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## REMOTE MOBILE SYSTEM THAT LIMITS THE USAGE OF ONLINE AND OFFLINE APPLICATION

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### ABSTRACT

According to Young & Abreu (2011), the excessive use of technology of children can be highly destructive. Procrastination and none prioritization of tasks, psychological complications e.g., anxiety, a lowered self-esteem and the effect on the physical wellbeing of children due to the lack of physical activity are few of how the negative implications on the misuse of technology can affect children. Thus, parents must be well aware of how these emerging technologies can be fully utilized to maximize the positive outcome for the welfare of their children, and to educate their children on its appropriate use (Kinnula, 2015).

The goal of the remote mobile application system that limits the usage of online and offline application to elementary learners will monitor what computer application they are using like online and offline computer games, and the location of the child, will support the parents to impose disciplinary actions to their children who are addicted to computer games and prohibited online and offline activities.

Android Studio v2.3.3 was used in developing the application together with the PHP for the server side, Notepad and MySQL for the database. XAMPP served as a local server for testing the interchange of data between different virtual devices. Android Lollipop version and beyond is a requirement for each mobile phone, the parent's phone and the child's phone. Internet connectivity is a requirement to achieve the features of the system. And a self-made survey questionnaire was used to evaluate the functionality of the developed system.

The respondents are the parents employed in Eastern Samar State University, Main Camus with children aging of 3 to 17 years old. From 484 populations, using Slovin's formula, 218 respondents were randomly selected, alpha test was conducted by the respondents.

The system developed was able to adhere to its intended objectives. To the respondents, finds as a solution to the concerns of the parents to the unhealthy fascination of their children to mobile applications. It allows parents to control, hence, limit what applications the children will be available to access, locate their children through GPS or Global Positioning System, and determine the type of application their children frequently uses and take precautionary measures.

**KEYWORDS:** Android, Android Lollipop, App, Application, Child's phone, GPS, MySQL, Offline activities, Parent's phone, XAMPP

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### INTRODUCTION

In this day and age, children are exposed early to modern technology. As a consequence, the way they learn, play and socialize has been affected considerably. They are well informed and more aware of the events that unfold in their surroundings. And due to this advancement, they can do tasks more proficiently than the previous generations of their age. In the last two decades, the Human Computer Interaction environment aimed to understand the impact among the technology user's (Druin, 2002).

According to Young & Abreu (2011), the excessive use of technology of children can be highly destructive. Procrastination and none prioritization of tasks, psychological complications e.g., anxiety, a lowered self-esteem and the effect on the physical wellbeing of children due to the lack of physical activity are few of how the negative implications on the misuse of technology can affect children. Thus, parents must be well aware of how these emerging technologies can be fully utilized to maximize the positive outcome for the welfare of their children, and to educate their children on its appropriate use (Kinnula, 2015).

The goal of the remote mobile application system that limits the usage of online and offline application to elementary learners will monitor what computer application they are using like online and offline computer games, and the location of the child, will support the parents to impose disciplinary actions to their children who are addicted to computer games and prohibited online and offline activities.

The focused of the study developed the mobile application system that limits the usage of online and offline application is to help parents to monitor and limit the applications that their children are using that may affect their socio-psychological growth. Served as an instrument in identifying the child's current activities in the technology they are using.

## OBJECTIVES

Remote mobile application control system that will function the following

- a) Monitor the time spent using an application;
- b) Disable the program application such as online and offline games;
- c) Limit the usage of a specific application through time stamp.
- d) To monitor kids phone/tablet usage through parent's phone remotely.
- e) Determine the program application currently active; and
- f) Identify a child's mobile location through GPS or Global Positioning System.

## METHODS AND MATERIALS

### Software Employed

Android Studio v2.3.3 was used in developing the application together with the PHP for the server side, Notepad and MySQL for the database. XAMPP served as a local server for testing the interchange of data between different virtual devices. Android Lollipop version and beyond is a requirement for each mobile phone, the parent's phone and the child's phone. Internet connectivity is a requirement to achieve the features of the system defined from the objectives. However, in finding the location of the child or the child's mobile phone does not require an internet connectivity.

### Respondents

The respondents are the parents employed in Eastern Samar State University, Main Camus with children aging of 3 to 17 years old. From 484 populations, using Slovin's formula, 218 respondents were randomly selected; alpha test was conducted by the respondents.

