1. **Widget Developmen**<https://docs.mendix.com/howto/extensibility/create-a-pluggable-widget-one>

**t Tutorial**

Widget Development Training Videos (By Deepika)

1. <https://web.microsoftstream.com/video/35cc2890-afc6-4257-b659-e696d16f44ab>
2. <https://web.microsoftstream.com/video/763a9a9d-c5d6-4b49-b55b-26e904eee276>
3. <https://web.microsoftstream.com/video/ff88ab30-b2cb-4e2b-9e71-008214a644ec>
4. <https://web.microsoftstream.com/video/e8b2f62a-dbbc-478a-aa26-3e5c7018c3f2>
5. <https://web.microsoftstream.com/video/d7b28b3e-8775-4624-93eb-6e29987b4e9e>
6. <https://web.microsoftstream.com/video/684ac472-8832-4435-97b0-21ddf8486957>
7. <https://web.microsoftstream.com/video/433424d3-1eda-413c-8b71-ab5bc0c06426>
8. Please follow the below link for getting idea about Mendix pluggable widget

[**https://academy.mendix.com/link/path/45/Building-Custom-Widgets-(Micro-Learning)**](https://academy.mendix.com/link/path/45/Building-Custom-Widgets-(Micro-Learning))

1. Intstall Visual studio code latest version

1. **npm install yo –g**    (install as generic files, not inside any project folder)

1. **npm install @mendix/generator-widget –g**(install as generic files, not inside any project folder)

1. go to mendix project folder->>make directory as CustomWidgets

1. For creating any new widget execute the below command and opt the suitable name

**yo @mendix/widget TextBox**

1. After executing the above command run  this command, npm run dev

1. Now this basic widget is ready to access from mendix project perspective, for that go to mendix studio pro,open the projet,

**Project -> synchronize project directory**

Search for the newly widget you added in **Toolbox**

1. We can reuse existing react components like antd components or material components  for creating our pluggable widget

<https://ant.design/components>

<https://material-ui-pickers.dev/getting-started/installation>

(while using the same we need to install all the dependencies through npm commands)

1. Now the main part need to start, actual development step, basic knowledge required is

**Reactjs, react native**

**Javascript(ES6) or Typescript**

1. Open the corresponding widget folder with vscode, the below files we need to customise

Src->components ->xml file (for defining properties for our widget)

Src ->componets->.jsx/.tsx file

Under Src ->jsx/Tsx file (main file) , import all dependency files here

**Sample Widget**

[https://material-ui-pickers.dev/api/KeyboardDateTimePickerhttps://material-ui-pickers.dev/api/KeyboardDateTimePicker](https://material-ui-pickers.dev/api/KeyboardDateTimePicker)

<https://www.npmjs.com/package/@material-ui/core>

**Hellowrodsample.jsx**

​

import {​​​​​​​​ Component, createElement }​​​​​​​​ from"react";

import {​​​​​​​​ MuiPickersUtilsProvider, DateTimePicker, KeyboardDateTimePicker  }​​​​​​​​ from'@material-ui/pickers';

importDateFnsUtilsfrom'@date-io/date-fns';

exportclassHelloWorldSampleextendsComponent {​​​​​​​​

render() {​​​​​​​​

return (

<MuiPickersUtilsProviderutils={​​​​​​​​DateFnsUtils}​​​​​​​​>

<KeyboardDateTimePicker

variant="inline"//"dialog" | "inline" | "static" 'dialog'  Picker container option

ampm={​​​​​​​​true}​​​​​​​​//12h/24h view for hour selection clock

allowKeyboardControl={​​​​​​​​true}​​​​​​​​//Enables keyboard listener for moving between days in calendar

label="Keyboard with error handler"

emptyLabel="Pick a date"

value={​​​​​​​​this.props.dateValue}​​​​​​​​

onError={​​​​​​​​console.log}​​​​​​​​

autoOk={​​​​​​​​false}​​​​​​​​

format="dd:MMM:yyyy hh:mm a"

onChange={​​​​​​​​this.props.onChange}​​​​​​​​

showTodayButton={​​​​​​​​true}​​​​​​​​

disablePast={​​​​​​​​this.props.disPast}​​​​​​​​

disableFuture={​​​​​​​​this.props.disFuture}​​​​​​​​

onAccept={​​​​​​​​this.props.onAccept}​​​​​​​​

// orientation="landscape"

// timeIcon=""

//views=("date")[] //("date" | "year" | "month" | "hours" | "minutes")[]Array of views to show

/>

</MuiPickersUtilsProvider>

          );

    }​​​​​​​​

}​​​​​​​​

**keyboardDateTimePicker.jsx**

​

[07-04 15:01] P, Ranjini

import {​​​​​​​​ Component, createElement }​​​​​​​​ from"react";

import {​​​​​​​​ HelloWorldSample }​​​​​​​​ from"./components/HelloWorldSample";

import"./ui/KeyboardTimePicker.css";

exportdefaultclassKeyboardTimePickerextendsComponent {​​​​​​​​

changeAttrValue = (value) => {​​​​​​​​

if (typeof (value) === "object") {​​​​​​​​

if (value.status !== 'loading') {​​​​​​​​

returnvalue.dateTimeValue

            }​​​​​​​​

        }​​​​​​​​

    }​​​​​​​​

onChangeHandle = (value) => {​​​​​​​​

this.props.dateAttr.setValue((value))

    }​​​​​​​​

render() {​​​​​​​​

letdateTimeValue = typeofthis.props.dateAttr.value === 'undefined'? undefined : (this.props.dateAttr.value);

if(this.props.dateAttr.status !=='available'){​​​​​​​​

returnnull;

