M-School Application Development As A Substitute Books Contact Between Parents And Teachers In Blossom Mobile Web-Based Preschool

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ARTICLEINFO	ABSTRACT
	Blossom Preschool is a school for young children ranging from 2- 5 years of age. The method used is the approach centers or BCCT (Beyond center and Circle time). In this method, children are stimulated to actively carry out activities to play while learning in centers of learning such as the Center for Religion, Sentra Balok, Calculate Sentra, Sentra Art, Nature Sentra, Sentra Literacy, Computer Sentra. Preschool Blossom current constraints still use a book manual link in the process of recording information to parents so that the information should be written manually or printed manuals that allow for errors such as information that is exchanged, parents forget to read the book liaison and delivery of information takes a long time. To overcome this, then built M-School application form mobile web application. The design process is done using the waterfall process model is then applied in the form of coding program to produce applications that are ready to implement. With the construction of this application can help parents and teachers to communicate. Moreover, it can shorten the time simplify the process of sending information

1. Introduction

The development of technology is growing so rapidly, especially mobile technology. The presencemobile technology has become part of our everyday lives. This can be seen with the proliferation of new applications are offered to support various activities. It can not be denied that the development of technology has changed the ways or the old method.

The development of mobile applications also have an effect on education, such as communication between teachers and parents. Blossom Preschool is a place that facilitates young children to learn while playing. Many parents who leave their children here because of the atmosphere of schools 'home-oriented'. In terms of communication between parents and teachers still use manually liaison book. This book is generally used to inform a variety of things that need to be delivered to the parents of students, such as school agenda, homework or state students.
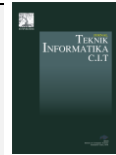
Unfortunately, many parents are rarely open and fill the book. Then, although parents read books such links, forget the content of the information presented is very possible. So what happens is parents rarely provide feedback on the information given in the book link.

2. Literature Review

a. Development
According to Big Indonesian Dictionary Third Edition (2002: 103) development is a process, method, action to build.
b. Application

According Ibisa (Bobsusanto, 2016), Application is a tool to simplify and accelerate the process of work and is not a burden for users.

c.   M-School

Application M-School is an abbreviation of the word Mobile School. The most important content contained in M-School application designed to make it easy for parents to obtain and provide information about student progress Blossom Preschool.

d.   Substitute Liaison Books

According robby Awaluddin (2016), Book link is an important document to connect homeroom parents or guardians of students.

3.   Methodology

3.1. Analysis System

Stages of system analysis done after the planning phase and before the stage of system design. System analysis stage is a stage that is very important, this is because if an error occurs in the analysis system, it will cause an error in the later stages.

Analysis of the current system is the communication that occurs between teachers and parents is only done through the intermediary of connecting books and in group chats. Liaison book is organized exclusively by the class guardian as an intermediary for communication with parents, which aims to inform the things that need to be delivered on the development of students in the school. Here is the procedure that the use of liaison book:

a)   *Teacher* write and submit information on the book link.
b)   *Parents*receive liaison book and read the information provided by the teacher.
c)   *Parents*give a reply message through liaison book.
d)   *Teacher* receive liaison book and read the information provided by the parents.

3.2. Weakness Analysis System runs

Based on the explanation of the analysis of the current system, it can be formulated some of the following:

1) *performance*
   The process of recording information requires more time and effort because teachers have to print the same information for all students.
2) *information*
   Limited space on the book link, so that the information should be written as short as possible. Sometimes it makes the distortion of information.
3) *Control*
   Books liaison sometimes only just opened by the teacher centers so that parents do not know the latest information from the teacher that causes control of access to information becomes less effective.
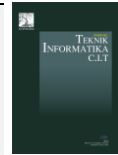4) *Efficiency*
   Manual recording process spent much waktudan create a buildup of documents, papers and more storage space.

4.   Discussion

4.1. Needs Functional Analysis System

Analysis of the functional needs analysis conducted to provide an overview of the problems and the needs of the current procedures currently in Blossom Preschool.

a)   Applications built to handle inputting information to be submitted to the student's parents by age group.
b)   Applications that are built to provide notice or notification to the recipient of the information, both teachers and parents if there is new information.
c)   Applications built allowing personalized two-way messaging.
d)   There is a web service for data access from applications to the database.
e)   Applications can display and change the profile of each user.
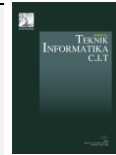f)   Applications can manage user registration data of teachers and parents with the admin user.

g) Applications can manage teacher data, the data parent, student data and data groups of students with the admin user.