### Instrument

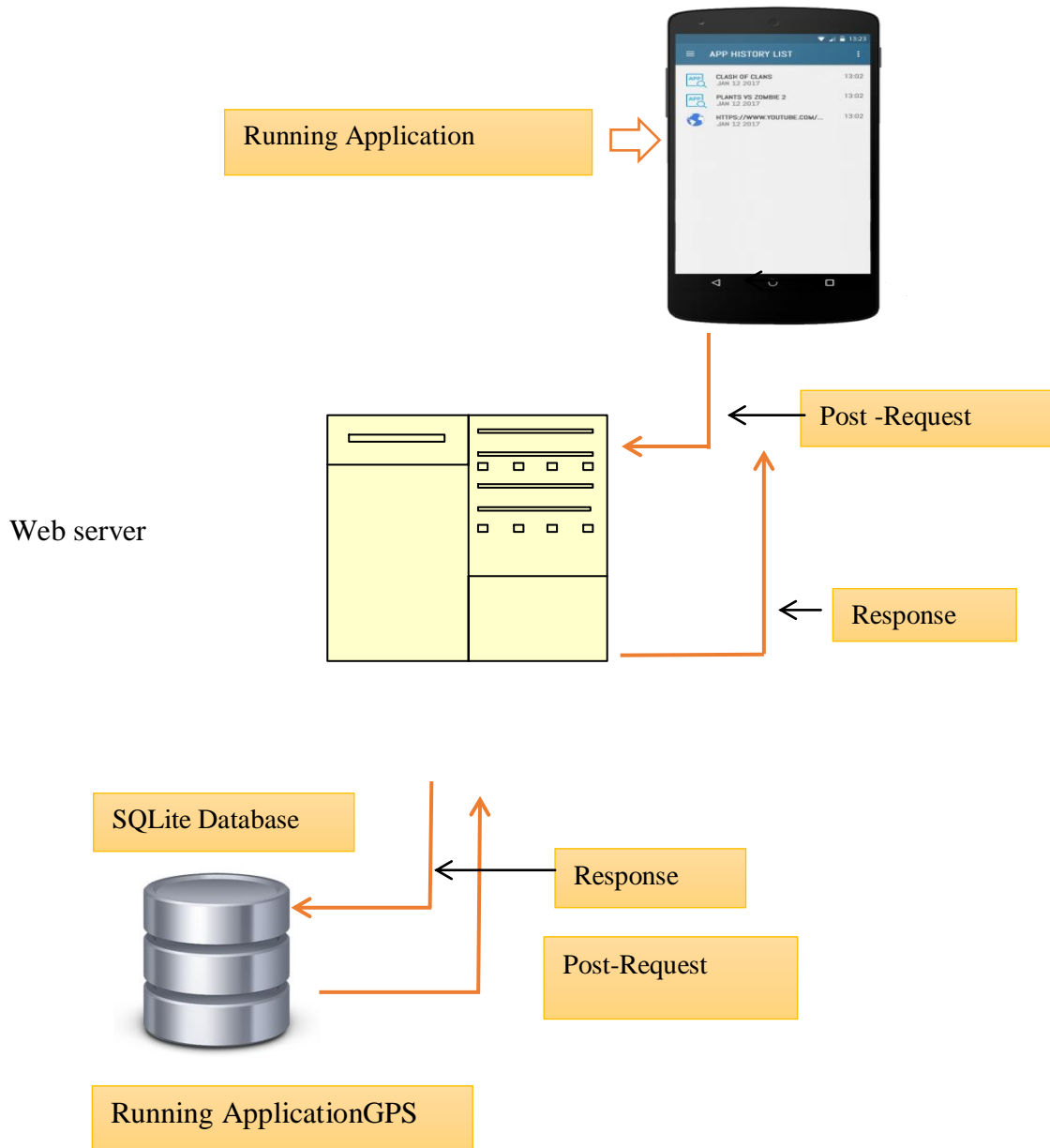
Self-made survey questionnaire was used to evaluate the functionality of the developed system.

