Attendance Management Case Study

Client:

The client is The Ministry of Education in Egypt. The Egyptian Ministry of Education is committed to developing the educational system in order to align itself with modern educational systems. It is a duty on the shoulders of the ministry to provide high quality education for everyone as a right for every Egyptian. One of its foremost goals is to establish an educational system that is organized and spread all over Egypt; that calls for social participation and grants the reformation of education in an effective way in every school.

Problem:

Aside from all the tasks and duties the ministry has to run, execute, and supervise; there is an obligation to oversee the attendance of students all over the country. The number of schools in Egypt is approximately 48459. Each governorate is divided into several administrations, and each administration contains a number of schools. Each school has to report the attendance status for all its students monthly. This is a huge problem defined by the following aspects:

- A massive amount of time and effort exhausted, because this process was done manually usually by several people in each school
- Lots of errors and inaccuracies because the reports were done using primitive pen and paper methods.
- Extra load on the administration to review and supervise reports.

After all this work the end result is mediocre and unsatisfactory. The ministry needs accurate information to calculate its steps and plan ahead. It also needs to give the administrators, teachers, and employees a room to focus their own jobs and tasks instead of reviewing and recording extensive amounts of data.
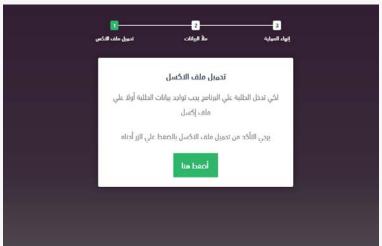
The Challenge:

The challenge was constructing a system that can host data for all students all over Egypt. The system to be created needed to follow the same hierarchy and categorization the ministry follows. Each governorate should have its limitations to access they hierarchy of administrations. Every administration includes certain schools that should apply the reports. This required a sophisticated and an elaborate database structure to contain all this information without having them mingled.

The user is a challenge because they are not very adequate computer users. That is why the system must be user-friendly and the user experience shouldn't be complicated. Even if human errors take place the system should help detect and notify the administrator about them.

The Solution:

We offered a platform that the Ministry could use to assign a profile to each school. Each school should register its grades, with the students in each grade. This data entry should be done only once by the beginning of every school year. After that, attendance and absence is recorded in the system. Once attendance is recorded from the school it is accessible by the administration the school follows. This solves the problem of waiting for employees and teachers to spend hours preparing the reports. Then there is the wait of sending and receiving the information. The solution gives the administration immediate access to the information from any place. Also the ministry can check the data at anytime. A monthly report is automatically sent to the administration with all the needed data.

Final Result

The final result is a sophisticated platform with a complete database. This database includes all the information of attendance and absence of all the students. The system reports automatically all the required data to all parties. It saves at least 8 hours of routine work a month for each school. The percentage of human error decreased significantly after implementing the system. This platform saves the data in a secure place, preventing any form of deterioration. It makes the information accessible at any requested time and reachable just by a quick search. The system also provided the capability to send a link to parents so that they can follow up on the attendance of their child any time they pleased. This also increased engagement between the parents and schools and decreased opportunities for students to skip school.

اولى ابتدائي		تانية ابتدائي		تالتة ابتدائي	
1-1	✎ ✖	2-1	✎ ✖	3-1	✎ ✖
1-2	✎ ✖	2-2	✎ ✖	3-2	✎ ✖
1-3	✎ ✖	إضافة فصل جديد		3-3	✎ ✖
إضافة فصل جديد				إضافة فصل جديد	

رابعة ابتدائي		خامسة ابتدائي		الصف السادس الابتدائي	
4-2	✎ ✖	5-1	✎ ✖	6-1	✎ ✖
4-3	✎ ✖	5-2	✎ ✖	6-2	✎ ✖
4-1	✎ ✖	5-3	✎ ✖	6-3	✎ ✖
إضافة فصل جديد		إضافة فصل جديد		إضافة فصل جديد	

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