

Using a database for time recording

Graham Smith - 2019-04-11 - [Databases](#)

Your business wants to record time spent by staff when working on a project so that you can collect information about the effort involved; possibly leading to internal or external billing for the total time spent or require details in order to process the invoice for the work carried out.

WHERE KAHOOTZ HELPS:

- The configure ability of Kahootz allows you to customise solutions towards your needs
- Multiple users can access the same system with individual logins - rather than needing to report back to one individual who then does data entry
- Kahootz access control and security means your information is safe, and you can control who can see what and run reports if applicable
- Web access from any location and from mobile devices means you don't have to return to the office to make entries - time can be recorded as spent for increased accuracy

WHAT ARE MY OPTIONS?

We've had several clients use Kahootz for time recording in a variety of different ways, which we've turned into a couple of examples.

1. [If your projects \(or places you need to bill too\) rarely change](#)
2. [If you're constantly working on a variety of new projects](#)

OPTION ONE: If your projects (or places you need to bill) rarely change

This method is used by Havant Borough Council's Coastal support team - a shared team of staff that needed to log time spent on a variety of types of work; recording how many hours had been spent, at what hourly rate, and which of the four partner councils was responsible for that section of the coastline. Havant wanted a monthly report about that work so the time could be billed back to the four councils.

A database was developed by the Havant team, with a text column to describe the work, a date column for when, a select-one column deciding which of the four councils was responsible and a number column for the amount of hours spent. A second select-one column was used to show who had done the work - a set of staff names; this also included their hourly rate. Staff added a new row each time a piece of work was done.

Project / Work Carried Out	Date	Completed by	Hours	Cost
Consultancy	07 Mar 2018	BS (£20)	3.0	£ 60.00
Meeting	07 Mar 2018	PKJ (£80)	1.5	£ 120.00
On-Site Support	07 Mar 2018	CJH (£100)	3.0	£ 300.00

They added an calculated column that worked out the cost of the work - it took the figures from the staff name column as the hourly rate, and multiplied by the number of hours.

Each month Havant managers run a database report, filtering to the current month and grouping by Council, showing a list of all the work done and the costings which fill into their internal billing systems.

This approach works well with a fixed set of things to record time against (in this case four councils to bill back to) as they're set in a select-one column. It also records what work was undertaken if you need to know the detail. Permissions could be used so that staff can report their own time but not see that recorded by others if applicable.

Configuration - Create a database in your workspace with the columns above (change the titles if required) and then set the "cost" as a calculated column, please refer to this article ([Calculated Columns in a Database](#)) for "how-to" enable this feature as its completed after creating the initial database by clicking "manage database"

from the actions tab.

Tick the checkbox "Is this column calculated from other columns" and enter the following code.

```
val( rereplace( {{Completed by}}, "[^0-9]", "", "ALL" ) ) * {{Hours}}
```

Other Options

Permissions Is this column locked?

Calculated Is this column calculated from other columns?

Calculation See the [knowledgebase article about calculations](#) for more information.

```
val( rereplace( {{Completed by}}, "[^0-9]", "", "ALL" ) ) * {{Hours}}
```

You can use the following variables to refer to other columns:

Note: If you changed the column names then you'll need to enter your titles in the above code instead of {{Completed by}} & {{Hours}}

* This code basically strips any letters from the drop-down menu and therefore only takes the digits 0-9

OPTION TWO: If you're constantly working on a variety of new projects

The Health and Safety Executive's web team use a database to list all of the small projects for new parts of their website that they are involved in, and the total time spent on them. Each new project gets a new row in the database that records some project details (who the customer is, basic description, contact details, dates etc.). There are also a set of number columns for each of the web team staff. As work goes on, people edit the project's row, to update a running total of the number of hours they've spent on that project. A pair of calculated columns adds up the time spent to give totals for each project in hours and in working days.

Project / Work Carried Out	↑	BS	CJH	GT	JG	PKJ	Dev Team	Legal Dept.	Consultancy	Total Time (Hrs)	Total Days
Long Project		3	25	11		8	7	4	2	60	2.5
Quick Project			5		2			1	1.5	10	0.4

This approach works well for varying projects, as each new project is a row and easy to add without needing to change the database columns. There isn't a link between the record and what work was done, but they only needed to know total time spent.

Configuration - Create a database in your workspace with the columns above (change the titles if required) and then set the "cost" as a calculated column, please refer to this article ([Calculated Columns in a Database](#)) for "how-to" enable this feature as its completed after creating the initial database by clicking "manage database" from the actions tab.

Tick the checkbox "Is this column calculated from other columns" for {Total Time} & {Total Days} and enter the following code.

```
Total Time (Hrs) - val ( {{BS}} ) + val ( {{CJH}} ) + val ( {{GT}} ) + val ( {{JG}} ) + val ( {{PKJ}} ) + val ( {{Dev Team}} ) + val ( {{Legal Dept.}} ) + val ( {{Consultancy}} )
```

Other Options

Permissions Is this column locked?

Calculated Is this column calculated from other columns?

Calculation See the [knowledgebase article about calculations](#) for more information.

```
val ( {{BS}} ) + val ( {{CJH}} ) + val ( {{GT}} ) + val ( {{JG}} ) + val ( {{PKJ}} ) + val ( {{Dev Team}} ) + val ( {{Legal Dept.}} ) + val ( {{Consultancy}} )
```

* This code basically adds all the digits together in each column to give a total time spent in hours.

Total Days - $\frac{\{\{Total Time (Hrs)\}}{24}$

Other Options

Permissions Is this column locked?

Calculated Is this column calculated from other columns?

Calculation See the [knowledgebase article about calculations](#) for more information.

```
{{Total Time (Hrs)}} / 24
```

Note: If you changed the column names then you'll need to enter your titles in the above code instead of our example.

* This code basically takes the total number of hours and divides it by 24 (hrs in a day) to give you the total time spent in days.

ASIDE: IF YOU DON'T NEED TO LOG TIME AGAINST PROJECTS

If you want to share information about who is in and out of the office, or at meetings, but don't need to report or invoice on that information, you could use Calendars. Internally the Kahootz team use a set of calendars named after each individual to record when we're out of the office with clients, working from home, on holiday etc. The Calendar view means it's easy to see that information at a glance, and we don't need to report on any of that information.

Related Content

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- [Calculated Columns in a database](#)
- [Setting permissions on databases](#)
- [What are database templates?](#)
- [Getting started with databases](#)