

Keyman Developer Tutorial

Create New Project

Session 1

This session we will create a keyboard project for the Dagbani language of Ghana. We will call the project DagbaniTutorial. We will create the project based upon the US keyboard. In this session we will also create a keyboard project for the Kamba language of Kenya. We will call the project KambaTutorial. We will create this project from a blank keyboard.

Create project from an existing Windows keyboard

1. Start **Keyman Developer**.
2. In the **Project** menu, click **New Project**.
3. Click **Import Windows Keyboard**, then click **OK**.
4. In the **Select an underlying system keyboard** list-box, select **US (KBDUS.DLL)**, and then click **OK**.
5. In the **New Basic Keyboard Project** dialog box, do the following
 - In the **Keyboard Name** box, enter **DagbaniTutorial**. Normally we would enter the language name.
 - In the **Copyright** box, enter **2021 MyOrg**. Normally we would enter the current year and the name of our organization or our own name.
 - In the **Version** box, we will accept the default, since this is the first keyboard.
 - In the **Author** box, enter **Me**. Normally we would enter our name.
 - In the **Targets** box, set **any**. In this way it can work for all devices.
 - In the **Languages** box, remove *en (English)* from the list and add the BCP 47 Tag of the desired language to the list. In our case we will add *dag (Dagbani)* to the list.

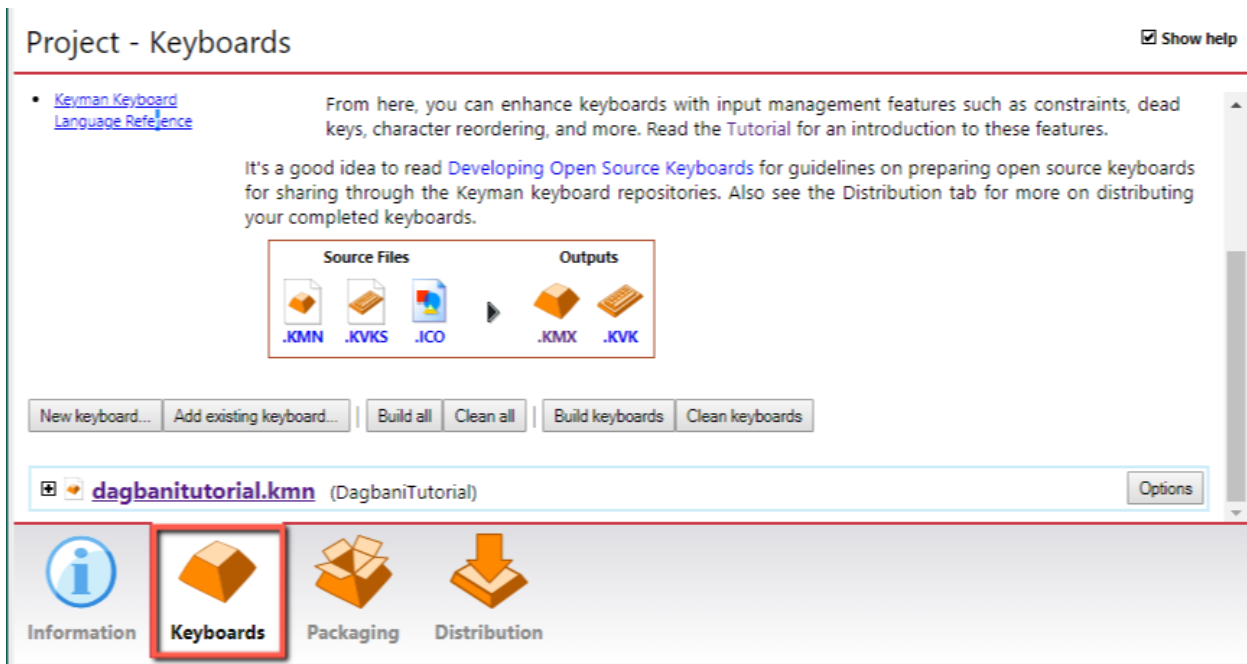
The dialog box should appear as below.

