**American International University-Bangladesh (AIUB)**



**Mid Assignment**

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**Digital School Management System**

1. **Overview:**

At present condition, it is very difficult to admit a child to a school. Most of the time talented students missed out on good opportunities and their talent is not being properly evaluated. After Admission, there is a subject allocation problem and students attendance mismatch. There were also problems in finding students' weakness in subjects and specific topics. This project will automatically evaluate the exam. It will receive all admission requests and will arrange properly for the admin to evaluate. According to students' feedback, it will help the admin to reschedule the classes and also appoint proper teachers in specific subjects. In Bangladesh, there is no system for student encouragement. This system has a rewarding opportunity for the students according to their results they can get rewards from school. It will encourage them to further study. At present condition, guardians don’t get their student’s attendance. With this software, they can easily track their child's attendance. Finally, most of the time it shows those students as well as their parts feels shy or scared to review teachers. For that reason, the admin doesn't know the feedback. In this system, it will take feedback and directly send it to the admin so that the admin can evaluate teachers according to the feedback. By using this system, we can reduce paper work, make studying more enjoyable, make awareness among parents, encourage students, and make sure proper guidelines.

1. **Problem Statement:**

There is much “Digital School Management System” software available on internet but for each system there are disadvantage exist and also missing features. Therefore, the common software of the School Management System is static entry desktop-based software which is mainly worked smoothly, faster with a arranging features. Typically, this common approach is adequate to the school requirements but still requires handwritten tasks to be relayed to do the process entry computer system. Admit a child is very difficult and lengthy process. Class management is a heavy work for the school administrator after admission process. Teachers feel hassle in attendance performance evaluation. It is very difficult and also time consuming for the teachers to evaluate the class test gradually and effectively. Another important thing is that there are no systems now which can encourage students providing reward based on their results. All those problems will be solved easily through this software. In addition sometimes students and parents also feel shy and insecure by given teacher review for that reason there is no conduction of teachers evaluation. Using this system it is also possible to give feedback of current teacher and according to that evaluation will be conducted by the admin. The indicated problems that will be developed they are;

* Problems of evaluation in student admission and test process.
* Mismatch of Class allocation with teachers for students.
* Lack of awareness in students’ attendance and performance issue by the parents.
* Problem of time duration of test evaluation and problem specifications.
* Lack of encouragement through reward in study life of a student
* Problem of Student, Parents feedback collection for teacher’s evaluations.

1. **Requirements:**
2. **Business Requirement**

A digital school management system that generally promotes some operational performance and make sure the engagement between students, teachers, and parents has several advantages. It also saves teachers valuable time from administrative tasks along with the student’s pressure. This management system is achieved by automating time-consuming daily tasks such as timetable creation, attendance management, report generation, notify parents, automatic task evaluations, student reward system, parent-teacher conversations, teacher evaluation based on parents’ feedback and so on. Teachers can more easily save, manage, and retrieve student data, can easily add task for auto evaluation, Parents now have a better idea of their child's performance in class. Compliance and other regulatory standards are also much easier to satisfy other benefits for business purposes like,

* No hassle for management of test evolution
* Student and as well as parents avail to see results with details without going school
* A system will notify user automatic when someone done their activity
* Wireless management system
* Less labor cost
* Eco friendly, no paper will uses for all work or management

1. **User Requirement**

The "Digital School Management System" is an easy-to-use application and will make day to day work in a school much easier, convenient and super faster. The system will have a database which will help store all the information of the school and so admin and teacher can view day to day activities, all works and hence can always keep an eye on what's happening in the school without actually being physically present there. School admission is a Hassel for the admin by this project it will receive all applicants’ application and then admin can easily evaluate and admit them in the school. Proper class management will be also done by this operator sequentially with the permission of the admin. Results of the students will be evaluated automatically and their attendance will be also conducted at that time. All those can be printed by an excel file with the access of teacher of specific class. To encourage students there is an exceptional invention that there is a reward system for the students according to their results. Finally students and parents will fill feedback form of class teachers and those file will be visible to admin only so that admin can evaluate the teachers. All those functions will be conducted by the system and it will store in the database gradually.