**Title:** Mobile Application System that Limits the Usage of Online and Offline Apps Remotely

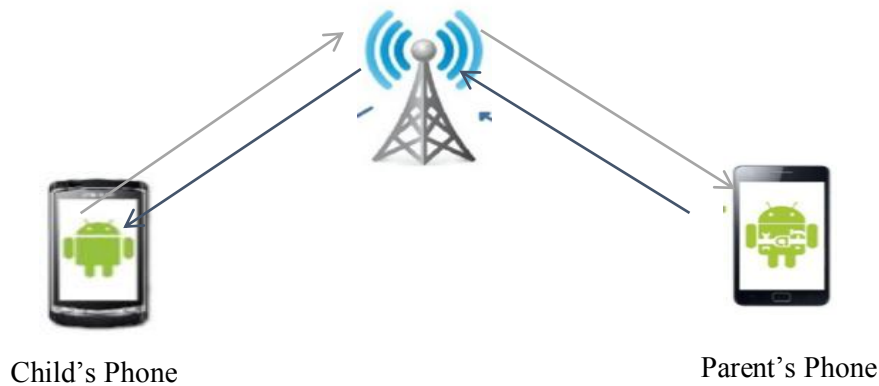
**Direction:** Evaluate the system developed; please check the appropriate column stating your approval or disapproval on the degree of accomplishment.

Questions	Yes	No
Q1: Is the application functional?		
Q2: Where you able to find the time spent used by your child using the online and offline application?		
Q3: Where you able to disabled the program application used such as online and offline games?		
Q4: Did the application helps to lessen the play time of your child?		
Q5: Can the application disabled unwanted and distracting apps on your children's Android Phones and tablets remotely.		
Q6: Did the application developed identify the location of your child or your child's phone?		
Q7: The application can easily limits for your children's devices right from your Phone or any browser.		
Q8: Is the application helpful to monitor your child? Parent's phone		
Q9: Is the application user-friendly?		
Q10: Overall, I am satisfied using the application.		

### System Development Architecture



### Via Satellite Transmission



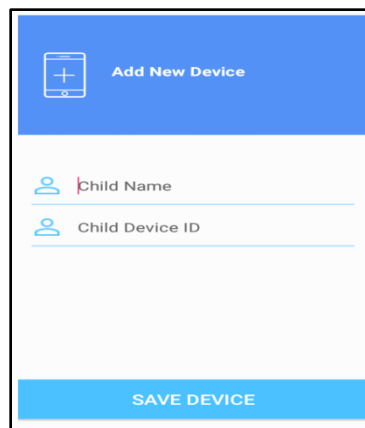
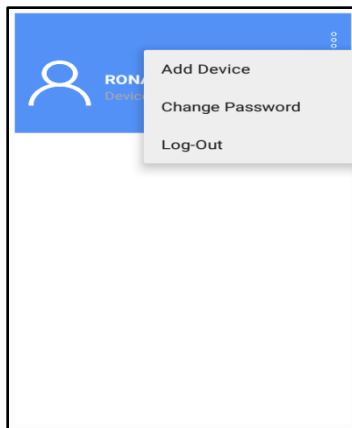
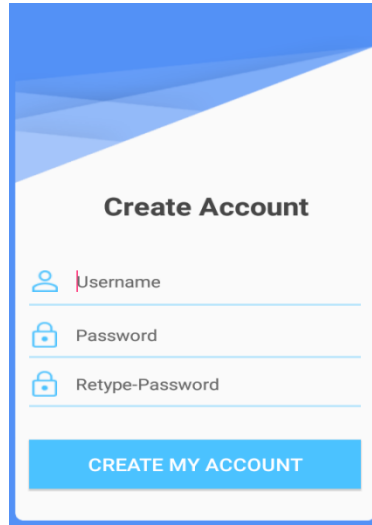
### Statistical Tool

Frequency percentage distribution in determining the extent of functionality of the system developed.