New Basic Keyboard Project ✕

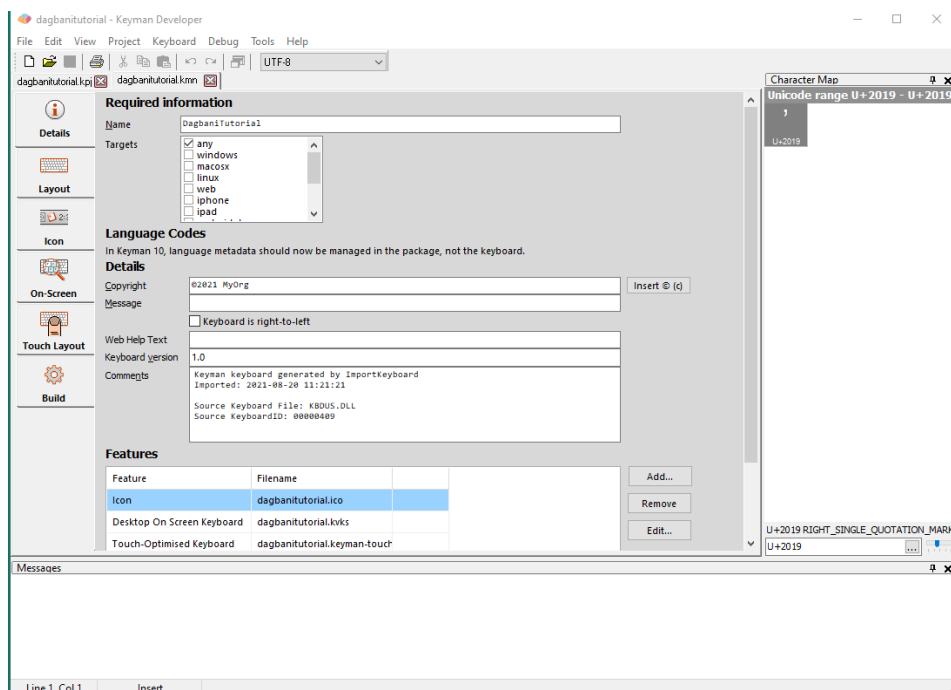
Keyboard Name:	<input type="text" value="DagbaniTutorial"/>	Languages					
Copyright:	<input type="text" value="©2021 MyOrg"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">BCP 47 tag</th> <th>Language name</th> </tr> </thead> <tbody> <tr> <td>dag</td> <td>Dagbani</td> </tr> </tbody> </table>		BCP 47 tag	Language name	dag	Dagbani
BCP 47 tag	Language name						
dag	Dagbani						
Version:	<input type="text" value="1.0"/>						
Author:	<input type="text" value="Me"/>						
Targets:	<input checked="" type="checkbox"/> any <input type="checkbox"/> windows <input type="checkbox"/> macosx <input type="checkbox"/> linux <input type="checkbox"/> web <input type="checkbox"/> iphone <input type="checkbox"/> ipad	<div style="display: flex; justify-content: space-between; margin-top: 10px;"> Add... Edit... Remove </div>					
Path:	<input type="text" value="C:\Users\kwsch\OneDrive\Documents\Ke"/>	Browse...					
Keyboard ID:	<input type="text" value="dagbanitutorial"/>						
Project filename	<input type="text" value="man Developer\Projects\dagbanitutorial\dagbanitutorial.kpj"/> <div style="float: right; margin-top: 5px;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </div>						

- Then click OK.

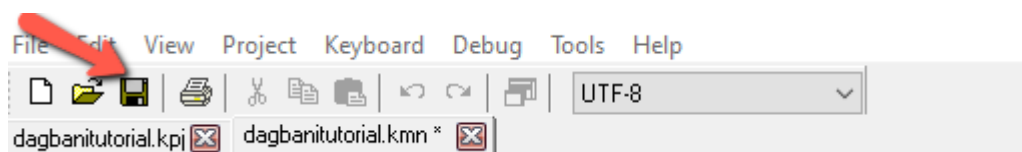
6. In the **Project - Information** dialog box, Click **Keyboards**. The **Project - Keyboards** dialog box appears, as below.



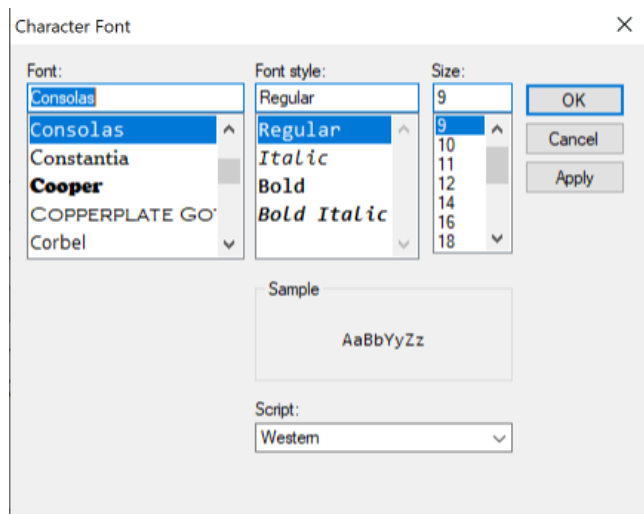
7. Then click **dagbanitutorial.kmn**. The Details pane appears, as below.



