

Attendance System Casestudy

Client:

The client is DTP Factory, established to provide specialized consulting services associated with multilingual desktop publishing, digital typesetting, and pre-press layout for business marketing. It is a business placed in Cairo, Egypt that provides services overseas. Both the typesetters and the marketing team work according to the workdays of Europe and USA, not that of Egypt.

Problem:

The DTP Factory was facing several problems organizing attendance and working hours, due to the inevitable flexibility this work nature offers. It was difficult for management to track and calculate working hours, extra hours and attendance, employee tardiness, early sign outs, company regulated permissions, leaves, and overtime. The problems were prominent in the below areas:

1. Due to flexibility in the start time of each job position miscalculations took place due to various cases.
2. Detecting actual overtime vs apparent overtime and performing the correct calculations of overtime individually required a manual calculation by the end of month.
3. Applying general HR rules for tardiness penalties, permissions, and working from home.
4. Tracking penalties in general.
5. Different attendance rules where applicable to different roles and in many cases to different people with these roles
6. Wasting valuable time on calculating several variables to process each salary individually.
7. Decreased management oversight as to the overall adherence to the attendance policy of employees within the organization.

It was definitely a hassle without a solid system that can collect and host all parties with their different cases to prevent errors from happening. The work environment and the employees morale was negatively affected. Due to feeling involved in red-tape that could be negated with something smart, that would not affect their time, or cause their salary to be deducted by mistake.

1		Marwa Fouda																	Attendance Data									
2		Date	Month	Weekday	Leaves	Sign in Status	Sign in Time	Sign in Date	Sign Out Status	Sign Out Time	Sign Out Date	Time Spent	Attendance Status	Late Time	Permission Hours	Attendance Comments	Work from Home	Sign in Exceptions	Work from Home Exceptions									
12	10-Jan-2016	January	Sunday		Signed In	8:08:17	10-Jan-2016	Signed Out	3:52:57 PM	10-Jan-2016	7:44:40	On Time																
13	11-Jan-2016	January	Monday		Signed In	8:27:32 AM	11-Jan-2016	Signed Out	4:04:18 PM	11-Jan-2016	7:38:48	On Time																
14	12-Jan-2016	January	Tuesday		Signed In	8:19:11 AM	12-Jan-2016	Signed Out	3:47:51 PM	12-Jan-2016	7:28:40	On Time																
15	13-Jan-2016	January	Wednesday		Signed In	8:40:23 AM	13-Jan-2016	Signed Out	3:53:53 PM	13-Jan-2016	7:07:30	On Time		1:00:00														
16	14-Jan-2016	January	Thursday		Signed In	8:25:46 AM	14-Jan-2016	Signed Out	4:04:29 PM	14-Jan-2016	7:38:43	On Time																
17	15-Jan-2016	January	Friday	Weekend																								
18	16-Jan-2016	January	Saturday	Weekend																								
19	17-Jan-2016	January	Sunday		Signed In	8:05:51 AM	17-Jan-2016	Signed Out	3:44:50 PM	17-Jan-2016	7:38:59	On Time																
20	18-Jan-2016	January	Monday	Day Off																								
21	19-Jan-2016	January	Tuesday	Day Off																								
22	20-Jan-2016	January	Wednesday		Signed In	8:09:20	20-Jan-2016	Signed Out	4:05:01 PM	20-Jan-2016	7:55:41	On Time																
23	21-Jan-2016	January	Thursday		Signed In	8:06:50 AM	21-Jan-2016	Signed Out	3:50:46 PM	21-Jan-2016	7:43:58	On Time																
24	22-Jan-2016	January	Friday	Weekend																								
25	23-Jan-2016	January	Saturday	Weekend																								
26	24-Jan-2016	January	Sunday		Signed In	7:58:23 AM	24-Jan-2016	Signed Out	3:43:58 PM	24-Jan-2016	7:45:33	On Time																
27	25-Jan-2016	January	Monday		Signed In	8:21:41 AM	25-Jan-2016	Signed Out	2:52:23 PM	25-Jan-2016	8:30:42	On Time			I permitted one hour early leave for													
28	26-Jan-2016	January	Tuesday	Day Off																								
29	27-Jan-2016	January	Wednesday		Signed In	8:12:47 AM	27-Jan-2016	Signed Out	3:51:34 PM	27-Jan-2016	7:38:47	On Time																
30	28-Jan-2016	January	Thursday		Signed In	8:43:17 AM	28-Jan-2016	Signed Out	3:54:59 PM	28-Jan-2016	7:11:42	On Time		1:00:00														
31	29-Jan-2016	January	Friday	Weekend																								
32	30-Jan-2016	January	Saturday	Weekend																								
33	31-Jan-2016	January	Sunday		Signed In	8:11:35 AM	31-Jan-2016	Signed Out	4:02:51 PM	31-Jan-2016	7:51:18	On Time																
34	1-Feb-2016	February	Monday		Signed In	8:15:18 AM	1-Feb-2016	Signed Out	4:00:17 PM	1-Feb-2016	7:44:59	On Time																
35	2-Feb-2016	February	Tuesday		Signed In	8:29:37 AM	2-Feb-2016	Signed Out	3:55:09 PM	2-Feb-2016	7:28:32	On Time																
36	3-Feb-2016	February	Wednesday		Signed In	8:08:47 AM	3-Feb-2016	Signed Out	3:55:57 PM	3-Feb-2016	7:48:10	On Time																
37	4-Feb-2016	February	Thursday		Signed In	8:20:23 AM	4-Feb-2016	Signed Out	4:01:49 PM	4-Feb-2016	7:41:28	On Time																
38	5-Feb-2016	February	Friday	Weekend																								
39	6-Feb-2016	February	Saturday	Weekend																								
40	7-Feb-2016	February	Sunday		Signed In	8:24:38 AM	7-Feb-2016	Signed Out	3:58:39 PM	7-Feb-2016	7:34:01	On Time																
41	8-Feb-2016	February	Monday		Signed In	8:12:47 AM	8-Feb-2016	Signed Out	3:58:23 PM	8-Feb-2016	7:45:38	On Time			Half day													
42	9-Feb-2016	February	Tuesday	Sick Leave																								
43	10-Feb-2016	February	Wednesday	Sick Leave																								
44	11-Feb-2016	February	Thursday		Signed In	7:59:58 AM	11-Feb-2016	Signed Out	3:55:47 PM	11-Feb-2016	7:55:49	On Time																
45	12-Feb-2016	February	Friday	Weekend																								
46	13-Feb-2016	February	Saturday	Weekend																								
47	14-Feb-2016	February	Sunday		Signed In	8:31:15 AM	14-Feb-2016	Signed Out	4:30:28 PM	14-Feb-2016	7:59:11	On Time		1:00:00														
48	15-Feb-2016	February	Monday		Signed In	8:16:59 AM	15-Feb-2016	Signed Out	3:58:21 PM	15-Feb-2016	7:41:22	On Time																
49	16-Feb-2016	February	Tuesday		Signed In	8:22:22 AM	16-Feb-2016	Signed Out	3:53:49 PM	16-Feb-2016	7:31:27	On Time																
50	17-Feb-2016	February	Wednesday		Signed In	8:10:31 AM	17-Feb-2016	Signed Out	3:19:40 PM	17-Feb-2016	7:09:09	On Time																
51	18-Feb-2016	February	Thursday		Signed In	8:40:58 AM	18-Feb-2016	Signed Out	2:02:08 PM	18-Feb-2016	5:21:08	On Time		1:00:00	3 hours early leave for the													

