# Technologies Stack

The technology stack for a SaaS platform that provides a drag-and-drop interface for users would depend on a number of factors, such as the specific requirements of the platform, the desired performance and scalability, and the development team's preferences and expertise. However, a common tech stack for such a system might include the following components:

* Frontend client: A JavaScript library or framework **Angular**, along with HTML and CSS for the user interface.
* Backend server: A language such as Python or Java, along with a web framework such as **Django**.

Database:

* Influx time series DB (Fastest solution)
* QuestDB
* Apache-Druid TS DB
* Warp10

Do we need real-time analytics?

Depends on what kind of operations we are going to execute more (CRUD).

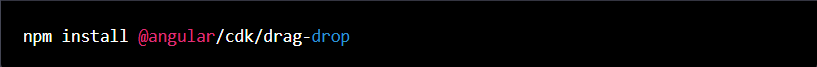
* Web API: A framework such **as Django REST framework** to handle the communication between the client and server.
* Machine learning pipeline: A framework such as **TensorFlow** or **PyTorch** for implementing the machine learning models, along with any necessary data preprocessing and postprocessing tools.

# Front-end (Drag&Drop UI) detailed development with **Angular**

To build a drag and drop interface with Angular, you can use the **@angular/cdk/drag-drop** module, which provides you with a way to easily and declaratively create drag-and-drop interfaces, with support for free dragging, sorting within a list, transferring items between lists, animations, touch devices, custom drag handles, and previews.

Here's a basic example of how you can use this module to create a drag and drop list:

1. First, you'll need to install the `@angular/cdk/drag-drop` module:



1. In your Angular component, you can then import the `DragDropModule` from the @angular/cdk/drag-drop module and add it to the imports array of your module:

Text

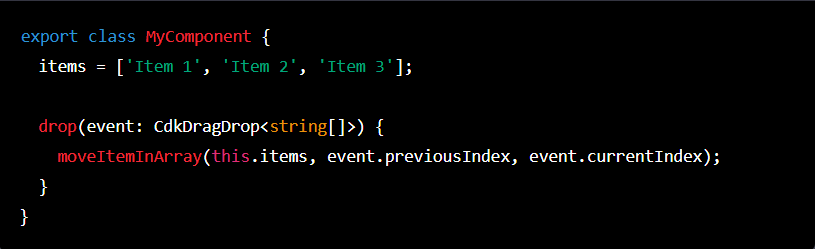
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1. In your template, you can then use the `cdkDropList` directive to define a container for a list of draggable items, and the `cdkDrag` directive to make the items themselves draggable:

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1. In your component class, you can define the `items` array and the `drop()` method to handle the drop event:



<https://material.angular.io/cdk/drag-drop/overview>

## Create a linear connection (arrow) between the DnD containers

To create a linear connection between each drag and drop element, you can use the @angular/cdk/overlay module, which provides a way to create floating panels, connected to an anchor element, that can be used to display additional content on top of an existing element.

Here's an example of how you can use this module to create a linear connection between each drag and drop element:

1. First, you'll need to install the @angular/cdk/overlay module:



1. In your Angular component, you can then import the OverlayModule from the @angular/cdk/overlay module and add it to the imports array of your module:

Graphical user interface, text

Description automatically generated

1. In your template, you can use the cdkConnectedOverlay directive to create a floating panel that is connected to an anchor element. In this case, the anchor element will be each drag and drop element:

Text

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1. In your component class, you can define the items array and the positions array, which specify the positions of the floating panel relative to the anchor element:



<https://material.angular.io/cdk/overlay/overview>