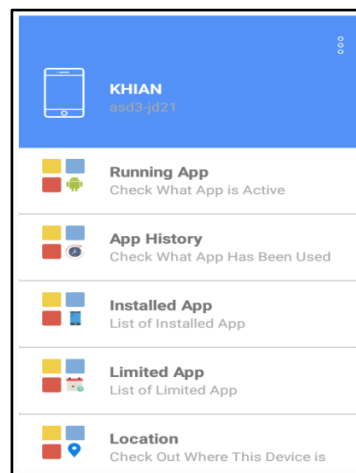
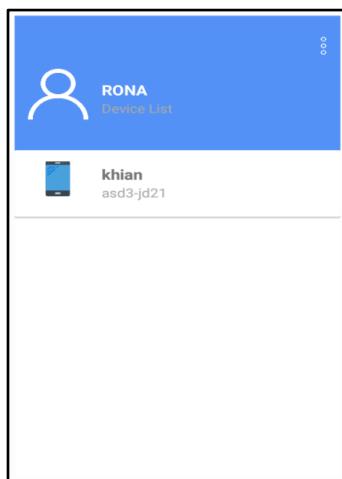
### Presentation of Result

Questions	Yes	No	Description
Q1: Is the application functional?	98%	2%	Functional
Q2: Where you able to find the time spent used by your child using the online and offline application?	90%	10%	Functional
Q3: Where you able to disabled the program application used such as online and offline games?	90%	10%	Functional
Q4: Did the application helps to lessen the play time of your child?	90%	10%	Functional
Q5: Can the application disabled unwanted and distracting apps on your children's Android Phones and tablets remotely.	98%	2%	Functional
Q6: Did the application developed identifies the location of your child or your child's phone?	100%	0%	Functional
Q7: The application can easily limits for your children's devices right from your Phone or any browser.	99%	1%	Functional
Q8: Is the application helpful to monitor your child?	100%	0%	Functional
Q9: Is the application user-friendly?	90%	10%	Functional
Q10: Overall, I am satisfied using the application.	95%	5%	Functional

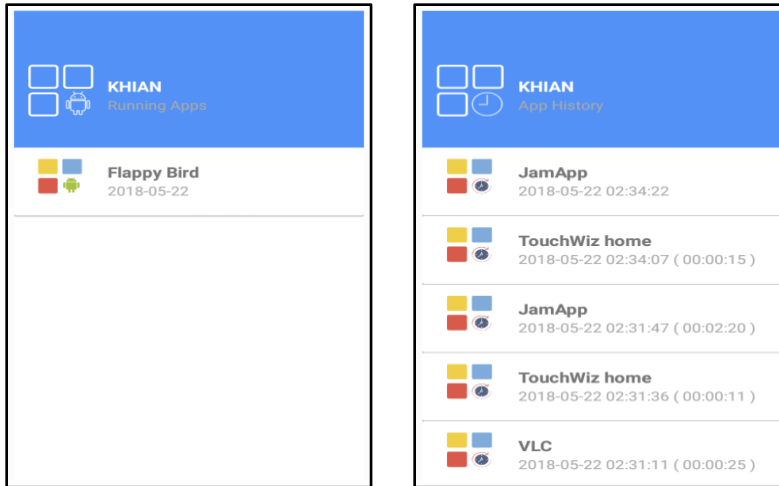
### Screenshots and Interface



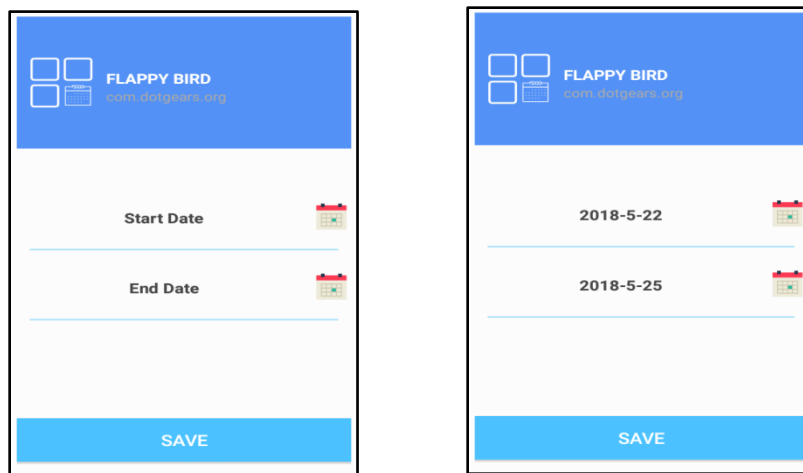
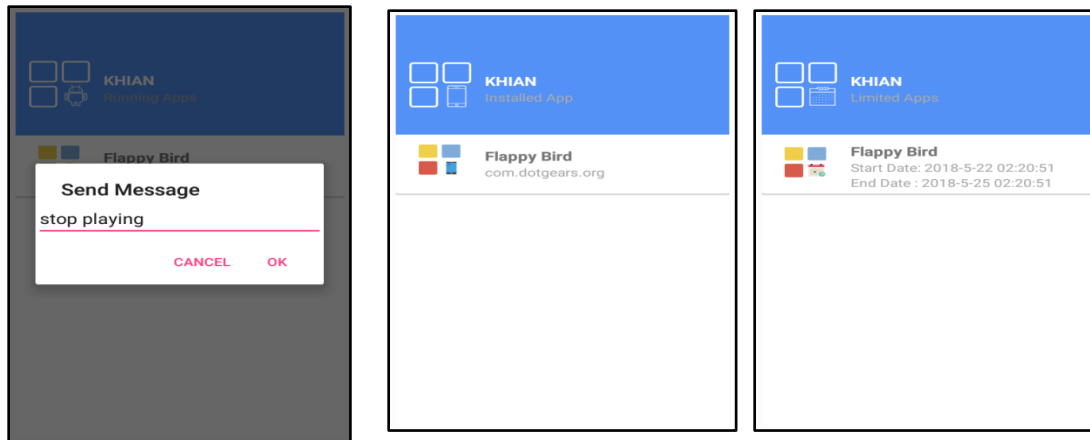
### Sign in and Sign up



