Tiki Trackers - ItemLink, ItemList and Dynamic ItemList field types

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In this video we will review together the differences between very important trackers field types;

- The ItemLink
- The ItemList
- The Dynamic ItemList.
  I will also demonstrate how to use them.
  And first I would like to start with sixty-seconds of recent Tiki news.

But before that I hope you enjoyed the summer break.It allowed me to review one year of Tiki Express Tutorials, check statistics and comments.
And by the way thanks for all the good messages I received about my last tutorial with Fabio helping a lot of people with Git and Tiki.
Commits are coming, doc has been improved and keep growing. There should be less and less reason for anyone to continue to use SVN while Git is working just fine. Back to my videos they will be some changes and adjustment.

And first I would like to start with sixty seconds of Tiki news. So let me run a timer and start with this.

!!Tiki news
Tiki20.1 was released a week ago, this is the first update for this major Tiki version and it definitely worth to upgrade and to use it.

Plugin List and List Execute were improved and optimised; New parameters for table display, to count items and to perform grouped or item per item calculation.
It is now possible to modify the content a single field inside a tracker item in List Execute.

A new ElasticSearch date base aggregation was added to improve Facets as well as the charts and histogram options using Tiki.
Look at those graphics made dynamically from trackers !
(thanks Jonny for the sample)

OpenFire and converse integration (for communication and chat) were massively improved and you can test our Tiki chat at WikiSuite.

The plugin trackerCalendar as well as the calendar feature were also improved and with bootstrap 4 integration it look really professional.The Diagram feature was fixed and improved, and I will do a full tutorial for this one as I really love this feature.
Categories was vastly improved with a lot of user interface additions like tags, categories counter and checkboxes. Also code optimisation to speed up the display and a better integration to the Tiki unified index.

Maps was improved and is now compatible with Open Layer 3, work with other open layers providers and clustering of mapped elements are now possible as you can see on this screen shot.

We have OCR and OCR content indexing !!!

60 seconds is very short for all the Tiki news but that’s it.

You can see more informations at doc.tiki.org/Tiki20 and looking at the Tiki "Changes Wizard".
You will find it in the Control Panels, in the Admin navbar under Tools, the item Wizards and among the Wizards list go to Changes.

Good let’s start now our Tiki Express Tutorial on the ItemLink, ItemList and Dynamic ItemList field types.

We have in Tiki many field types and we’ve seen a few on my trackers tutorial.If you missed it and are new to trackers I suggest you to view this video first.
I’ll place a link in the video description a usual.
It is then a good time to remind you to subscribe to my youtube channel, click on the like button and share this video. Do it please, that’s the way to help me to do more Tiki Express Tutorials.
So as we’ve seen we got text field type, date field type, dropdown, categories, files, etc
You’ll find a link at the bottom of this video with a list of all the field with details.

Today I’ll show you how to use 3 very important tracker field types that will give you the ability to use trackers for relational database applications.
Using them you can display, use and compute data from different trackers.
In conjunction with the Tiki unified Index you will be able to retrieve data from file galleries, wiki pages, user information, calendar, etc. But let’s quickly review them before jumping into complicate case.

I’m here to give you a solid kickstart so I won’t cover absolutely everything.
Just sute yourself; Study, Use, Test and Explore.

!!Tiki tracker field types Quick definition
Let’s start with quick definitions.
ItemLink, with this field you can retrieve the content of one or several fields from a different tracker. You can display the value or display a link to the item, you can display the value in a dropdown or in a table, you can filter using the trackerItem status, you can display or select the value. You can also create an item directly in the other tracker with this field.
In short: You have a tracker A and you want in this tracker a field that list values from a field of tracker B.

ItemList, with this field you can retrieve the content of several fields from a different tracker to create a list of values. In short: You have tracker A and you want in tracker B a list made from element of the tracker A.

Item Dynamic List, with this field you can retrieve dynamically a value from a different tracker item based on selected values from both trackers. You can force the selection if unique. In short: you have tracker A and B. In each one you have a field to match with and when the match is positive you display immediately a content of another field from tracker A into tracker B.

!!Create a Clock Work system
Let’s setup a clock work system.
While it is pretty close to what I would deliver to a customer this is just for demonstration.
They are things I wouldn’t do that way like a static Days tracker and also if we have rates I would already add calculation fields but the purpose is to to show you the maximum of things with those 3 field types without too much distraction.

