

# Automating the entire hostel operations with a user-friendly web application.

Case Study



Industry:	Educational
Technology:	HTML, MVC.Net, Cloud, MS SQL
Country:	India

# **Client Profile**

Since 1983, the client is running a non-profit institute guiding people across various states of India in the entrepreneurship field. Moreover, the institute is sponsored by both governments as well as private financial organizations. In order to spread awareness and enhance the words frontier of entrepreneurship research, the client has established a Center for Research in Entrepreneurship Education and Development (CREED) to inspect various issues faced by small and medium enterprise sector and build a network of researchers and trainers for conducting seminars and sessions on entrepreneurship education and research.

# Challenges

In order to spread awareness among small and medium organizations, the partner has established 12 state-level entrepreneurship development centers and institutes. Moreover, they also offer hostel facilities to students, staff, and guests to stay for a short period of time. The client approached us to digitize their entire hostel management system. Below are the challenges we inspected in the project:

- The existing system was highly manual that involved a lot of paperwork and calculation and therefore may be erroneous. This has led to inconsistency and inaccuracy in data maintenance
- The client's manual system was sluggish and consumed a lot of time that caused inconvenience to the director, wardens, students, and staff
- Natural calamities such as fire or flood might wipe out or destroy important hostel data
- The hostel management was facing hardships in maintaining the data because of its manual nature.
- Institute's director had to approach wardens to know about the room availability
- Students had to write manually the complaints regarding housekeeping and inventory management
- As the data was stored manually, it became difficult for the wardens to keep track of room availability
- For admission, guests had to personally visit the hostel and contact wardens for room availability and ask for permission to organize an event in the institute's hostel premises

## Solution

Experts at KCS reviewed the client's current situation and their project goal to digitize the entire hostel management system. We reached a conclusion to build a web application that can streamline various operations of the client's business. An intuitive and user-friendly web app was the optimum solution for the client's need for the digital transformation of their hostel management system.

- We classified the entire solution into various categories like director, students, warden, staff/faculty, and inventory management
- The solution helped wardens to get real-time updates about the room availability by simply logging into the web application
- Students can register all their complaints online regarding hostel and housekeeping
- We replaced the old data management system with online storage and retrieval process
- The Model-view-controller (MVC) benefits the client to give the best-in-class UI experience to the end-users and help in managing the overall traffic flow on the web app
- We used the latest version of HTML while designing the web app to make it more intuitive and user-friendly
- Due to HTML, stakeholders can easily navigate through the entire web app
- We designed a responsive and user-friendly web application that fits the user's screen automatically
- We also offered MS SQL solution in the project to provide 360-degree data security
- The implementation of MS SQL also enhanced the performance of the data management system

### **KCS** Approach

Experts at KCS developed a feature-rich and powerful web application that automated various operations of the client's hostel management. In the development process, we used modern and cutting-edge technologies like MVC.Net, to give seamless user-experience and maintaining the traffic flow on the web application. The MS SQL integration revolutionized the way the client handled the data. It also helped the client to get real-time insights about the hostels.



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#### Impact

The digital transformation of the client's hostel management system ultimately helped them to streamline various operations of the hostel. With the establishment of an online platform, there is no dependency on the old manual registers. Hostels can handle all the operations using a highly intuitive and user-friendly hostel management system. Using this online system, students can now apply for the leave and see the leave status without personally visiting the warden. This system also helped wardens to accept or reject the leave applications of the students.



