



DEVELOPMENT OF SURVEILLANCE APPLICATION FOR KIDS DAILY LIFE AT PLAY SCHOOL

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ABSTRACT

This research aims to develop a mobile-based monitoring application that can be used to monitor the daily activities of children in kindergarten. The main objective is to optimize the daily reporting process of children and reduce the incidence of violence. In the context of concerns arising from the Malaysian Ministry of Education's report on cases of sexual harassment and physical violence in schools during the pandemic, it is imperative to ensure the safety and well-being of children. The research method used in this study is quantitative. Data will be collected through a survey administered to individuals who have relationships with children attending kindergarten. The survey will analyze respondents' demographic information, their perceptions of existing and proposed monitoring methods, communication aspects of monitoring, and desired supporting features. The application to be developed will allow parents to monitor their children in real-time during their kindergarten activities. The application will be equipped with various features that make it easier for parents and caregivers to obtain information related to child development and condition. Information related to child development and child welfare will be the main priority in the development of this application. Transparency in reporting and monitoring children will also be the main focus. The development of this monitoring application is expected to provide peace of mind for parents and caregivers, while still ensuring the safety and well-being of children in kindergarten. With this application, it is expected that cases of violence and abuse can be minimized through increased monitoring and effective reporting. In addition, the app can also be a better communication tool between parents, caregivers, and schools, so that collaboration in the process of child development becomes more coordinated and efficient. In order to produce an application that meets the needs of users, the survey results and data collected will form the basis for further development. In the development of the application, the analysis will be used to design and implement the desired features. It is expected that this application will be a valuable tool for parents and teachers in facilitating the growth and development of children in kindergarten, as well as ensuring the well-being and safety of children. In addition, the app is expected to provide peace of mind to parents and caregivers.

Keyword: Mobile Application, Monitoring, Daily Report, Kindergarten, User Interface

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ABSTRAK

Penyelidikan ini bertujuan untuk membangunkan aplikasi pemantauan berasaskan mudah alih yang boleh digunakan untuk memantau aktiviti harian kanak-kanak di tadika. Objektif utama adalah untuk mengoptimumkan proses pelaporan harian kanak-kanak dan mengurangkan kejadian keganasan. Dalam konteks kebimbangan yang timbul daripada laporan Kementerian Pendidikan Malaysia mengenai kes gangguan seksual dan keganasan fizikal di sekolah semasa wabak, adalah penting untuk memastikan keselamatan dan kesejahteraan kanak-kanak. Kaedah kajian yang digunakan dalam kajian ini adalah kuantitatif. Data akan dikumpul melalui tinjauan yang diberikan kepada individu yang mempunyai hubungan dengan kanak-kanak yang menghadiri tadika. Tinjauan ini akan menganalisis maklumat demografi responden, persepsi mereka terhadap kaedah pemantauan sedia ada dan yang dicadangkan, aspek komunikasi pemantauan, dan ciri sokongan yang dikehendaki. Aplikasi yang akan dibangunkan akan membolehkan ibu bapa memantau anak-anak mereka dalam masa nyata semasa aktiviti tadika mereka. Aplikasi itu akan dilengkapi dengan pelbagai ciri yang memudahkan ibu bapa dan penjaga mendapatkan maklumat berkaitan perkembangan dan keadaan kanak-kanak. maklumat berkaitan perkembangan kanak-kanak dan kebajikan kanak-kanak akan menjadi keutamaan utama dalam pembangunan aplikasi ini. Ketelusan dalam melaporkan dan memantau kanak-kanak juga akan menjadi fokus utama. Pembangunan aplikasi pemantauan ini diharapkan dapat memberi ketenangan kepada ibu bapa dan penjaga, di samping memastikan keselamatan dan kesejahteraan kanak-kanak di tadika. Dengan aplikasi ini, diharapkan kes keganasan dan penderaan dapat diminimumkan melalui peningkatan pemantauan dan pelaporan yang berkesan. Selain itu, aplikasi ini juga boleh menjadi alat komunikasi yang lebih baik antara ibu bapa, penjaga dan sekolah, supaya kerjasama dalam proses pembangunan kanak-kanak menjadi lebih selaras dan cekap. Bagi menghasilkan aplikasi yang memenuhi kehendak pengguna, hasil tinjauan dan data yang dikumpul akan menjadi asas untuk pembangunan selanjutnya. Dalam pembangunan aplikasi, analisis akan digunakan untuk mereka bentuk dan melaksanakan ciri-ciri yang dikehendaki. Diharapkan aplikasi ini akan menjadi alat yang berharga untuk ibu bapa dan guru dalam memudahkan tumbesaran dan perkembangan kanak-kanak di tadika, serta memastikan kesejahteraan dan keselamatan kanak-kanak. Di samping itu, aplikasi itu diharapkan dapat memberikan ketenangan fikiran kepada ibu bapa dan penjaga.