1. **Functional Requirement**
2. **Student Admission Management:**

**Admin**

1. Admin can create/edit/delete student account
2. Admin can create/edit/delete teacher account
3. Admin can create/edit/delete parent account
4. Admin can review admission requests
5. Admin can approve/disapprove admission requests

**Parent**

1. Parent can register
2. Parent can login
3. Parent can change password
4. Parent can fill up the admission form
5. Parent can view admission status
6. Parent can make payment that is due
7. Parent can view the student account

**2-Class Management System:**

**Admin**

1. Admin can create/edit/delete a class
2. Admin can assign students to a class
3. Admin can assign a teacher to a class

**Teacher**

1. Teacher can login
2. Teacher can change password
3. Teacher can view his classes
4. Teacher can upload video/text content to a class
5. Teachers can submit a notice to a class

**Student**

1. Student can login
2. Student can change password
3. Students can view classes
4. Students can view content of each class
5. Students can view the notice sent by teachers for a class

**Parent**

1. Parent can view his child’s class
2. Parents can view the notice sent by teachers of each class

**3-Attendance Tracking System:**

**Teacher**

1. Teacher can upload attendance excel sheet of a class

**Parent**

1. Parent can view the class wise attendance of his child

2. Parent can view the entry and exit time of the child

**4-Test Management System:**

**Student**

1. Students can view classes
2. Student can view tests
3. Student can participate in a test
4. Student can view Reports of a test

**Teacher**

1. Teachers can create/edit/delete a test
2. Teacher can create/edit/delete topics within a test
3. Teacher can create/edit/delete questions within a topic
4. Teachers can view submitted tests
5. Teachers can give feedback custom feedback to the tests submitted

**Admin**

* 1. Admin can view submitted tests and results for all classes

**Parent**

* 1. Parent can view the test results of his/her child

**5--Student Reward System:**

**Student**

1. Students can his/her points
2. Student can view what to do to get more points
3. Student can view the rewards shop
4. Student can redeem points in the rewards shop

**Teacher**

* 1. Teacher can view student’s points
  2. Teacher can create gifts for the rewards shop
  3. Teachers can view which students redeemed which reward

**Admin**

1. Admin can view all rewards
2. Admin can view all students’ points
3. Admin can view all redeem requests

**Parent**

* 1. Parent can view the points of his child
  2. Parents can view which reward the child has redeemed

**6-Teacher Performance Evaluation System:**

**Student**

1. Students can fill up the feedback form for a class

**Admin**

1. Admin can view all feedback forms from students
2. Admin can view all feedback forms from parents
3. Admin can view reports based on student performance on every teacher

**Parent**

1. Parent can fill up the feedback form for a teacher
2. **System Requirement**
3. **Hardware:**

Minimum Requirement;

* Computer with a web browser
* Processor: Core i3 4th Generation. RAM: 8 GB
* System Type: Windows 10 (64 bit)
* Storage: 256 GB SSD

1. **Software:**

* Google chrome or any other modern browser

1. **Requirements Development**

Requirement development denotes the process which consists of some set of activities that produce requirements for a specific product. For Digital school management admin will log in to the system with a specific user id and password. Like this parents will create an id and apply for their child's admission by fulfilling the admission form. By the system evaluated admission form will be accepted by the admin. After successful admission Classes will be arranged through the system with the help of the admin. For attendance, the system will notify all parents about their child. For specific subjects, the teacher can arrange tests for the students and it will automatically evaluate the score of the students. All scores will be generated through an excel file and the teacher along with the admin can see it. The Reward system will be an emerging invention for the students to encourage them in their studies. Teachers along with the admin can set rewards and can also change them. According to the test results of the students, they will gain points and with those points, they can request for reward. Teacher evaluation will be done through the feedback form provided by the admin and fulfilled by the students and parents. Most of the time parents feel hesitation about teacher feedback because of some specific reason. Here the system will hide information and it will only be visible to the admin. According to this feature, this software can reduce the hassle of admission, can choose the right students, class allocation will be smooth and perfect, the teacher can easily track attendance and it will be delivered to the parents also. More importantly, the reward system will encourage students' and parents' feedback and will help to evaluate teachers as well. On the other side as it will automatically generate test results so parents can see their child that which topic has lacking and need to be guided.