The Challenge:

The challenge was creating reliable system that is organized and secure enough to hold all the information of all stakeholders. It needed a hierarchy constructed with a certain set of permissions to each level in order to validate requests and to assign roles. A system like this would guarantee different profiles for different roles. The required platform should be customizable in case the HR rules and regulations changed. The change-maker should be the only role with permissions to do that, and he should have control over what is related to his responsibility.

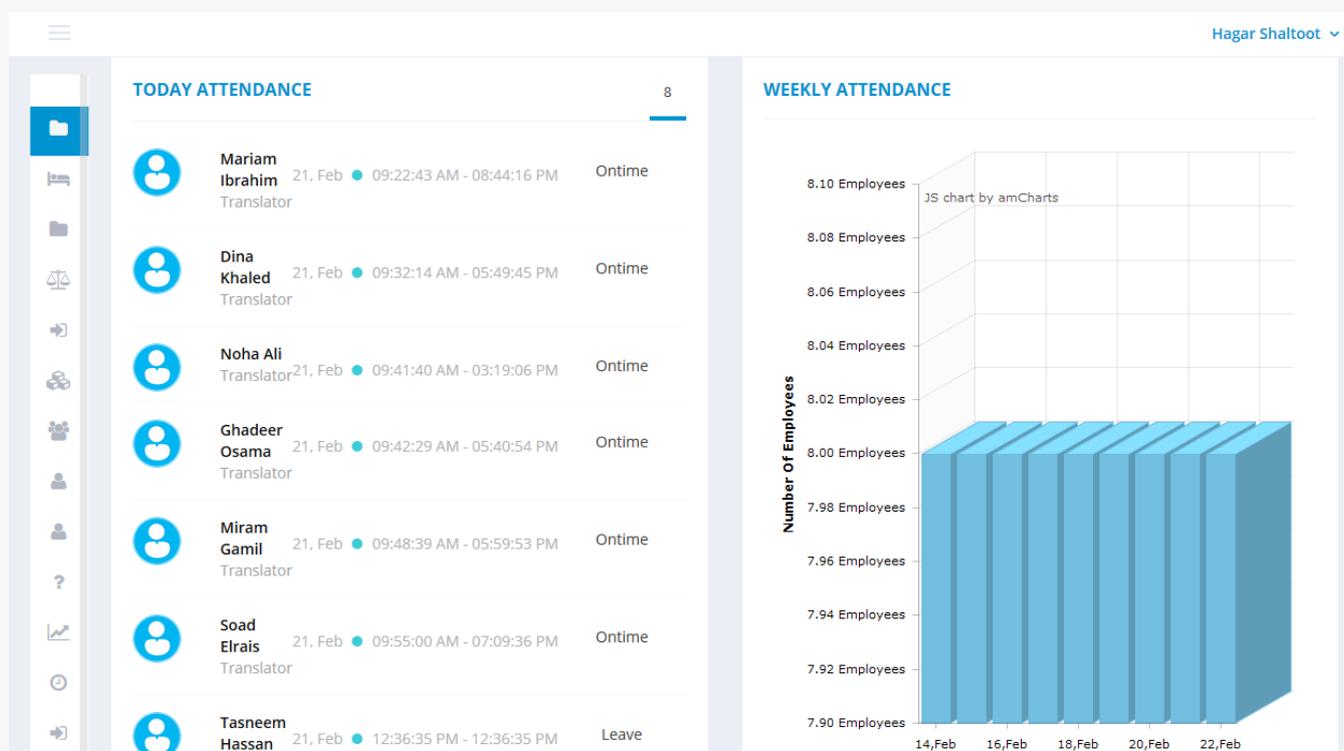
Having a customizable system is a huge challenge in itself, as it requires predicting several scenarios to different future cases and problems. It also requires a detailed vision from the client about the future progress, and the problems the stakeholders might cause.

