**Biometric Time Attendance System (Face Detection/Fingerprint) Devices & Customized web based Realtime Attendance Software for DHAKA WASA**

**Beginning of Biometric Attendance**

July 2018, Dhaka WASA started its journey with biometric digital time attendance. Started with only 5 devices at Dhaka WASA head office (WASA Bhaban) 2 Nos. Device at SWTP-1 & 2.

Before COVID/19 Pandemic lockdown -

Total Bio-Metric (Fingerprint) Device Installed : 48 Nos. (Including WASA Bhaban)

Total Registration Complete : 2906 out of 2921 ( 99.5% )

\*\*\* Due to finger problem 15 persons not completed.

Total Finger Problem : 75 Persons.

Total Damage Machine: 02 Nos.

Total Location: 32 Nos.

**During lockdown**

Government of Bangladesh declared lockdown from 26/03/2020. March 2020 pandemic COVID-19 speared rapidly and our government take decision immediately for lockdown to all over the country. That’s why WASA all office stopped taking biometric attendance (Total Seven months) due to lockdown and so that the virus can’t speared by finger scanning devices.

New Face detection Time attendance system

WASA authority took decision to replace biometric fingerprint attendance system with new technology 3D face detection attendance devices to avoid contagious contamination from finger touch

UFace800+

ZKTeco's newly released UFace800+ Semi-Outdoor Multi-Biometric Time Attendance & Access Control Terminal which supports 3,000 face templates, 4,000 fingerprint templates and 10,000 cards.

New era of Face detection Time attendance system

2nd June 2020 we installed 02 Nos. face detection device at SWTP-1&2

Replicate face detection attendance system at WASA Bhaban as well as different MODS zone, revenue zone, WTP etc. location.

Water Pump/SLS House Survey Report (1 Km Distance)

Customized Web based Realtime Attendance Software for DHAKA WASA

Connected Device in Different location WASA offices

Present Piloting Status of Device Connection:

WASA Bhaban : 2 Nos Device

MODS Zone-3 & Revenue Zone-3: 1 Nos. Device

SWTP-1: 1 Nos. Device

SWTP-2: 1 Nos. Device

Total Device Connected: 05 Nos.

FEATURES

Dashboard for Management. (Currently available.)

Scheduled Reporting to Management by E-Mail. (Currently available.)

Online access of Staff & user. (Currently available.)

Android & iOS Application. (On Demand)

SMS alert (On Demand)

Current Piloting link

http://wasa.itechbd.net/login/

Centralized customized   
Software feature

USER MANAGEMENT

User administration

Multi user Role access with different privileges.

Role Based Access Control

Role Based Input Control

STAFF ATTENDANCE

Staff Attendance Entry.

Customized Reporting of Section Wise & Individual Staff Attendance.

Daily Absent & Absconding SMS Notification to Staff

Customized Reporting on Staff & Assigned Subject Mapping

SOFTWARE FEATURE

STAFF MANAGEMENT

Complete Admission Process.

Staffs Details Profile.

Customized Reporting on Staff

Attendance Automation

Staff Migration between Branch, Shift, & Section.

ADVANCE SOFTWARE REPORT MAMAGEMENT

Employee information report/details.

Shift information.

Leave information.

Daily in/out report.

Daily absent, present & leave report.

Daily late report.

Daily over time (OT) report.

Daily summary OT information.

SOFTWARE FEATURE

ADVANCE SOFTWARE REPORT MAMAGEMENT

Daily summary attendance information.

Monthly in/out report.

Monthly absent, present & leave report.

Monthly late report.

Monthly over time (OT) report.

Monthly summary OT information.

Monthly summary attendance information.

OTHERS

Easy to use.

Fully customized.

Ability to add employees easily & flexibly.

Reduces HR daily work & increases productivity.

Integration attendance with fingerprint devices.

Tracks up to date work status.

Centralized monitoring.

SOFTWARE FEATURE

OTHERS

Enhanced Reporting Capabilities.

Employee personal information.

Attendance Management.

Holiday Management.

Leave Management.

Employee wise leave day.

General shifting and Employee wise shifting.

Employee over time (OT) calculation.

ARCHITECTURE DETAILS

Cloud Based Solution & Software Tools

Development in Frontend: HTML-5, CSS & Bootstrap Framework.

Development in Frontend: PHP & PHP Codeigniter Framework

Intelligent Technology will host the TIME ATTENDANCE MANAGEMENT CUSTOMIZED SOFTWARE Solution on Cloud Based server infrastructure

User will access the application over the internet using Web Browser

Distributed Faster Solution with Central Implementation.

PHP & PHP Codeigniter Framework

JAVA Script & jQuery

Ajax & Jesson

Rest API

Challenge to implement this software

Old Finger Device connectivity

All Pump House connectivity to this software

Different Time Schedule in different office/zone

Others software like Leave management integration

Roaster duty/ Roaster Shifting.

24hours duty schedule (6AM-2PM, 2PM-10PM, 10PM-6AM)

12 hours schedule(8AM-8PM & 8PM-8AM)

General Duty(9AM-5PM)

Data Collection of all over DWASA

Our Recommendation

Similar ILO standard duty roaster for all zone and treatment plant