Keyword: Mobile Application, Monitoring, Daily Report, Kindergarten, User Interface

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CHAPTER 1 INTRODUCTION

1.1 Project background

As a child grows and develops, they gain new life knowledge. A child's personality, attitudes, and values also develop as he grows and matures. Therefore, this period has a significant impact on the child's future. Development is a gain in the capacity and function of a more complex body, such as a child's ability to walk or speak. His development is evident in the way he plays, learns, communicates, and pays attention. Evaluations of children's growth and development must involve families, school personnel, and health professionals.

Children's growth and development are at their peak during the playing school era, which in this instance enters the golden age period. The most important time in a person's life is during the Golden Age, especially for children. It is important to make the most of the various privileges we have currently. Parents should seriously take advantage of this chance to encourage children's potential for growth and development, which includes both physical and non-physical aspects, by offering suitable and appropriate stimulation for mental, intellectual, emotional, moral, and social growth. This will help children grow and develop in the best possible ways (Uce, 2017).

Parents play a significant role in the growth and development of children since they are responsible for creating a safe environment, monitoring children's daily activities, and aiding in the development of

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physical, cognitive, emotional, linguistic, and social skills. and the child's morality. Even this cannot escape the everyday direction and guidance of parents towards their children. The conclusion is that parents are the primary or primary role models for children. The purpose of parental supervision of children in daily family essential because parents are the child's closest relatives and have a huge impact on their growth potential. However, schools also play a significant role in children's growth, particularly in shaping their social spirits, and schools are places where children can grow and develop to gain basic skills and generally existent information.

Play school is a setting where children receive their first formal education. Play school is the first educational level for children aged 4 to 6 years. According to (Wulandari & Purwanta, 2020).the objective of playing schools is to optimize the six areas of early childhood development. These developmental factors include religious and moral beliefs, physical-motor, cognitive, linguistic, social-emotional, and artistic qualities.

The kindergarten learning process is typically conducted face-to-face in the classroom. This is due to the fact that in the early childhood learning process, they still require direct teacher leadership, as the teacher is both the executor and guide for the classroom learning process (Larimore, 2020). The teacher's role is inseparable from monitoring children at school; in practice, the teacher evaluates the children's development daily in all play school activities.

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To implement it in daily life, teachers can utilize student activity report books including information to be communicated to parents in the form of progress reports. However, there are limitations to the adoption of this strategy, as books are frequently forgotten at home or misplaced when in the custody of children. In addition, it was deemed impractical to use books, the data entry method was time-consuming, and the amount of information available to parents would be limited.

Therefore, the role of technology in digitizing the diary is required to simplify this series of processes; in its application, an interactive mobile app and web app-based application will be created; the application that will be developed will include features that allow parents to directly monitor their children's activities at school regarding updates on children's learning, health conditions, and other relevant information.

1.2 Problem Statement

1. Parents have difficulty getting information about children's academic development every day because conventional daily reports are considered less flexible.
2. The process of communication between parents and teachers is limited, so that parents or teachers do not know the overall condition of the child.
3. Parents cannot monitor children directly when children are at school.



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1.3 Objective of the Project

1. to provide information to parents regarding reports on the condition and academic development of their children at school through the application
2. to enable parents and teachers to communicate regarding the child's condition.
3. to enable parents to monitor their children in real time through application media.

1.4 Research Questions

1. How to design a daily report application for play schools.
2. what features are needed by teachers and parents in tracking children's activities every day.
3. what are the advantages of parents and teachers with this application.

1.5 Definition of Terms

1. Surveillance
2. Application
3. Kids
4. Playschool

1.6 Significance of the Project

designed to facilitate parents' monitoring of their children's school activities and development. It is hoped that parents can participate more in their child's development.



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1.7 Scope of the Project

1.7.1 Project

This research project will build monitoring and reporting systems intended to facilitate communication between parents and teachers in schools.

