

# MOBILE APPLICATION FOR POULTRY MANAGEMENT

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**Abstract** – The main aim of this project is to design and develop a mobile application that makes the manager's job simpler so that they can plan and distribute work to their employees working at different levels in the hierarchy, manage inventory, track workflow, etc., using smart phones from anywhere at any time. With this mobile application, the employees can update the status of tasks assigned daily and maintain their registers updated. This mobile application also offers provisions for generating reports automatically about sales and revenue. A Quick Read (QR) code based security feature is incorporated in this application for manager to track the status of work assigned to their employees online.

**Key Words:** Mobile Application, QR code, Inventory, Work Flow, Register Update, Automation

## 1. INTRODUCTION

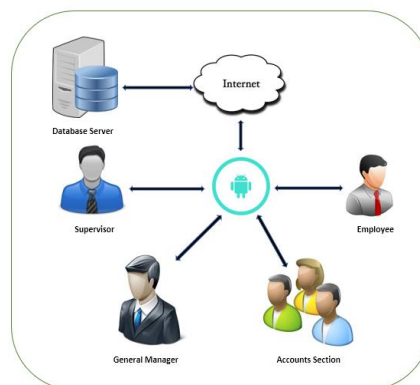
Nowadays, digitalized is likely the single most important Shift world-wide in all the fields which involves in our daily life. And the respective Field workers and officers face a major problem in maintaining the work record and business details manually in the corporate company. Hence they are planning to make it computerized according to their need they need a single mobile app to easily access their records and Business details according to their company clients. In this Mobile application they need to feed their daily entries of the work and they can also do it by anywhere there is no time bound to enter the data if they use the manual register it is difficult to carry them and they can only do it in particular time. And through this mobile application it is easy for Manager and Accountants to do their business calculations easily and they can also track the workers easily.

### 1.1 WORKING PRINCIPLE

Every employees and managers who are part of the Shanthi Feeds Company is given a user account and password to access this mobile application. When an employee login to the application, the application shows important guidelines about raising the Chickens healthily and they can also infer details about the number of birds available, types of breeds available and the number of birds with below average weighted, etc. ..Using this application, the supervisor can monitor the routine tasks such as details of birds delivered, birds available, the availability of the Parental Stock and also

Cost of them. The manager has the full authority over the application. When the manager login to the Applications, he can upload the new Rules and the target of the company and he can see the overall assessment of the company including the sales, revenue of every month. This application also includes the advantage that manager can track the status of work assigned to each sector in the company and compare their performance according to past months or days. Using this application, the manager can generate reports automatically about latest business transaction for business meetings. The mobile application is Developed using Android Studio and SQL (Structured Query Language) .

## 2. PROPOSED SYSTEM OF APPLICATION



**Fig -1:** Block Diagram

The proposed mobile application incorporates the data entry and register updating which helps the employees and higher officials to accurately record and make report of their work which is protected by the username and password. Now the user will be asked for the username and password when the user tries to login to the user account in the mobile application and after entering those information, users can make the changes which means the user can enter the data through the user account. This mobile application also provides workers with a detailed contact list and the previously added data and they can monitor the move and working of each worker through this mobile application. And workers can also enter the vaccination details of each breed through the application and higher officials can validate that works through this mobile application. The workers with huge work load can entry the data from anywhere which helps them to work in the manner of 24/7. And this mobile application will create a secured and organized communication throughout the company. This application is developed for android devices but it is applicable for any platform because it is web app which is developed using PHP, HTML, Android studio and MYSQL database server.

### 3. QR CODE AUTHENTICATION SYSTEM

The QR-Code authentication system using mobile application is easily implemented in a mobile device with high recognition rate without short distance wireless communication support such as NFC. This system has been widely used for physical authentication system does not require a strong level of security. The system also can be implemented at a low cost. However, the system has a vulnerability of tampering or counterfeiting, because of the nature of the mobile application that should be installed on the user's smart device.

The one-dimensional barcodes have been used in limited areas such as identifier of goods due to the limitation of information capacity. The two-dimensional barcode has been widely used in various fields because of great increase of the information capacity. Thus the user authentication system using the QR-Code becomes possible. Therefore, the widely use of smart devices has promoted to spread the QR-Code authentication system. Users could generate the QR-Code image for authentication easily through mobile application on their smart devices.

The system is mainly used in a low cost authentication system such as gate access control in buildings and unmanned book rental system in libraries. However, this system is vulnerable to attempts to disguise access to someone else's identity because of the nature of easily replicable QR-Code. In case of mobile device, it is very easy to duplicate through screen capture and be transferred to other user via instant messenger. Thus it is very difficult to eradicate these user violations because of the limitations by those characteristics. In order to overcome these vulnerabilities, various considerations such as security policy, authentication protocols, network security are required. In addition, the system needs also to consider reverse engineering because the vulnerable attributes of the mobile application.

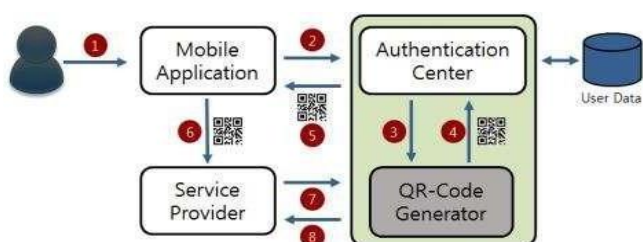


Fig -2: Vulnerability Attribute of Mobile Application

### 4. SOFTWARE ARCHITECTURE OF PROPOSED SYSTEM

There is total of three account privileges which is designed based on the working of the poultry industry and all the words are accomplished based on that hierarchical structure. And it consists of the Following Members:

#### 4.1 MANAGER

The manager able to see all the data of different hierarchy of employees working in the industry. The number of breeds that are still breeding, number of breeds that are completed by the employee, number of breeding accounts, number of breeding accounts that are closed by the accountant are visible for the manager. In addition to this, the attendance of the employee, accountants can be viewed by the manager and also a Profit graph which is shown for analyzing the growth of the industry.