        }​​​​​​​​else{​​​​​​​​

return (

this.props.dateAttr.status !== 'loading' &&

<HelloWorldSample

dateValue={​​​​​​​​dateTimeValue}​​​​​​​​

disFuture={​​​​​​​​this.props.disableFuture}​​​​​​​​

disPast = {​​​​​​​​this.props.disablePast}​​​​​​​​

onChange={​​​​​​​​this.onChangeHandle}​​​​​​​​

/>);

            }​​​​​​​​

    }​​​​​​​​

}​​​​​​​​

**xml file**

​

<?xml version="1.0" encoding="utf-8"?>

<?xml-stylesheet type="text/css" href="KeyboardTimePicker.css"?>

<widgetid="intelizign.keyboardtimepicker.KeyboardTimePicker"pluginWidget="true"needsEntityContext="true"offlineCapable="true"

supportedPlatform="Web"

xmlns="http://www.mendix.com/widget/1.0/"xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://www.mendix.com/widget/1.0/ ../node\_modules/mendix/custom\_widget.xsd">

<name>Keyboard Time Picker</name>

<description>Its a custom date and time picker widget</description>

<icon>

   </icon>

<properties>

<propertyGroupcaption="General">

<propertyGroupcaption="Label">

<systemPropertykey="Label"/>

</propertyGroup>

<propertyGroupcaption="DataSource">

<propertykey="dateAttr"type="attribute"required="true">

<caption>Date Attribute</caption>

<description>Please connect the widget with appropriate date attribute</description>

<attributeTypes>

<attributeTypename="DateTime"/>

</attributeTypes>

</property>

<propertykey="customFormat"type="string"required="false">

<caption>Custom Format</caption>

<description></description>

</property>

</propertyGroup>

<propertyGroupcaption="Visibility">

<systemPropertykey="Visibility"/>

</propertyGroup>

</propertyGroup>

<propertyGroupcaption="Options">

<propertykey="onChangeAction"type="action"required="false">

<caption>OnChange Action</caption>

<description/>

</property>

<!-- <property key="disablePast" type="action" required="false">

                <caption>Disable Past Dyas</caption>

                <description/>

            </property>

            <property key="disableFuture" type="action" required="false">

                <caption>Disable Future Dyas</caption>

                <description/>

            </property> -->

</propertyGroup>

</properties>

</widget>

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 Requirments

* [hyperlink to open pdf file](https://forum.mendixcloud.com/)

I want to use hyperlink to view pdf file that I uploaded in project. I tried with link button, but failed to do that. Kindly suggest some ot...

From <<https://forum.mendixcloud.com/p/ideas>>

* Time selector Menu on Datetime picker in Desktop version

From <<https://forum.mendixcloud.com/link/ideas/2297>>

* [**Listviewcontrols - Dropdown multi selection filter based on all existing values**](https://forum.mendixcloud.com/)

Hello all,     good filters are a prerequisite for a good list view! So it would be nice to have a dropdown filter with multi selection ...

* [**[Feedback & Collaboration Widget] Option to select which Apps to show.**](https://forum.mendixcloud.com/)

Would be great if the App Switcher feature in the Feedback & Collaboration Widget allows you to select which apps/links to open so you only …

* [**How to make Nested Dropdowns (menu and submenu)**](https://forum.mendixcloud.com/link/questions/105534)

Is there a way to build nested dropdowns in Mendix? A widget that would allow me to make a dropdown menu, where the user can mouse over the ..

* [**Pop-up widget in mendix native**](https://forum.mendixcloud.com/link/questions/98042)

Pop-up in mendix native mobile development.  There is no layout type to define in mendix native layout.

* [**Native radio buttons?**](https://forum.mendixcloud.com/link/questions/104116)

Hi, I cant find a widget for Radio buttons in Native app? Is it possible to find this in Native app mode?

* [**Searching for a widget to place markers on an image.**](https://forum.mendixcloud.com/link/questions/103872)

Accepted answer

Hello,   For a specific usage case, I am looking for a widget which enables you to place markers on an image, which in turn create objects...

* [**Accordion widget**](https://forum.mendixcloud.com/link/questions/102905)

How to create Accordion widget in mendix? can you please suggest me?

* [**Pluggable calculator widget**](https://forum.mendixcloud.com/link/questions/102175)

Accepted answer

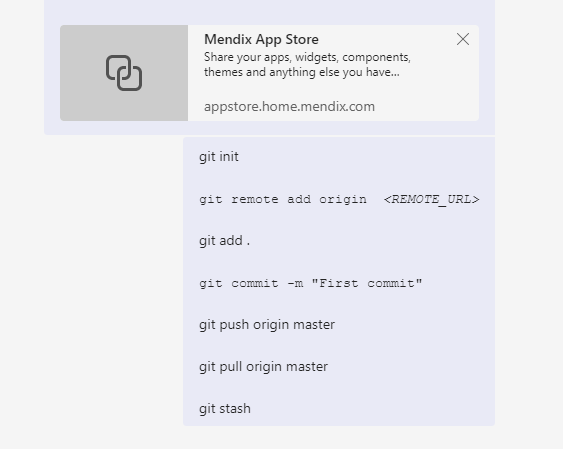
Hi I want to build a calculator widget which will add the values passed to the attribute. and I want to style the widget with different colo...

* [**Barcode Scanner from Tablet Browser**](https://forum.mendixcloud.com/link/questions/101256)

Hi all,   i have requirement to scan Barcodes . Application is a desktop application. The Barcode scan has to happen when the application ...

**Uploading To Appstore (Uploading widget to menidx app store)**

Mendix marketplace: <https://appstore.home.mendix.com/index.html>  
mendix.support@intelizign.com  
pwd:MendixSupport@Intelizign1



React Material UI (Sample application)