

Handheld Biometric based Class-room Attendance System

In College, taking Attendance for every class is repetitive, non-productive activity, yet mandatory. Traditional method of calling of Roll-call & marking Attendance register is being followed for ages now, which creates the need for digitising this process by an accurate, faster & convenient electronic tool involving biometric verification of student finger.

It shall also comply to the following needs:

- ▶ DIY (do-it-yourself) - The students shall punch their own attendance accurately & conveniently, while the lecture is ongoing, thus saving time spent otherwise.
- ▶ Eliminate the probability of Proxy attendance, there by fixing the known leakage.
- ▶ Automate Entry of Attendance Data in the College Academic MIS to capture Human errors/bias.
- ▶ Visibility of attendance data online among Students & parents for transparency.
- ▶ Mobile App for Students to view individual Attendance Report.

FORTUNA has evolved a classroom attendance solution, "Smart Roll-Call" which complies to above requirement besides being faster & effective tool to handle large Lecture Halls where even roll-call is also not possible. It is a Solution consisting of a Hand-held Biometric Hardware & Application Software to generate Analytical attendance report.

MicroLOG Bio :

Handheld Biometric Attendance management Terminal :

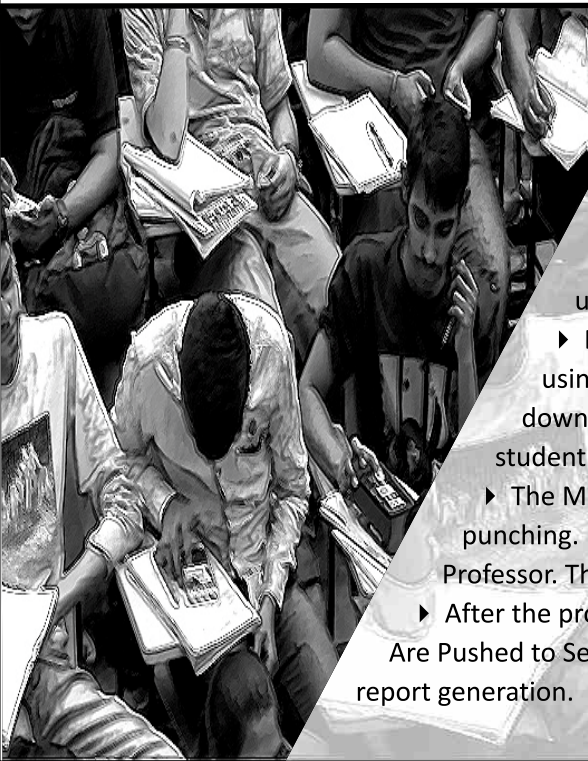
MicroLOG Bio automates and provides a convenient way to quickly record student attendance using Biometric Finger print based technology, to ensure identification accuracy, prevent errors, and eliminate proxy attendance even from identical twins.

MicroLOG Bio, is a Handheld, portable and rugged device(fall-proof upto 2 m). The device has a battery backup of 4-6 hrs with inbuilt WiFi module & LAN Port for Data communication.



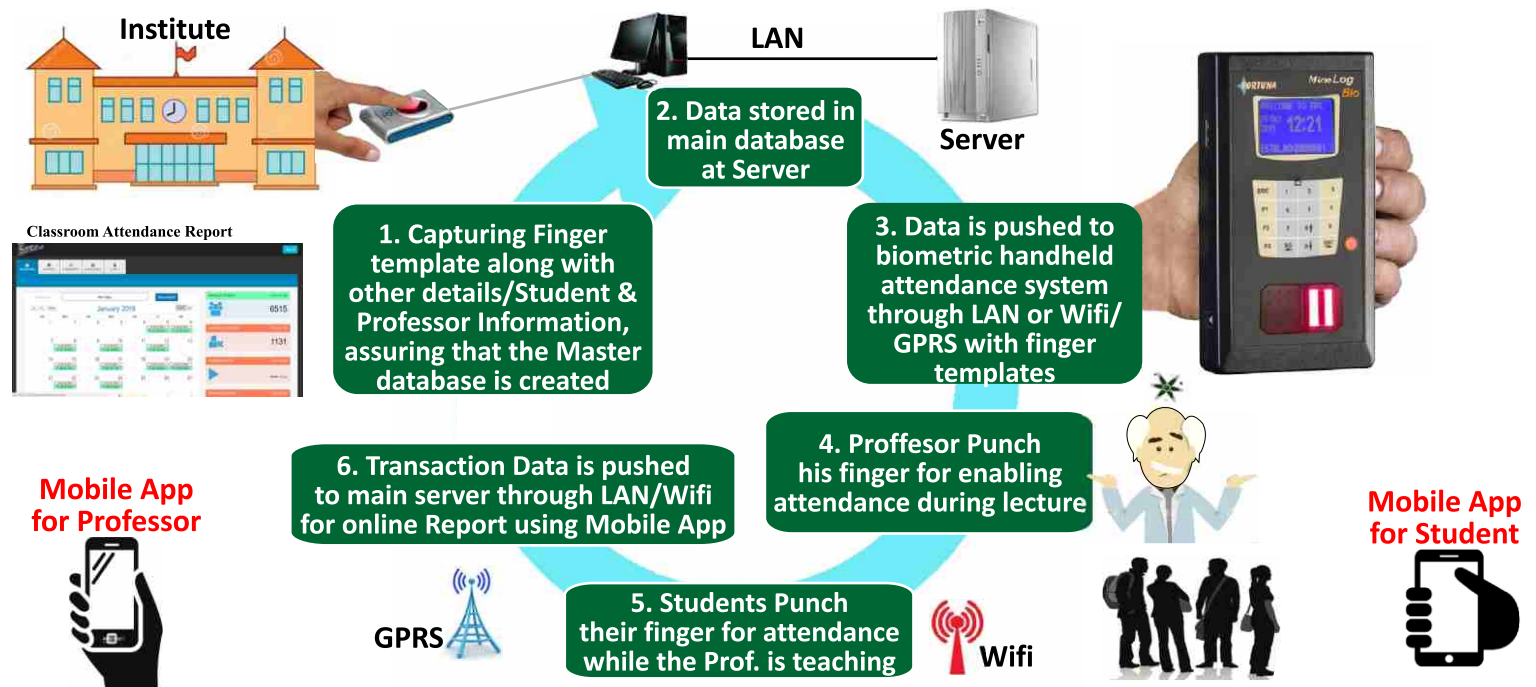
How does the solution work?