### Device ID of the child

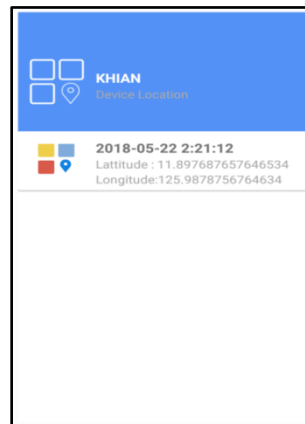


Installed apps and Limited apps.



Running Application and Application History

Device Location



## CONCLUSION AND RECOMMENDATION

The system developed was able to adhere to its intended objectives. To the respondents, it finds a solution to the concerns of the parents to the unhealthy fascination of their children to mobile applications. Specially, these days and generation, the use of mobile devices has been prevalent and is easily accessible even to children, thus, affecting and stunting their overall development.

The amazing user-friendly system, allows parents to control, hence, limit what applications the children will be available to access, locate their children through GPS or Global Positioning System, and determine the type of application their children frequently uses and take precautionary measures.

Program performance in terms of functionality, clearly described from the results, all features are functional. Over all, the respondents were satisfied of the behavior of the system.

The system developed is highly recommended to be utilized, especially parents, which require a method to impose restrictions in their children's usage of applications that disrupts their focus on their studies.

## REFERENCES

1. Anderson, Ruth E., et al., 2009. "Building a transportation information system using only GPS and basic SMS infrastructure," 2009 International Conference on Information and Communication Technologies and Development (ICTD), IEEE.
2. Anson Alexander. "Smartphone Usage Statistics 2012", available at: <http://ansonalex.com/infographics/smartphone-usage-statistics-2012infographic>.
3. Bell, et al, 2005. "Software Engineering for Students: A Programming Approach".
4. CDC parent portal raising healthy teens, [www.cdc.gov/parents/teens/healthy\\_children.html](http://www.cdc.gov/parents/teens/healthy_children.html)
5. Chandra, et al, 2011. "GPS Locator: An Application for Location Tracking and Sharing Using GPS for Java Enabled Handhelds".
6. Druin, A., 2012. "The role of children in the design of new technology. Behaviour and information technology".
7. Gallego, et al, 2018. "Parental Monitoring and Children's Internet Use: The Role of Information, Control, and Cues".
8. Guilamo, et al, 2010. "Parental Monitoring of Adolescents: Current Perspectives for Researchers and Practitioners. New York: Columbia University Press".
9. Kinnula Marianne, 2015. "Young Children as Internet Users and Parents Perspectives".
10. Livingstone, et al., 2019. "Balancing opportunities and risks in teenagers' use of the Internet: The role of online skills and Internet self-efficacy. New Media & Society".
11. Mazloum, et al., 2013. "GPS AND SMS-Based Child Tracking System Using Smart Phone".