1.7.2 Target Audience

Two applications will be developed, each with its own purpose. There are applications designed for both parents and teachers. The application for parents was designed for 20- to 40-year-old parents. This is due to the fact that parents in this age bracket are deemed capable of using well-designed applications, whilst parents who cannot utilize the application will be given options via WhatsApp, but with restricted capability. In this case only kindergarten teacher applications will be developed.

1.7.3 Demographic

Through the features that will be developed, this project will focus on the creation of a monitoring application for kindergarten students. In Shah Alam, Malaysia, the actual data collection will occur.

1.7.4 Geographic

This project will be executed out at Shah Alam, Malaysia. Especially in the local kindergarten.



CHAPTER 5

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary

The creation of this application is based on the problem of monitoring children's activities in kindergarten effectively and efficiently. Parents often face challenges in monitoring children's development in kindergarten, including daily activities, social interactions, and children's safety.

The daily report method currently used in some kindergartens is considered ineffective in providing sufficient information to parents. Manual reports that must be completed by teachers or kindergarten staff often do not provide a comprehensive picture of children's activities throughout the day. In addition, the reports also take time and effort in the process of writing and collecting data.

To overcome this problem, this research aims to develop a monitoring application that can assist parents in monitoring the daily lives of children in kindergarten. This application is designed to provide a practical and efficient solution, so that parents can easily access information about children's activities at kindergarten.

This application developed has features that allow parents to view children's daily schedules, get activity reports, see children in real-time in class and receive notifications about children's development in real-time. The information will be presented clearly and structured in the application, so that parents can easily monitor children's activities

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without having to rely on manual reports that are prone to limitations and delays in information.

In this study, the research used quantitative research methods and for its application, data collection was carried out regarding the problems faced by parents in monitoring children in kindergarten through interviews and observations. The data collected is then used as the basis for developing a monitoring application that can overcome these problems. Through this research, it is hoped that a more effective and efficient solution can be found in monitoring the lives of children in kindergarten.

It is hoped that the results of this research will produce an application that is effective and efficient in monitoring the daily lives of children in kindergarten, so that it can help parents in monitoring children's development better. This application is also expected to make a positive contribution in improving the safety and quality of education of children in kindergarten, as well as providing comfort and trust to parents in monitoring their children.

5.2 Conclusion

Based on the feedback results from a total of 20 respondents, it was found that 100% of them found this application very helpful and worth using. In addition, all respondents agreed that the application of colors in the design of this application was appropriate and gave a good impression. They also agreed that the appearance of this application is easy to see and easy to understand in use.



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Overall, the feedback from respondents showed a high level of satisfaction with this monitoring application. In addition, 19 respondents showed high interest in using this application in the future. However, there was 1 respondent who disagreed with the use of this application, citing that the respondent did not currently have children.

These findings indicate that the developed monitoring application has great potential in meeting the needs of parents in monitoring the daily lives of children in kindergarten. It also reflects a real need among parents to have practical and efficient access to information about their children's activities and development.

In this case, this research successfully provides an effective and efficient solution through the development of a monitoring application that pays attention to attractive appearance, availability of clear information, and ease of use. The results of this research make a positive contribution in improving the quality of children's education in kindergarten and providing a sense of security and trust to parents.

Overall, this monitoring application provides hope for better progress and development in monitoring children's activities in kindergarten. Through the implementation of this application, it is expected to increase collaboration between parents and kindergarten institutions in optimizing children's development holistically.

5.3 Recommendation

Based on the evaluation of the existing design prototype, there are several suggestions for the development of this application. First, it



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is necessary to develop the application more completely in order to better meet the needs of users. Furthermore, it is important to pay attention to the development of supporting applications that can strengthen communication between parents and school administrators.

As a next step, the app also needs to focus on ease of use for teachers in reporting children's activities. Features that simplify reporting and data management will greatly help teachers and ensure the accuracy of information conveyed to parents.

In addition, it is recommended that this application can be accessed through other platforms, such as websites, to provide flexibility of access to users. This will allow parents and school authorities to access the application not only through mobile devices, but also through non-mobile devices such as computers or tablets.

In the process of further development, it is necessary to conduct more in-depth research related to data accuracy and assessment reporting methods. Standardizing the assessment scale and using good reporting methods will increase the validity of the information delivered to parents. Involving education experts in the development of this application is also very important to ensure its quality.

Overall, these suggestions provide the necessary development direction for a monitoring application for children in kindergarten. With proper development and involving relevant parties, this application can be a better and more effective solution in meeting the needs of parents and teachers in monitoring the development of children in kindergarten.



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