SMART COLOR LOCKING SYSTEM FOR ANDROID SMARTPHONES USERS

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Abstract

In this proposed system we are going to implement a new way authentication system for android smartphones. As we know that the each and every person are move around android smartphones instead of PC's, Laptops because of its friendly access as well as structure it anywhere with light weight. The user are store his personal database or data to a smartphone where the data more secure for users point of view then the need arises to provide much or high level security for our smartphone and because of this we are going to introduced a new technique or new way of android Smartphone authentication system.

Key Words: - Android, Smartphone's, Screen lock, Authentication.

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1. INTRODUCTION

The user are rapidly moving to a smartphones for matching the technology. In that the smartphone users the android user are more because of its friendly nature and open source nature which will help the user to build or work on any application is more effectively. In previous day the launcher gives or provides security for applications. The launcher pro etc they provide a convenience but not good security the home launcher currently in market but they will not use authentication method in Android OS but they need to provide Authentication for security and the convenience [1,2,3] in this scenario we will analyze the authentication & security lock screen problem or launcher & suggest a new upgraded system for Android smartphones.

2. LITERATURE SURVEY:

Now a days the smartphone users are increasing in huge manner most of android users. They will perform all the activity or regular work with respect to his android smartphone. We can say the desktop or laptop will replace with smartphones but the smartphone user will look on his security concern so the need arises how to gives security for his data. Now a day most of the launcher provides security for android smartphone but this is not much enough to provide security for smartphone so we will go to provide
A smart colour authentication system for high level security for users database or data. For developing proposed system we will look some related papers are as follow :

❖ In [1] Slide locking system: In this locking system the

Android and IOS provide a "touch–horizontal slide" with respect to screen. It does not provide as much security level and other security applications.

❖ In [2] Glass locking system: In this locking system the system based on Android and is provided on Samsung smartphones. It perform the activity like as Slide Lock can be dragged in all directions.

❖ In [3] Keypad locking system: In this locking system required a four-digit password, so it provides key space from 0 to 9999.

❖ In [4] Pattern locking system: In this locking system the system is depend on users interaction. The system describes the user authentication is based on nine dots which will provided by the system. It is based on attaching one point with respect to other points to make a password. Accordingly, it provides approximately one million (= 9P4 + 9P5 + 9P6 + 9P7 + 9P8 + 9!) of key space. However, if users enter an easy pattern for convenience, there is weak security power, in this system the week password also be generated and it is acceptable.

❖ In [5] Finger scanning system: In this locking system Atrix smartphone, made by Motorola, supplies a finger scanning system, which provides both good convenience and better security. This processes on the screen and low speed are the main problems in this system.

3. PROPOSED SYSTEM:

In our proposed system our efforts to detect or prevent the users secure data from third party user. This system is shown in figure. Re-touching the node is allowed and when the node is touched it changes its colour up to 7 times so the user will provide much higher input for his android smartphone. we allowed user to set any random password and check where the password is much enough to provide security or not if it is enough for security concern then save it and send to the users mail for users point of view to access it for next use or if the password is not much secure then it will give a week password message and wait for user input until they will enter a strong password. In the System, the Guest mode activity will introduced to give permission for user to access limited data when the locking system will apply on your smartphones.
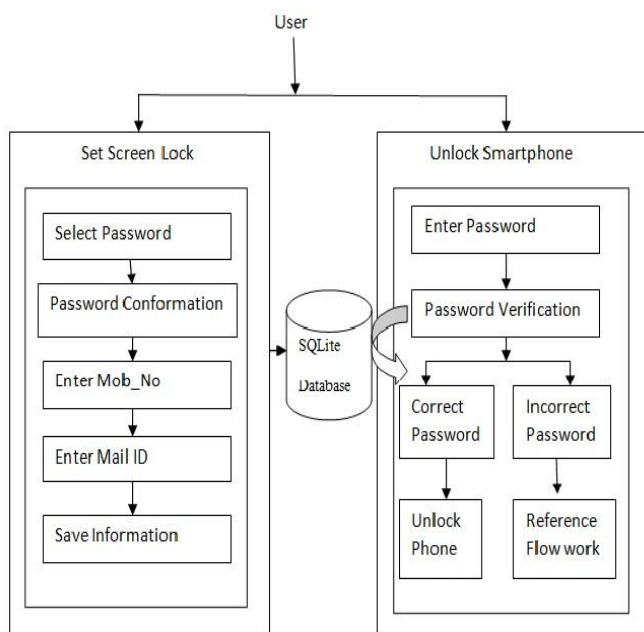

Fig: Android Smartlock Architecture.

