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**AMITY SCHOOL OF ENGINEERING & TECHNOLOGY**

**Synopsis**

**B.Tech (CSE)**

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**Academic Session: 2019-2023**

**Faculty Guide: Prof. Sanjeev Thakur**

**Project Title: Supermarket Handling System**

**Introduction:** Supermarket has become a thriving business opportunity as it was a major benefit to the customer to walk in a single store and get a wide range of products available to them at a single place, hence saving time as they don’t have to visit different stores to buy the products.

Supermarket, large retail store operated on a self-service basis, selling groceries, fresh produce, [meat](https://www.britannica.com/topic/meat), bakery and dairy products, and sometimes an assortment of non-food goods. Supermarkets gained acceptance in the [United States](https://www.britannica.com/place/United-States) during the 1930s. The early stores were usually located in reconverted industrial buildings in outlying areas; they had no elaborate display facilities, and their primary advantage was their low prices. During the 1940s and ’50s, they became the major food-marketing channel in the United States, and in the 1950s they spread through much of [Europe](https://www.britannica.com/place/Europe). The extent to which they have succeeded in various countries has depended on the ability or willingness of producers and wholesalers to adapt their operations to large-scale [retailing](https://www.britannica.com/topic/retailing). The spread of supermarkets has been part of a trend in the developed countries toward reducing costs and simplifying the pattern of [marketing](https://www.britannica.com/topic/marketing).

**Objective :** This project deals with the application which is responsible for the management of a supermarket systems like inventory, billing, checkout employee management and many more. The aim is to create an application that would centralize these systems under one application for the ease of the owner to access and manage their business. It also aims to create an application that would also provide a better customer experience and reduce the time the customers spend in the checkout line. This is done by creating an automated billing system which can be further divided into two branches, one for cash customers in which a cashier would be required to authenticate the billing and second with non-cash customers who can either opt for a cashier checkout or save time by opting for self-checkout in a payment would be made in electronic form.

**Proposed Methodology:** The methodology that would be used to create the application would be java to create the frontend of the application and MySQL database to create the backend of the application.

Java is the most preferred language to create applications as it has many benefits like it is robust and portable which results into an interactive user experience, it is platform independent and very secure, java codes can be reused to make any other application or could be further modified to introduce more functionality.

MySQL database which is open-source software is a very good application for relational database operations and can be integrated easily. It features include fast maintenance, greater scalability and reliability, platform independent, user friendly and provides support for other databases like Informix, Oracle, Sybase.

**Signature of Guide:**