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### (57) Abstract:

The Smart Online Library Management System is an innovative application that combines the power of Artificial Intelligence and Internet of Things (IoT) to revolutionize the traditional library management system. The system aims to automate the tedious tasks involved in managing a library and make it more efficient, cost-effective, and user-friendly. The system includes features such as real-time book inventory management, self-check-in and check-out, book recommendation, and personalized reading lists based on the user's interests and preferences. The system utilizes AI algorithms to provide intelligent book search and real-time user tracking to suggest relevant books to users browsing the library. The system automates the fine management process and provides automatic reminders to users who have overdue books, reducing the workload of librarians. The system allows users to reserve books online and receive notifications when the book is available, reducing the wait time for popular books. The system provides data analytics tools that allow librarians to analyze the library's performance and make data-driven decisions. The system allows users to provide feedback on the books they have read, and the AI algorithms analyze the feedback to suggest improvements to the library's collection. The Smart Online Library Management System improves the user's experience and encourages them to explore more books, leading to a more engaged and satisfied library community.

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