4.2. System design

The results of the analysis of the functional needs of the system is described using the usecase diagram as follows:

Fig 1. Use Case Application M-School

Usecase diagram describing the actor who plays a role in the development of m-school applications as a replacement for the book liaison between parents and teachers Meanwhile, how the system functional relationship with the actor described using activity diagram. How a usecase / functional system is done, is described with sequence diagrams. Here is a class diagram illustrating the structure of the class system and the relationship between classes

Fig 2. Class diagram of m-school applications

4.3. System Implementation

a) *Sign Up*

The use of m-school application must register to vote by filling out the form and access rights that contains ome biographical data as in Figure 3.

Fig 3. The sign-up form

By filling out this form and choose the access rights as the user does want to be a teacher or a parent.

b) *user*teacher

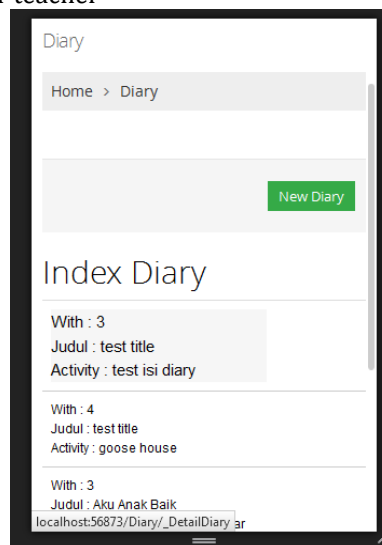Here is an overview of the user teacher

Fig 3. User Diary teacher

Teachers can only do create, update and delete the post for akunsendiri. That is, another teacher accounts can only do View diary to our posts and could not do edit or create a post for another teacher data centers.

c) *user* parents

Here is an overview of the user parent

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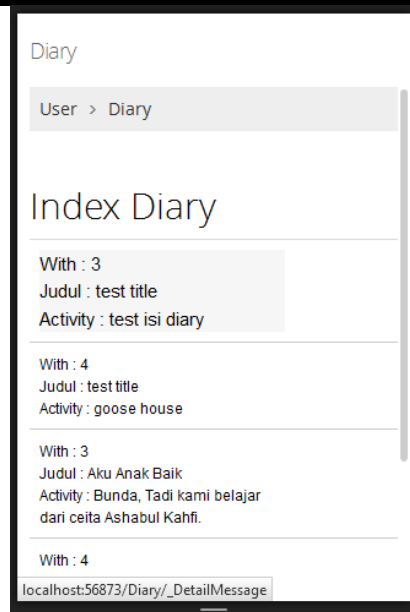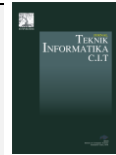
Fig 4 Diary parents of user

Parents can only view data diary alone.

d) *message*

Here is a description of the teacher messageuser
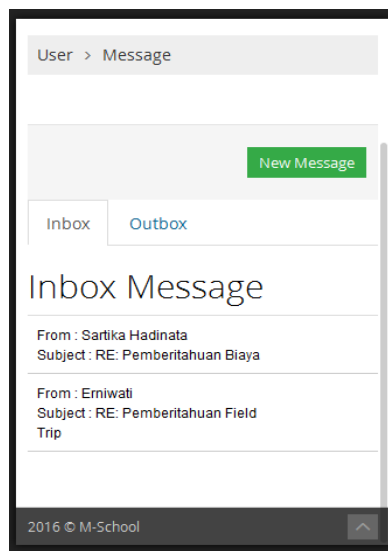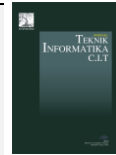

Fig 5. The user Diary parents

Each user can send messages, view messages or incoming and outgoing messages, as well as reply to the message.

5. Conclusion

With the construction of the M-School applications as book liaison between parents and teachers can provide feedback in the form of messages that can be sent by teachers and parents to facilitate communication. In the M-School Application contained a notification feature to indicate information baru.Terdapat Diary menu so that teachers can provide information to parents by age-group of students so that they can exchange data exchange web server.

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