- ▶ One time Register students and Professor Finger Print for Biometric attendance system.
- ▶ MicroLOG Bio is configured initially with Master Data like the Professor, Courses being taken by him for Semester & the Students registered for the course under the said Professor.
- ▶ During each lecture, the professors carry the MicroLOG Bio device and logs in using his finger punches on the device. After the professor logs in, the subject drop down will appear on the screen to select the Class subject & making it ready for student attendance.
- ▶ The MicroLOG Bio is handed over to Students to pass it around each student for finger punching. Upon completing the Attendance of all the students, the device is returned to the Professor. The Professor punches his finger again to Log-out from the device.
- ▶ After the professors log-out, which is equivalent to closing the Attendance Register, the data Are Pushed to Server in bulk mode & posted in the Application database for online Attendance report generation.



Benefits of MicroLOG Bio for student attendance monitoring :

- ▶ **Accurate Attendance:** Educational institutions can centrally and accurately monitor student attendance to prevent proxy attendance and errors/delays in Attendance data entry from Attendance register, which are common problems involved in manual attendance marking.
- ▶ **Convenience:** The handheld biometric device is convenient to be carried by the professor to the classroom and also for student to hold in hand and mark their attendance by simply scanning their finger, without any training & infrastructure.
- ▶ **Saves Time & Eliminate Paper work:** Biometric based student attendance system saves the valuable Lecture time, everyday (normally 10% of the Class time) to record class attendance in less than 2 seconds per student.
- ▶ **Taking attendance during examination:** Educational institutions can equally use this solution for taking attendance during examination & replace traditional method of Hall ticket.
- ▶ **SMS Notification:** The automated attendance Solution also sends an instant SMS notification to the parents/Guardian of that absent student missing a lecture.
- ▶ **Increases transparency between Student, Professor and Parents:** Our WEB based application software called Smart Rollcall helps student/Professor/Admin to view the attendance report from any device (Mobile/laptop/tab) after due login.



What are the types of report obtained?

Keeping the Universities' requirement in mind, under mentioned reports provided for individual courses which will have the details of individual student as well as consolidated present & absent percentage:-

(A) Daily Report (B) Weekly Report (C) Monthly Report (D) Semester Report (E) Day wise Punch Report.

Semester Attendance Report

Roll No	Name	Class	Present	Absent	Present %	Absent %
12434	NAVEEN	2	0	2	0.00 %	100.00 %
13079	ALOK NAG	2	0	2	0.00 %	100.00 %
14328	KRUNAL MARU	2	0	2	0.00 %	100.00 %
14557	RISHI RANJAN	2	0	2	0.00 %	100.00 %
14639	SHASHIDHAR S	2	0	2	0.00 %	100.00 %
14673	SHUBHAM GUPTA [S/O A K GUPTA]	2	0	2	0.00 %	100.00 %
14744	T S KAUSTUBHA	2	0	2	0.00 %	100.00 %
14749	TARUN KUMAR	2	1	1	50.00 %	50.00 %
14769	UMA SHANKAR RAM	2	0	2	0.00 %	100.00 %
14811	VISHAL GAUTAM	2	1	1	50.00 %	50.00 %
150044	ABHISHEK SINGH	2	0	2	0.00 %	100.00 %
150112	ANSHUL ROY	2	0	2	0.00 %	100.00 %
150243	EKTA SINGH	2	0	2	0.00 %	100.00 %
150316	KAMAL KUMAR MEENA	2	0	2	0.00 %	100.00 %
150450	NIKHIL SANKHAR	2	0	2	0.00 %	100.00 %
150650	SAURABH SINGH (12-07-1997)	2	0	2	0.00 %	100.00 %
150671	SHIVA MARKAM	2	1	1	50.00 %	50.00 %
150822	VIVEK KAYATH	2	1	1	50.00 %	50.00 %
150828	WAGHELA DARSHAN SANJAY	2	0	2	0.00 %	100.00 %
160150	ARPIT KUMAR	2	0	2	0.00 %	100.00 %
160151	ARPIT SINGH	2	0	2	0.00 %	100.00 %
160159	ASHISH KUMAR (SATISH KUMAR)	2	0	2	0.00 %	100.00 %
160266	GAURAV MEENA	2	0	2	0.00 %	100.00 %
160291	HIMANSHU KUMAR	2	1	1	50.00 %	50.00 %

