**ANDROID MULTILAYER PATTERN LOCKING PROJECT**

**Abstract:** Everyone use smartphones nowadays and due to this increase usability of smartphones everywhere, now people have started keeping their important files and information into their smartphones. And thus they need some application or software to keep safe their data into their phones, even when someone else use their phone. Android multilayer pattern locking application is one such application which helps the user to keep a lock on their files and folders in their phones via pattern keys.

**Existing System:** In the existing smartphones, only some groups of smartphones have locking systems, which makes them unaffordable in terms of security. Also, in some systems, If they have smartphones, then also the users get only one chance to open the lock when the lock comes in terms of some pattern.

Existing system is quite unsafe and if it is safe, then it is for sure unreliable in terms of usage. It may have many advantages of keeping the data safe, but once if we forget the pattern, then we cant retrieve all the data again because we will be unable to login into the system in our own account.

**Proposed System:** In this proposed system, users have been provided with multiple times to unlock their system using pattern. Initially, they have to register into the system administration with a certain pattern and then every time they try to open their files or folders, having these pattern lock into it, then they can try to unlock it 5 times. 5 chances are given so that if the user draw incorrect pattern then also he/she can correct his/her mistake and can redraw the pattern again. This android multilayer pattern locking system will help users to keep their files and folders safe.

**Modules:**

Modules used in the given android multilayer pattern locking system are:

1. User Module: Here the user can set the pattern design as per his/her way in which he/she can remember simply. User can register the pattern through this module.
2. Registration Module: In this module, user can register the design along with the required details of the system and can get some important instructions as well the same as the given pattern locking performa.
3. Administration Module: All the details and data will be saved in this module and once the times for entering the pattern for unlocking the system reaches to 5, this module gives sudden reply for crossing the no. of limits for entering the pattern and thus lock the pattern again.

**Software Requirements for designing a multilayer pattern locking system:**

* Andorid software development kit (SDK)
* Windows XP
* Java Development Kit (JDK)
* Netbeans editor
* Android debug bridge

**Hardware Requirements for designing multilayer pattern locking system:**

* Hard Disk – 2 GB.
* RAM – 1 GB.
* Processor – Dual Core or Above.
* Mouse.
* Keyboard.
* Monitor.
* Printer.