Supply Chain Management

This is a Supply Chain project for maintaining the flow of inbound and outbound stocks in an inventory system. The app starts with a Login module where the user validates the credential and enter into the main page. If a new user wants to sign up, a sign up options is given to create a user account. This page creates an auto generated User Id which will be used as the producer Id. The pin number created by the user is hashed using Base64Encoder and the hashed password is stored in the system. The Main Activity of the app consists of three button Add Product, Scan QR and Exit Button. The First Module Add product creates the new products and stores the details of the products in the database. Also when the product is created, a QR code is generated on the same page that contains the product as well as the producer details. The Created QR code is stored in the phone storage which can be used in future for sharing. The producer/user can also share the QR code from the app when creating the product. The Second module is the Scanning module where the user can scan the QR code. Once the QR is scanned properly the application moves to a map activity where the location of the product is marked in the map and the details of the product is displayed using the toast message. The Third module in the Exit module clicking which the application logs out and moves to the Log in page. The technical part of the application are as follows: The application uses MVC architecture for better manipulation of data and can be extended easily to next versions of the app. MySQL database is used for the backend module and the application has a common database hosted in a third party webhost server. All the data from different users hits the same database as a thread request. The request from the application is made as an Http request from a class that extends AsyncTask class for concurrency. The Http requests are sent to different php scripts which handles the database connection and data manipulation parts ,the application receives a response from the php scripts based on the outcome of the operation. Since all the database operations are handled in the server the application can scale up to thousands of users without impacting the performance of the application. This application is compatible on all the smartphones with basic facilities. This application also encrypts the password before sending it to the server so that midway hacking of the password is not possible.