#### 4.2 EMPLOYEE

Every Employee in the industry will give a unique username and password for accessing the Mobile Application. Once the employee login into the account, the employee can perform update of new breeding using the add breeding section. The Add Breeding Section consists of date (the date in which the breeding is added), Breed Name (specifying the type of breed), input chicken count (number of chickens available when giving to the farmer), input average weight (average weight of the chicken). Once the breed is added, it will be displayed in the still breeding section until the employee completes the breeding. The Section consists of date (the date in which the breeding is added), Breed Name (specifying the type of breed), input chicken count (number of chickens available when giving to the farmer), input average weight (average weight of the chicken). Once the breed is added, it will be displayed in the still breeding section until the employee completes the breeding. the Section consists of date (the date in which the breeding is added), Breed Name (specifying the type of breed), input chicken count (number of chickens available when giving to the farmer), input average weight (average weight of the chicken). Once the breed is added, it will be displayed in the still breeding section until the employee completes the breeding.

While completing the breed, the employee needs to update the output chicken count, output average weight. Once the breed is completed, it will be shown in the completed breeding section.

#### 4.3 ACCOUNTANT

Every employee in the account section will give a unique username and password for accessing expenditure details in the mobile application. Once the Accountant login to the account, the breeding's that are completed by the employee which are shown in the Breeding's Accounts section. The entries in the Breeding's Account is shown only after the Employee completes it.

The entries in the Breeding's Account can be closed using the close breed section. The Close Breed Section Consists of fields like procurement cost, breeding cost and selling price of individual chickens. Once the Breed is closed, it will be shown in the Breeding's Profit with profit price for individual chickens.

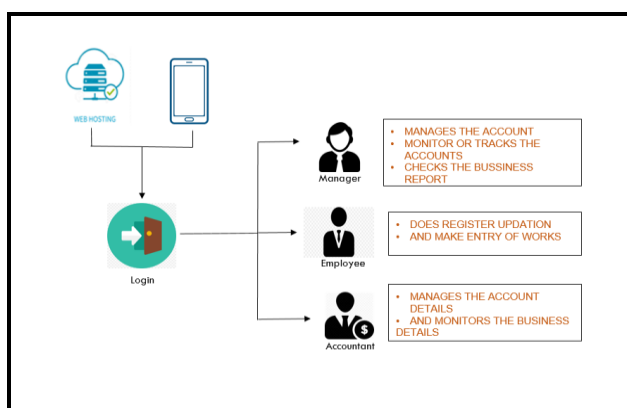


Fig -3: Vulnerability Attribute of Mobile Application

## 5. RESULT AND DISCUSSION



Fig 4: Home Page

### 5.1 MANAGER LOGIN

- Click on Manager Login, It prompts for the username and password for authentication. The Manager can also login using QR Code by clicking the QR Code button in the login page.

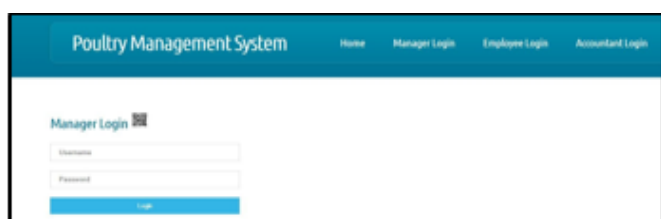


Fig 5: Manager Login

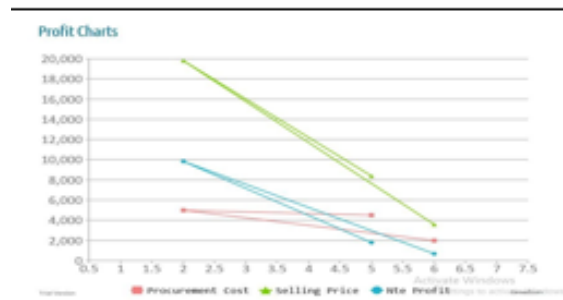


Chart -1: Profit Loss Chart

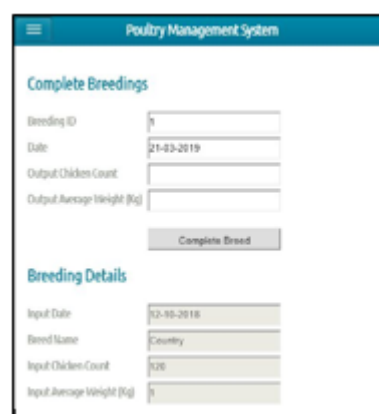


Fig 6: Breeding Details

## 6. CONCLUSIONS

Mobile Application is one the developing technologies which is important in all the field of work for their comfort. And now a day's physical records are difficult to maintain. But Mobile Application and the data that entered through the mobile app are easy to maintain and store the data through that mobile Application. Thus the Mobile Application was implemented to easy the process of Workers. This Application is Developed through Html, PHP, MySQL and Android Studio

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