

IT PROJECT SCOPE FORM

<u>Project Title:</u> Entry/Exit Management System for IIIT Bangalore	<u>Project Number:</u> 01
<u>Project Leader/Manager:</u> Bandaru Mahidhar	<u>Anticipated Project Start Date:</u> 5th September, 2018
<u>Sponsor:</u> Administration of IIIT Bangalore	<u>Date Prepared:</u> 22nd August, 2018
<u>Project Risk Level:</u> Low	<u>Estimated Completion Date:</u> 5th December, 2018

Team Members:

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Purpose of Project:

- **Goal Statement** : To create a management system to record the entry or exit of students, faculty, staff and guests into and out of the premises of IIIT Bangalore across all the gates. To track movement, the system uses barcode scanners to read the barcode on the id cards issued to the students, faculty and staff. For guests however, the system provides an additional feature to manually enter the entry/exit details.
- **Main Benefits** : The system makes the process of entry/exit a lot simpler and convenient both for the individuals entering/exiting the campus and for the security guards at the gates. Such a system would also allow us to easily track the movements of a particular individual in and out of the campus premises, if the need arises. An example of such a use case would be to find out if a student has made entry/exit beyond the curfew hours.

Background:

Presently entry/exit into the campus premises requires filling out a hand written record. This method is error prone, inconvenient and it is highly time consuming to query handwritten records. A digital entry/exit can help us by making the entire process less error prone and a lot more convenient and since the records will be stored in a database, querying the system for various kinds of queries becomes easier and less time consuming.

Deliverables:

- This project will deliver software to record and query the movement of individuals across the 3 gates of IIITB. For students, faculty and staff the software uses the barcodes on their id cards to track movement. For guests the software provides an additional feature for guest entry/exit.
- The software will be loaded onto 3 laptops which are to be placed on the 3 gates on

campus. Barcode scanners will also be placed on these gates.

- Security will be trained to use this software on the laptops and to use the barcode scanners to record the movement of individuals across these gates.
- The software allows the following queries as of now:
 - a. Find all the entry exit records of a particular student, faculty, staff member or guest over a given time frame.
 - b. Find all students whose last record is an exit but the student hasn't returned.
 - c. Find all students who have made entry/exit during the curfew hours.
 - d. Find all guests who have entered the campus premises but haven't exited.
- The database schema of the software will be highly robust to facilitate the addition of new kinds of queries, as per need, in the future.

Stakeholders:

1. Students/Faculty/Staff: The project aims to make the process of entry/exit a lot easier.
2. Wardens: The wardens can now track the movement of students a lot more easily and reliably. This is useful to impose curfew restrictions and ensure the safety of students.
3. Security: The system allows the security guards to detect the presence of trespassers, if any, on the campus premises. The software thus acts as a tool that can help them do their job better.
4. Parents: The parents can be a lot more assured regarding the safety of their children after this system is in place.

Resource Requirements:

- The project requires the placement of 3 laptops and 3 barcode scanners. A typical entry level laptop costs around 14000 INR and a barcode scanner costs around 1800 INR. Therefore the hardware costs of this project add up to around 48000 INR.
- The development of software will take around 2 months. A month will be required to train the security guards at the gates and to setup the hardware.
- A server will be required to maintain the database. Estimated cost is around 500 INR per month.
- Maintenance costs can be estimated at another 500 INR per month.