1. **Vision and Scope:**

**Vision:**

A Digital school management system denotes the situation that promotes operational performance and proper engagement between admin, students, teachers, and parents with several advantages. At the same time, it also saves teachers valuable time from educational, institutional tasks along with the student’s pressure. This Digital School management system is achieved by some automating time-consuming daily tasks such as class creation, attendance management, report generation, notify parents, automatic task evaluations, student reward system, parent-teacher conversations, teacher evaluation based on parents’ feedback and so on. Here Teachers can more easily save, manage, and retrieve student data, information. Parents now have a better idea of their child’s performance in class about their attendance. Other visions such as;

* A system will notify user automatic when someone done their activity.
* Auto evaluation and weakness recognition.
* Wireless management system.
* Less labor cost.
* Eco friendly, no paper will uses for all work or management.
* All user can manage and done everything easily.
* Everything will be live so everyone can track easily.
* Parents feedback for teacher evaluation.
* Automated attendance system for student no need take physically.
* For automatic testing system with given details helps student to be more attentive as well as get notify teacher and parent also.

**Scope:**

Digital School Management System is a complete software system that will allow a school to manage the different operational and educational activities of a school. It will make admission easier, evaluation more effective, encourage student, modern study, student parent feedback for teacher evaluation. In addition, the whole school system will runs digitally and make the system more efficient and smooth working experience through a digital way. The high-level modules in the software system are listed below.

1. Student admission management
2. Class management system
3. Attendance tracking system
4. Test management system
5. Student reward system
6. Teacher performance evaluation system

**User-Classes:**

The software system will have the following user classes.

1. Admin
2. Teacher
3. Student
4. Parent
5. context diagram
6. **Software Requirement Specification:**

The main objective of this document is to give a detailed description of the “Digital School Management System” application. The document provides detailed information about the interfaces, constraints and interactions. The “Digital School Management System” is an easy-to-use application and will make day to day work in a school much easier, convenient and faster. The system will have a database which will help store all the information of the school and so admin and user can view day to day activities, and hence can always keep an eye on what's happening in the school without actually being physically present there. Therefore, the significant features of the system will be;

* 1. **Student Admission Management**

As an admin, he/ she can view all admission requests So that he/ she know how many admission requests have been made. Therefore the Admin will be able to view all admission requests in a tabular form and view details of each admission request after clicking on it.

* 1. **Class Management System**

As an admin, he/ she can edit a class so that he/she can change the information related to a class. For this reason the new information will be visible to the admin and a toast notification will appear to show if the edit was successful or not.

* 1. **Attendance Tracking System**

As a teacher, he/ she can upload attendance in excel sheet of a class so that he/ she can keep attendance record of each student. So, the attendance will be recorded date wise and it will be stored in a tabular form by student Id serial and view details of each student after clicking on it.

* 1. **Test Management System**

As a teacher, he/she can add topic within test so that he/ she can evaluate student in individual topic. So, all questions are dividing in group with different topic so that teacher can understand which student understands which topic.

* 1. **Student Reward System**

As a student he/she want to redeem reward points so that he/ she can get gifts using reward points that earned. So, Confirmation pop up will appear if the student has enough reward points to get a gift from the shop. Teacher will also receive a notification about the points used.

* 1. **Teacher Performance Evaluation System**

As a student he/she want to fill up the feedback form for a class so that he/she can give feedback to the teacher of my class. Here, pop up notification will appear mentioning that the feedback form has been submitted. Form submission will be visible to the admin.

1. **Constraints:**

At present the most common issue of schools/teachers/students/parents face while using a digital school management system is that it has a complex user interface. Firstly, the system has to be very user friendly and not very complex. Then the users must be trained to use the system interface and the system will become unusable if there is any internet disruption or system problem.

1. **Validation and verification:**
2. **References:**