The timing system should be smart enough to detect each timezone of each participant. Then it should be linked to the HR rules and regulations of attendance and the payment system.

The Solution:

After several meetings that included very detailed information about their complicated attendance rules. And after studying all the data of their manually-constructed database, we offered a solution to DTP Factory to deal with all the problems mentioned above. We proposed a system that contained the following features:

1. User friendly interface for signing in and signing out.
2. A separate account for each member.
3. A separate profile for different teams, or groups of special cases.
4. A hierarchy that offers different roles with different permissions and limitations.
5. Customizable profiles that allow applying different rules for teams of different roles.
6. Smart timezone detector, that is linked directly to the location of the office.
7. A generator to calculate overtime, or to generate overtime requests for the supervisor to approve, solving the problem of actual overtime vs apparent overtime.
8. A weekly or a monthly report that provides every stakeholder with the data he needs to report his general commitment and payment.
9. A complicated structure for requesting normal leaves, emergency leaves, half-days, and permissions, with a huge margin of flexibility to suit different cases of employees.



Final Result

The final result is an accessible system with a set account for each employee. Each team is supervised by a team lead who can approve or dismiss requests of overtime, half-days, normal leaves. The system saved 100% of the time and manpower spent on calculating the salary of each employee individually. It also increased the accuracy of calculations to 100%. The platform provided team-leads with time and energy to govern the team and focus on their main job, relieving them from mundane tasks. It also provided the whole administration with a chance to think ahead of progressing and developing business. Now the morale of the team is not affected by bringing a new one.

☰
📅 Tuesday, 07 Mar 08:00:22 PM
👤 Sign In
Ghadeer Osama ▾

- 👤 Attendance Actions
- ? Your Requests
- 📊 Your Reports
- 👤 Attendance
- ⊖ Penalties

📍 Attendance

Search:

Date	Sign in time	Sign out time	Status	From Home
Tuesday 17, Jan 2017	Tuesday 09:00:00 AM	Tuesday 05:22:10 PM	Ontime	No
Wednesday 18, Jan 2017	Wednesday 09:35:49 AM	Wednesday 04:52:44 PM	Ontime	No
Thursday 19, Jan 2017	Thursday 09:33:24 AM	Thursday 05:19:03 PM	Ontime	No
Friday 20, Jan 2017			Weekend	No
Saturday 21, Jan 2017			Weekend	No
Sunday 22, Jan 2017			Leave	No
Monday 23, Jan 2017			Leave	No
Tuesday 24, Jan 2017			Leave	No
Wednesday 25, Jan 2017			Leave	No
Thursday 26, Jan 2017			Leave	No

Showing 1 to 10 of 37 entries

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- 📄 Dashboard
- 📅 Holidays
- 👤 Attendance Profiles
- ⚖️ Balance
- 👤 Edit Attendance
- 🏢 Departments
- 👤 Positions
- 👤 Employees
- 👤 Attendance Actions
- ⚡ Permissions
- 📍 Normal Leaves
- ★ Half Day
- 🚑 Emergency Leaves
- 🏠 Work From Home

📍 NEW NORMAL LEAVE REQUEST

Date From

Date To

< March 2017 >

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

📄 Save