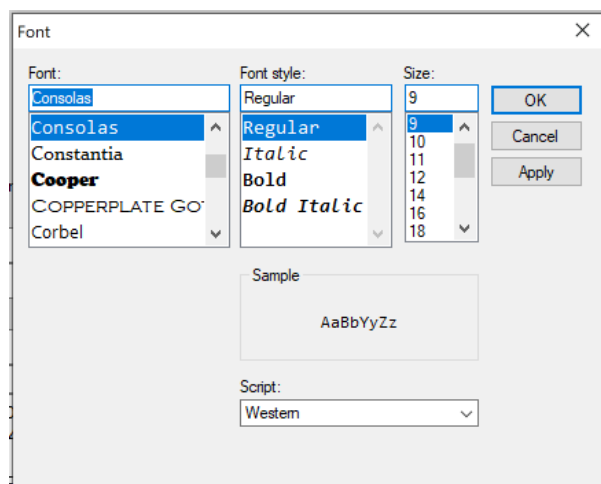
Click the **Save** icon to save our work. The project has been created.



8. We may want to change the size of the character font to meet our viewing needs. In the **View** menu, click on the **Character Font**. The **Character Font** dialog box appears. Make whatever changes we desire. Then click **OK**. This impacts the font that is used in the testing box.



9. We may want to change the size of the code font to meet our viewing needs. In the **View** menu, click on the **Code Font**. The **Font** dialog box appears. Make whatever changes we desire. Then click **OK**. This impacts the font that is used in the Keycoding box.



10. Click **Layout**. The **Layout** pane appears. Note that we see all this code that came from the US keyboard. In the next session, we will need to modify this code for Dagbani language.

11. To exit the program, in the **File** menu, click **Exit**.

Create a project from a blank keyboard

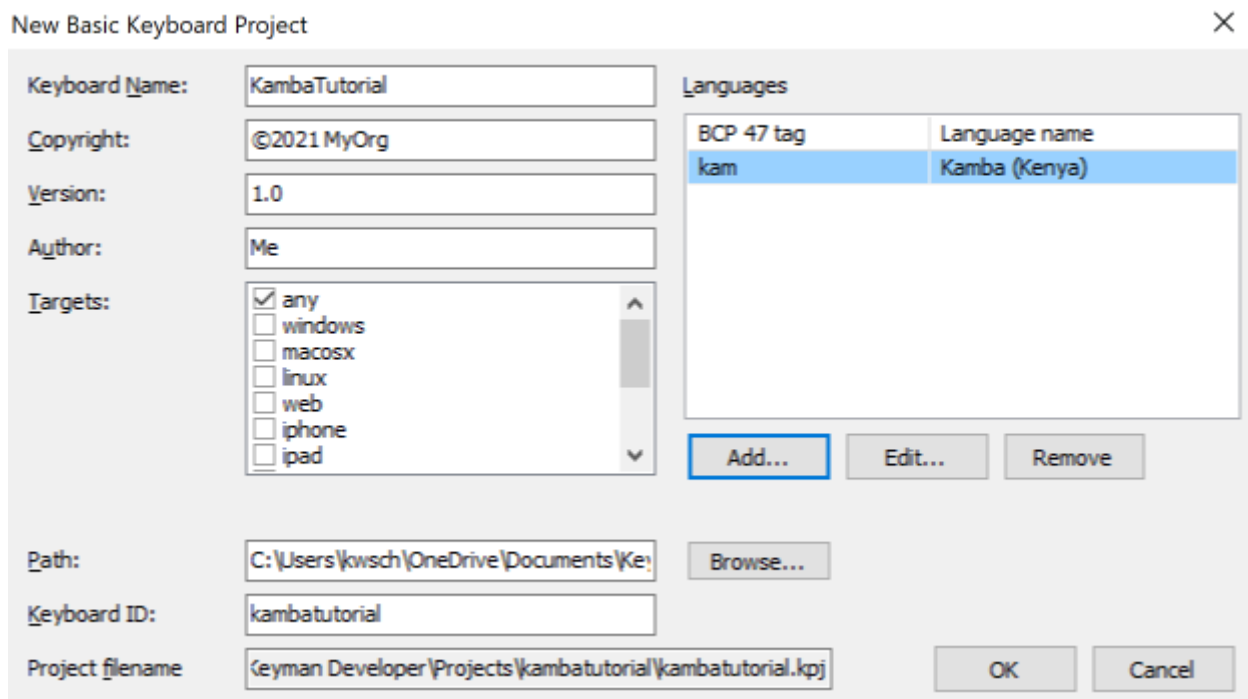
We will now create the KambaTutorial project