Day wise Punch Report

Roll No	Name	05-Jan-2018	Total Class	Present	Present(%)	Absent	Absent(%)
13172	ATUL KUMAR VAISH		1	0	0 %	1	100 %
13326	JITEN KUMAR		1	0	0 %	1	100 %
13766	VAISHYA RISHABH KAMLESH		1	0	0 %	1	100 %
13817440	NIKHIL SUMER		1	0	0 %	1	100 %
14088	AMIT SAINI		1	0	0 %	1	100 %
14569	ROHITASH MEENA	11:04 AM	1	1	100 %	0	0 %
150286	HEMANT SINGH MADERANA		1	0	0 %	1	100 %
150490	PIYUSH RAJ		1	0	0 %	1	100 %
160151	ARPIT SINGH		1	0	0 %	1	100 %
160152	ARVIND KUMAR VARTIYA	11:04 AM	1	1	100 %	0	0 %
170001	AAISHI ASHIRBAD	11:09 AM	1	1	100 %	0	0 %
170005	AAKASH YADAV	11:10 AM	1	1	100 %	0	0 %
170006	AAMIR AHMAD MAKKI	10:50 AM	1	1	100 %	0	0 %
170007	AAYUSH MANI	11:05 AM	1	1	100 %	0	0 %
170008	AAYUSH PANDEY	11:06 AM	1	1	100 %	0	0 %
170009	AAYUSH SAINI	11:14 AM	1	1	100 %	0	0 %
170013	ABHAY VARSHNEY	11:19 AM	1	1	100 %	0	0 %
170015	ABHIJEET	11:04 AM	1	1	100 %	0	0 %
170016	ABHILAKH CHAUDHARY	11:45 AM	1	1	100 %	0	0 %
170017	ABHINAV ANKIT	11:04 AM	1	1	100 %	0	0 %
170018	ABHINAV BENDE	11:01 AM	1	1	100 %	0	0 %
170019	ABHINAVNATH K.T.	11:16 AM	1	1	100 %	0	0 %

Daily Report

Roll No	Name	05-Jan-2018	Total Class	Present	Present(%)	Absent	Absent(%)
170786	VEDANT SUNIL KEDAR	P	1	1	100 %	0	0 %
170788	VIBHAV KATIYAR	P	1	1	100 %	0	0 %
170790	VIJAY LATHER	P	1	1	100 %	0	0 %
170791	VIJIT MALIK	P	1	1	100 %	0	0 %
170792	VIKAS KUMAR MEENA	P	1	1	100 %	0	0 %
170793	VIKAS SAINI	P	1	1	100 %	0	0 %
170796	VINEET KUMAR	P	1	1	100 %	0	0 %
170800	VIPI	P	1	1	100 %	0	0 %
170802	VIPUL SEHARA	P	1	1	100 %	0	0 %
170807	VIVEK	P	1	1	100 %	0	0 %
170808	VIVEK AGRAWAL	P	1	1	100 %	0	0 %
170810	VIVEK VERMA	P	1	1	100 %	0	0 %
170811	VUTNOORI VAMSHI	P	1	1	100 %	0	0 %
170812	YADU SHARMA	P	1	1	100 %	0	0 %
170817	YASH MAHESHWARI	P	1	1	100 %	0	0 %
170818	YASH MITTAL	P	1	1	100 %	0	0 %
170819	YASH RAJ SINGH	P	1	1	100 %	0	0 %
170820	YASH SRIVASTAVA	P	1	1	100 %	0	0 %
170821	YASH VERMA	P	1	1	100 %	0	0 %
170824	YATIN AZAD	P	1	1	100 %	0	0 %
170827	YOGESH KUMAR MEENA	P	1	1	100 %	0	0 %
170828	YOGESH RAWAT	P	1	1	100 %	0	0 %
Total Student			431				
Total Student Present			413				
Present %				95.82 %			
Total Student Absent			18				