# Stock Maintenance and Production Prediction System for Textile Industry

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**Abstract -**

*Web-technology based textile stock maintenance system is designed to reduce paperwork by maintaining the required information such as fabric order details, weavers details, fabric in-stock entry, fabric dispatch details, weavers fabric entry, weavers payment details, yarn stock details and payment details. The accounting can also be made by exporting the data or payment transactions. The System will also predict the productivity of the weavers to place order to complete quickly. The stock can be maintained over the system to view the stock details anywhere without any physical documents.*

*Key Words*: **Stock Maintenance System, Web Application, Production Prediction.**

## 1. INTRODUCTION

Web application is an application program that is stored on a remote server and delivered over the Internet through a web interface. Stock Maintenance is the most important functionality in the textile manufacturing industry. Implicit Stock Maintenance will be the major function area of production and to the textile clients. This system will store the required day to day information of the weavers and fabric details. Based on the weavers previous fabric production records, further fabric entry details are predicted to the weavers according to the looming machines. This will fasten the production rate exponential to the weavers. The textile production prediction plays the major role in this system. It advances the task of complex working of the weavers. The system will also provide the mode of transport for transporting the production units to the expected clothing manufacturers. The available stock details are exported as a document.

## 1.1 Motivation

The goal is to accomplish the stock maintenance for the textile industry through web application. To enhance the proper production functioning of the textile industry. To predict and suggest the weavers to the users.

## 1.2 Objectives

a. To reduce the paperwork of maintaining the information of fabric details, weaver's details and payment details.
b. To minimize the cost of sufficient stocks available to meet the customer needs.
c. To predict the weavers to produce fabrics which will fasten the yield production.
d. The admin will have user credentials to access, modify and backup facility of the web application.
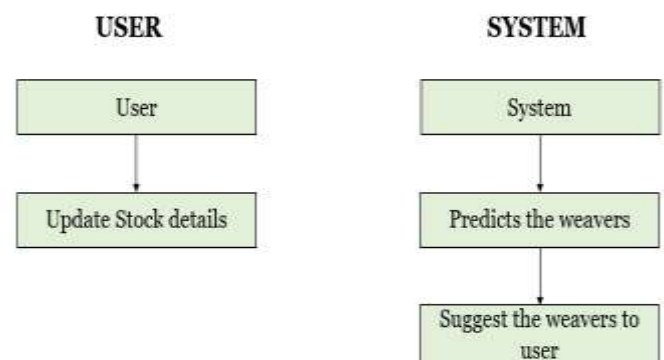
## 2. SYSTEM IMPLEMENTATION



**FIG-1**: Flow Diagram

### A. User Implementation:

The user updates all the weaver details per weaver order. It also exports the weaver, dispatch, prediction details in the document format.

### B. System Implementation:

The System is implemented to store the data and export the details in the database to retrieve easily. The web application is implemented on the Server side by the admin of the organization.

### C. Database Implementation:

A remote MySQL database is implemented so that the individual system could be able to communicate with the server by using the JDBC technique.

## 3. PLATFORM SPECIFICATIONS

### A.  Hardware Requirements:

- **Processor:** Pentium P4 or higher version
- **Motherboard :** Genuine Intel
- **RAM :** Min 512MB
- Monitor
- Mouse and Keyboard as Input Devices

### B.  Software Requirements:

- **Operating system:** Windows Operating System
- **Technology Used:** Web Technologies, PHP
- **Tools used:** XAMPP

## 4. PROJECT MODULES

### 1.  Dashboard Module

The dashboard provides the logical view of the desired modules based upon the functioning between users, fabric entry details, weavers, product to the clients.

### 2.  Weaver Update Module

Upon receiving the fabric order details from the client, the system suggests the weaver to produce yarn. It also displays the weavers name and weavers ID with the number of looming machine to simplify the large number of tasks.

### 3.  Payment Details Module

The payment details will be maintained over each day work by the weavers. It is based upon the number of looms. Mode of payment can be online transaction via Google Pay or Razor pay. The payment can also be Cash on Delivery.

### 4.  Export Document Module

The document can be downloaded by both the user and system. The document is created as the weaver completes his task. It is maintained in day by day, weekly, and monthly by accessing the stored information in the database.

### 5.  Prediction Module

The prediction to choose the best weaver for weaving the fabric order is predicted by the previous fabric orders completion. This is done by retrieving from the database. The Naive Bayes Algorithm is implemented by using the small amount of dataset to estimate good results.

## 5. CONCLUSION

Web application for the textile industry is used to reduce manual work in a large number of tasks. It provides the exact information to all the co-workers involved in the organization. The prediction simplifies the weavers tasks based upon the fabric order. The information of each co-workers task details are stored as the document which is easily maintained in the organization as well as by their co-workers.

## ACKNOWLEDGEMENT

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