1. Start **Keyman Developer**.
2. In the **Project** menu, click **New Project**.
3. Click on **Basic**, then click **OK**.
4. In the **New Basic Keyboard Project** dialog box, do the following
 - In the **Keyboard Name** box, enter **KambaTutorial**. Normally we would enter the language

name.

- In the **Copyright** box, enter **2021 MyOrg**. Normally we would enter the current year and the name of our organization or our own name.
- In the **Version** box, we will accept the default, since this is the first keyboard.
- In the **Author** box, enter **Me**. Normally we would enter our name.
- In the **Targets** box, set **any**. In this way it can work for all devices.
- In the **Languages** box, add the BCP 47 Tag of the desired language to the list. In our case we will add *kam* (*Kamba*) to the list.

The dialog box should appear as below.

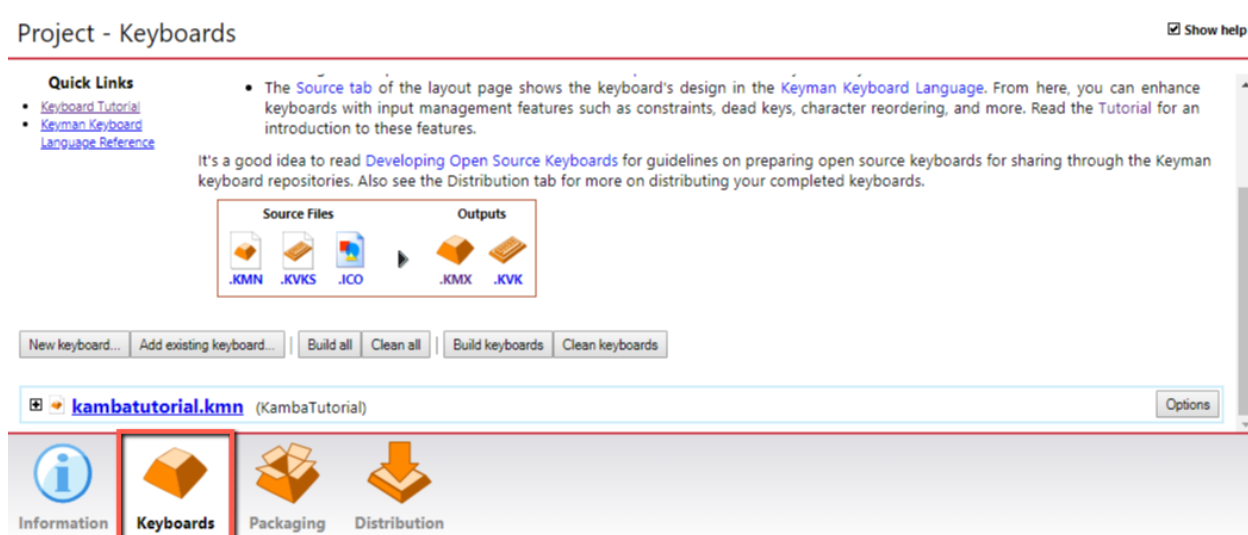


The dialog box is titled "New Basic Keyboard Project" and contains the following fields and controls:

- Keyboard Name:** KambaTutorial
- Copyright:** ©2021 MyOrg
- Version:** 1.0
- Author:** Me
- Targets:** A list box with "any" selected, and other options: windows, macosx, linux, web, iphone, ipad.
- Languages:** A table with two columns: "BCP 47 tag" and "Language name". It contains one entry: "kam" and "Kamba (Kenya)". Below the table are buttons: "Add...", "Edit...", and "Remove".
- Path:** C:\Users\kwsch\OneDrive\Documents\Ke... with a "Browse..." button.
- Keyboard ID:** kambatutorial
- Project filename:** Keyman Developer\Projects\kambatutorial\kambatutorial.kpj
- Buttons:** "OK" and "Cancel" at the bottom right.

