using mobile phone) is not efficient for this. It requires huge time to interact parent and teacher. Most time guardian may not aware of update information of academic management system. Little students may not understand teacher guideline and homework which is a large problem for guardian. Sometimes many records are hard to be retrieved later. For finding exam result we have to waste many times. This process is not user friendly, poor clam and service.

3. Project Objectives:

One of the most important elements of a child's educational journey is clear and regular communication between parents and teachers. It's vital for good communication to exist between both parties in order to guarantee that a child's cognitive, social and emotional development is

progressing naturally and without any issues. Parent involvement also helps to keep kids on track and make sure they're reaching their full potential in all areas, from homework to exams, afterschool hobbies and more. It's a great opportunity to discuss student performance and improvement.

4. Preliminary Solutions:

The existing denoted problems can be solved in various way, some of those solutions are described below:

Alternative 01: Proper task scheduling and record management. Maintain records, manage student attendance and track student performance, improve communication with guardian.

Alternative 02: Appoint more employees and taking proper steps to remove laziness of employees.

Alternative 03: The problem can be solved by replacing the current communication way with a computerized and social networking system which will be working as quickly.

5. Project Scope:

Alternative 01:

This solution aims to provide an effective remedy to the problem. The scope of this solution is described below in table-1.

Table-1: scope of the 1st alternative.

Item	Description
Functions	The functions of this solution is given below: 1. Retrieve necessary data.
Features	The features of the solution is described below: 1. Enhanced management will reduce working complexity. 2. Guardian can share opinion directly. 3. Guardian can easily observe school administration system
Facilities	The common facilities are: 1. Student information will be preserved more flawlessly. 2. Friendly and more realistic relationship are built parents and school authority
Required time	Around a year to get the benefit of this solution.
Estimated cost	Around 6 lakhs to establish the solution.

Alternative 02:

Here, by recruiting more employees, we can overcome some of those mentioned problems in some nontechnical ways. The scope of this solution is illustrated below in table-2:

Table -2: Scope of the 2nd alternative.

Item	Description
Functions	The solution has following functions: <ol style="list-style-type: none">1. Monitor each employee's working flow.2. Add data with more accuracy.
Features	The features of the solution are: <ol style="list-style-type: none">1. Publish manual result and other important notices.
Facilities	The solution provides following facilities: <ol style="list-style-type: none">1. All the notices and other important paper works can be found in one place.2. More employees will reduce the working pressure and show output within less time.3. Distributed management will reduce complexity of official works.
Required time	Around 6 months to generate the output of the solution.
Estimated cost	Around 7 lakhs will be needed to fulfill the solution.

Alternative 03:

In this solution, we can enhance the management of students' records and task schedules more properly. The scope of this solution is described below in table-3:

Table-3: Scope of the 3rd alternative.

Item	Description
Functions	The project has following functions: <ol style="list-style-type: none">1. Add necessary information.2. Update new information.3. Delete unnecessary information.
Features	The features of the project are: <ol style="list-style-type: none">1. Access control system.2. update about latest class schedule and notice.3. View result board.
Facilities	The project will provide following facilities: <ol style="list-style-type: none">1. It is a great opportunity to discuss student performance and improvement about student between parent and student.

	<ol style="list-style-type: none"> 2. All the information of a student can be found in one place. 3. The time need to interact with each other greatly decrease. 4. It will make the parent and teacher communication system more reliable, efficient and cost effective.
Required Time	Around 6 months of time is needed to complete the project.
Estimated Cost	About 10 lacks taka will be needed to complete the project.

6.Estimated Cost and Time for Feasibility Study:

From the above scopes we can see that, the 2nd alternative is more expensive as we need to recruit more employees to run the solution. And manual form of notices and results will be damaged after a particular period of time. Again, the 1st alternative is more complex and needs more working hours then necessary. It would increase the official work pressures from all perspectives. But according to the 3rd alternative, if we preserve information in an automated way, it will definitely reduce working load, decrease the possibility of losing data, and reduce the valuable time wastage. So, it can be said that, the 3rd alternative is more effective and flawless by all means.

Determination and organization of the necessary details to make the project work best for a system needs a feasibility study. It will help to propose the best solution to the problem according to the resource available. It will also determine if the project is technically, legally and financially possible with the resource available for the system. So we would like to propose to have 2week time and a cost of 50000 taka to do the feasibility study.