LITERATURE REVIEW FOR CANTEEN AUTOMATION SYSTEM

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Year of Paper	Title of the paper	Journal/Conference details	Methodology used	Proposed idea	Advantages/ achieved objectives in paper	Disadvantages/ Limitations
2020	Mobile Application for Canteen Automation System using Android	International Journal of Advanced Research in Computer Engineering & Technology (IJARCET)	Implemented on AP language like AspectC, Aspect C++, AspectL(Lisp), Aspect XML and Aspect Android etc, Top down approach	ADMIN LOGIN •Add/Remove Food Items Order Forecasting(predict items most frequently at some stage in precise hours) •Total Earnings 2.STAFF LOGIN •Order Placed By Customer •Order Forecasting 3. USER LOGIN •menu items• Placeanorder •Billpayment	Completely Computerized-line ordering of food in acanteen ➢ Order can be located using personal android phones ➢ Customers Does not have to wait long queue ➢ This Software Reduces Paperwork.	Active internet connection Needs Android Currently, only linked to one restaurant.
2020	Canteen Automation System with Payment Gateway	Proceedings of the 3rd International Conference on Advances in Science & Technology (ICAST) 2020	Language: python Frontend : HTML, CSS Framework : Django Database : SQL Top down approach	A system which works by reducing manual error wherever possible. The user will first register on the website and make an account. After completing the registration procedure they will navigate through the	customer record keeping, data entry into register and then maintaining those register, keeping a track of the billing and also maintaining the repository along with how much items are left in the food	Active Internet Connection More user friendly Smartphones are only allowed.

				website, select the food item they wish to buy and order it. After which they will be taken to the payment gateway to make the payment.	inventory. Due to the organized data, it becomes easier to manage.	
2019	Canteen Automation System	International Journal for Scientific Research and Development (IJSRD)	Top-down Approach used Mobile Application using Language: C#, C++ Framework: Xamarin RDBMS using SQL for queries	Automated online food ordering system with secure and special server for food ordering Admin Login (Canteen/College side) User login (Customers)	➢ Easy Maintenance. ➢ User-friendly. ➢ Easy Accessibility. ➢ Efficient and reliable. ➢ Load Balancing.	Requires an active internet connection Requires Android phone if user is ordering
2019	Cloud based Android App for College Canteen Management System	International Journal of Research and Analytical Reviews (IJRAR)	Frontend: Android Application (Java, XML) Format of data on server: JSON Backend: Firebase (cloud database) API: Payment Gateway API.	Cloud-based cashless framework facilitating storage, management and analysis of data. Admin Login (Canteen Side) Student Login (Customers)	➢ E-cart, E-menu, E-wallet to all logged users. ➢ Users can cancel their orders within a specified time else fine is charged. ➢ Cloud Database makes it more scalable. ➢ Automatically generating the sales reports.	Requires an active internet connection. Requires Android phone if user is ordering.
2019	Canteen Automation System using Android	International Journal of Innovation Research in Technology (IJIRT)	Top down approach used; system designed at block level, which are created on the basis of analysis done during problem identification phase.	Idea was to automate the existing manual system with the help of computer software. While development, different blocks are created for different functions.	Security of data. Minimize manual data entry. Managing information of meal type.Manage information of canteen editing, adding and updating of records is improved.	Requires Android phone if user is ordering. Also requires active internet connection.
2019	Canteen Management App	International Journal of Information Sciences and Application (IJISA)	Top-down Approach Frontend: HTML5, Javascript, BootStrap. Backend: JSP	Customer end: A online system where food can be ordered from any food delivery industry. An interactive, dynamic website with up-to-date menu of food items. Review the order details	Load Balancing Easy Accessibility User Friendly Efficient and reliable E-Wallet Encrypted credentials	Requires an active Internet connection.

				any time before checking out. Canteen end: All orders will be displayed with items, corresponding options and delivery details, in a concise and easy to read manner.		
2018	Online Canteen System	Journal of Emerging Technologies and Innovative Research (JETIR)	Web app using javascript, sql database, html and xml.	E-menu is available, payment is online. Requires user account. Admin gets a list of orders, can update the menu.	➢ Cloud based system- scale does not make any difference. ➢ No customer queue, order prepared in advance.	Can be improved by automation of software, where no manual observation is required.
2017	Android Based Canteen Automation Using WiFi	International Journal of Advanced Research and Review (IJARR)	The use of Android, Java, MySQLHtml, and JavaScript. Top down approach	It is a wireless restaurant management system with feature takeorder, send order, billing and other using android devices. Location based services using android operating system motivated by the use of android mobile operating system in health and other applications, System present the use of android devices in business applications, namely the restaurant management system in restaurants	To automate restaurant management systems. User satisfaction,to reduce the cost of labour. Allow the restaurant to operate faster Reduce employee error, thereby increasing customer happiness.	Need of smart phones with active internet connection.
2017	Automatic Order Management System for Restaurants	International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE)	Frontend: Android Application(Java, XML) / Web Application Database Server: MySQL Server. API: Payment Gateway API IoT: Raspberry Pi	Restaurants use a local network and a local server to store data making it faster. Web Application for automation makes it easy to use for all customers.	➢ No active Internet connection required since it uses Wi-Fi. ➢ Orders are accepted only if the customer gets authenticated. ➢ Free Internet Access	Requires more hardware to implement. Server Maintenance

2016	Cloud Based Canteen Management System	International Journal for Research in Engineering Application & Management (IJREM)	Automating the process on cloud (Both mobile and web apps), using AWS EC2 or others having auto-scaling and load balancing features. Here, HTML5,WORDPRESS (front end) and GO(server side language) are used for the website.	A cloud based cashless system which is based on RFID and e wallets for transactions. Order can be placed through the mobile app. Features of cloud such as auto-scaling, load balancing and pay as you go enhance the working of the system .	The advantage of using a cloud based system is that the scale of a canteen does not make any difference. Through the friendly user interface of web and mobile apps the different users of the system do not need special kind of training and can use the application with ease. Owner can keep track of everything going on in his business which gives him better control over his business.	Active internet connection required.

Conclusion

We are referring to: Canteen Automation System using Android from International Journal of Innovation Research in Technology (IJIRT 2019), as our base paper.