- Then click OK.

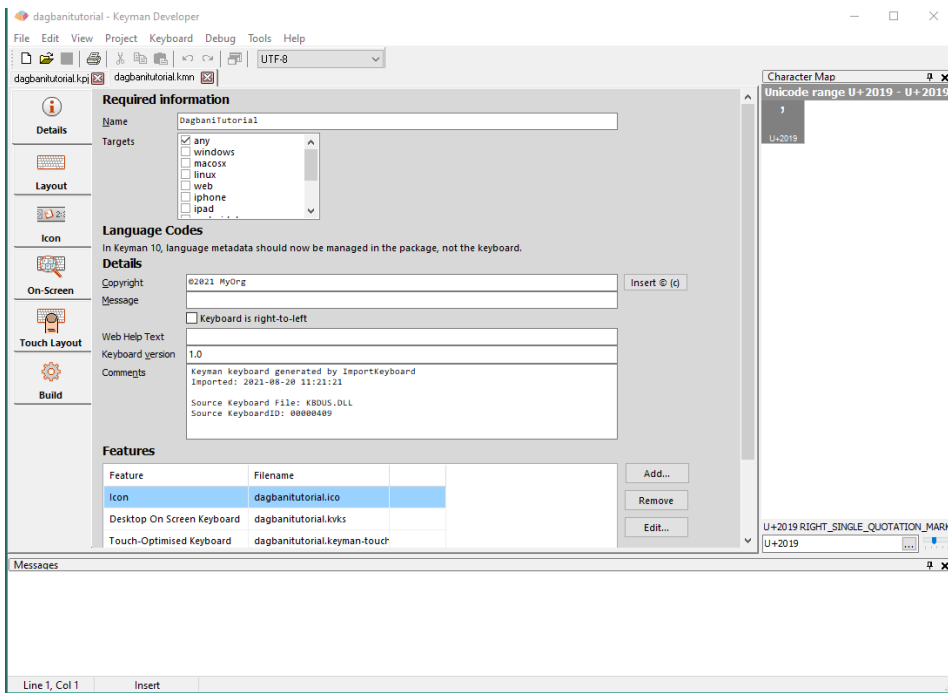
5. In the **Project - Information** dialog box, Click **Keyboards**. The **Project - Keyboards** dialog box appears, as below.



The dialog box is titled "Project - Keyboards" and contains the following elements:

- Quick Links:** A list of links: "Keyboard Tutorial", "Keyman Keyboard Language Reference", and "The Source tab of the layout page shows the keyboard's design in the Keyman Keyboard Language. From here, you can enhance keyboards with input management features such as constraints, dead keys, character reordering, and more. Read the Tutorial for an introduction to these features."
- Source Files:** A section showing icons for ".KMN", ".KVKS", and ".ICO".
- Outputs:** A section showing icons for ".KMX" and ".KVK".
- Buttons:** "New keyboard...", "Add existing keyboard...", "Build all", "Clean all", "Build keyboards", and "Clean keyboards".
- Project Name:** "kambatutorial.kmn (KambaTutorial)" with an "Options" button.
- Bottom Bar:** A row of icons: "Information", "Keyboards" (highlighted with a red box), "Packaging", and "Distribution".

6. Then click **kambatutorial.kmn**. The Details pane appears, as below.



7. Click on **Layout**. The **Layout** pane appears. Note that this time we see a keyboard layout image. This is because this keyboard is not based upon any other keyboard which is too complicated for Keyman Developer to display.

Click **Code** tab. We see just a few line codes that initialize an empty keyboard, as below. We do not see any code that would come from another keyboard.

```

1  c kambatutorial generated from template at 2021-09-17 10:54:15
2  c with name "KambaTutorial"
3  store(&VERSION) '10.0'
4  store(&NAME) 'KambaTutorial'
5  store(&COPYRIGHT) '©2021 MyOrg'
6  store(&KEYBOARDVERSION) '1.0'
7  store(&TARGETS) 'any'
8  store(&VISUALKEYBOARD) 'kambatutorial.kvks'
9  store(&LAYOUTFILE) 'kambatutorial.keyman-touch-layout'
10
11 begin Unicode > use(main)
12
13 group(main) using keys
14

```

8. Click the **Save** icon to save our work. The project has been created.



9. To exit the program, in the **File** menu, click **Exit**.