In system consist of mainly two parts first will used to set the smartphone password and second will used to perform activity for unlock smartphone in that the following parts perform a main role for completing the activity.

4. SET SCREEN LOCK:

In this locking system when we are going to start or use this system that time it is necessary to enter the data in proper manner which will used to define a security for your mobile or your smartphone. This is a way where we are going to provide security field in step wise manner. As we know that the each and every field are affect on security issue. The steps are first when we start this security app in our mobile as smartphone the very first use of that software will ask a security field as follow select password this field are going to set a password in any style or sequence. Next step is depend on the first field which is conform password this field ask user where the entered data is correct or not for password saving. After the user conformation the app will

store the database to SQLite And switch to next field which is for Enter Mobile number this field is used for confirmation of mobile number to give user extra security. After mobile number conformation the app will show you a next window which is ask user for his email detail which use for when user will forget the entered password then this field will gives the users entered password. Which is present when user is enter the first time password pattern that time the app will match user input and send to the users mail because of this the password will gives to the user. when the user entered all his detail in each window the last window will come which is ask user to save the data when user click on that the all entered data will save and the data will send to the SQLite database.

5. UNLOCK SMARTPHONE:

The unlock smartphone activity will occur when we want to try this activity after installing in our phone with proper setup. When we set this app for security purpose when we want to unlock screen that time we need to press unlock key when we press the unlock key the screen display will on and shows one window which will describe our app security. This window will contain Enter password this field is used to allow user for enter the password which user will already set when the installation is begin. When the user will enter the password the app will check that entered data into the SQLite database The SQLite database hold the already entered password and match that data to entered data when he match the data it will generate

two field first is the entered data from user is either acceptable or not if yes then it will tell system the data is correct and the app will unlock system else the user entered detail or password is incorrect then switch to the reference field flow work for user. The guest login feature will also introduces phone that time user will just shake his smartphone and user will enter in guest login. The user will access those data which user will allow using.

6. FLOW OF PROPOSED SYSTEM:

The first condition when user starts to achieve the security level high for that the user will need to install that app in his smartphone. After completion of installation of app they will run this app. The application will start it will ask user select pattern, conform password, enter mobile number, enter email address, save information the user will enter a appropriate data and save all the data with proper manner.

When user will save that data THEY entered password will send to USER'S mail which will used to remember the password lifetime for users point of view. After entering the database it will assign this app as a security app for his smartphone. When user will start or use that app for his security app then user will give one window which will ask user for enter the password then user must enter the appropriate pattern which user already set at the time of save the setting.
When USERS ENTER the password the next step is to recognize users entered password in this step the users

entered data will match existing database which will present in SQLite database.

In matching the password the two steps or stages are OCCURRING first is the pattern is correct then unlock the system and second is the password is incorrect and app will show a reference flow work to user. The next stage is guest login when the user will not going to unlock the screen that time we will going to provide a extra facility guest login when user will shake the phone that time the users smartphone will automatically login to a guest user and user will access those data which user allow for guest user.

7. ALGORITHMIC STRATEGIES TO BE USED FOR PROPOSED SYSTEM:

- Install app
- Enter appropriate database
- Save the database
- Data will store in SQLite database
- Set screen lock
- Ask for password
- Enter appropriate password
- Match password to SQLite database
- If password is correct unlock screen
- If not gives reference flow work for user**3.**

CONCLUSIONS

The Proposed system will overcome the existing system bugs or errors with respect to current working home launchers' screen lock system and different improving security applications which is increasing day by day in market to provide security for Android smartphones. When we implement this system the user security need is achieved most effectively, we are going to improve the user's authentication and security level. Android is introduce in tablets and other digital equipment that will require a much security. The use of our improved security system ensures security of secure database.

REFERENCES

[1]. DAI-Labor, "Malicious Software for Smartphones," Technical Report, 2008.
[2]. Ken Dunham, "Mobile Malware Attacks and Defence," SYNGRESS 2009, 2009.
[3]. Android Security Overview, Android open source project.
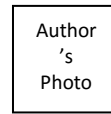[4]. Design and Implementation of Improved Authentication System for Android Smartphone Users, 2012.

BIOGRAPHIES

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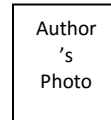
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