So I created 4 trackers and filled some of them to go faster.We have the Workers tracker that will store our workers information.
We have a Days tracker that will store the days of the week.
We have a Rates tracker that will store the price for different services.
We have a clock work to recap all the informations and create reports.

!!Tiki Unified Index
Before we start it is important to tell you that everything about data in Tiki is dependant of the Unified Index. It holds the information the fields will lookup into and you have to keep its freshness to work properly. To refresh it you can use the rebuild index command from the Admin control panel Search or from console.php suing the shell. For example when you set an itemLink and you don’t see the field you just created in another tracker chances are your Unified Index is outdated. Just rebuild it and clear caches.

!!Workers tracker settings
In this tracker I use status for active workers and inactive workers.
We have First name, Last name and Passport field those are and Agency our first ItemLink.

Let have a look to the agency field.
I tell this ItemLink field to look into the Rates tracker and to display the list of all the label items in this tracker. No other options were changed from the default.

I can see that the Agency field list all the labels in all the items in the tracker. This is how the field is set by default. We certainly prefer to show only one label for each agency.I go back to this field options and for the parameter "One item per value" I change the value to one item for each label.Back to the tracker item list I create a new worker.

Back to the item list all is there, note that I got one pending item, to demonstrate I use the item status to filter the inactive worker.

Let’s see the next tracker.

!!Days tracker settings
The days trackers just contain a list of days with a single text field for the days name.In real case I could use dates and time, link other trackers with monthly recap, etc.

Let’s go to the next tracker.

!!Rates tracker settings
This one is really a mish mash but again it is a demo.
I have a Label and I used it as matching field with the Agency value, I have rate a text field and type to display later a list of different services and rates in our report.

Ok, next the final tracker the clock work

!!Clock Work tracker settings
You can see that all my fields contain informations from an external tracker.

The first field is an itemLink linked to the workers tracker that display the first and last name and with an option to create a new worker on the fly.

We got a Dynamic Item List to fill automatically the passport number value and to force the selection on the unique possible value we "Hide blank".

We got the same for the Agency and this field will be use later as the matching value with our tracker rates.

We got a itemLink linked to the days tracker. One item for each label of course and this this time we want to select multiple values.
And last, an itemList that look in the rates tracker, matching the Agency from this tracker with the other tracker and generate a list that will display the type of service and its cost for the agency.

Okay… Let’s create our first report !
!!Using the Clock Work

In the Clock Work tracker let’s create an item;
Let’s select a worker. I can see the content of the first name and last name field and only the active workers with an open status are displayed.

I can also create a new one on the fly with a simple click on a button as you can see.

Now look what happen when I select a worker, the Dark Knight.Passport and Agency, 2 dynamic item list are filled automatically as soon as we have a match between the trackers (the last name here).
Days, our itemLink with the option to select multiple values is waiting our input.

Service and Rate, our itemList show a list of items for this Agency displaying cost and service label together in a row. I can let it that way and use it as a display or select a row and save to generate a report with separate items.

Save.
Our list of items is updated and everyhting worked fine.
All this can be used now by the plugin List and List Execute on wiki pages.

!!Goodbye

Wow.As you can see those 3 field types add super powers to the Tiki trackers and from this sample you can start to imagine how you can greatly improve your Association, Company or personal project with dozens of forms, reports… any data management.

Here for a Kindergarten project I created a customers payments and employees working hours report generated almost automatically. This each month saves a lot of times to someone that want to take care of children and really not to sat several hours to feed an Excel sheet with information.
This is just one case on hundreds those field types were made and improved for.

I hope you learn something here and please, if you like that video click on the like icon and share everywhere you think it should be.
If you don't want to miss my next tutorial and want to be notified when I publish a new video just click on the bell, the subscribe button of my youtube channel.

Thanks again for watching and
May the power of Tiki be with you.

https://doc.tiki.org/Tracker-Field-Type
https://doc.tiki.org/Items-List-and-Item-Link-Tracker-Fields

https://doc.tiki.org/Dynamic-items-listhttps://dev.tiki.org/Wish-Report
https://wikisuite.chat/XMPP,
https://www.elastic.co/guide/en/elasticsearch/reference/current/search-aggregations-bucket-daterange-aggregation.html
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