Spark

User guide V1.01





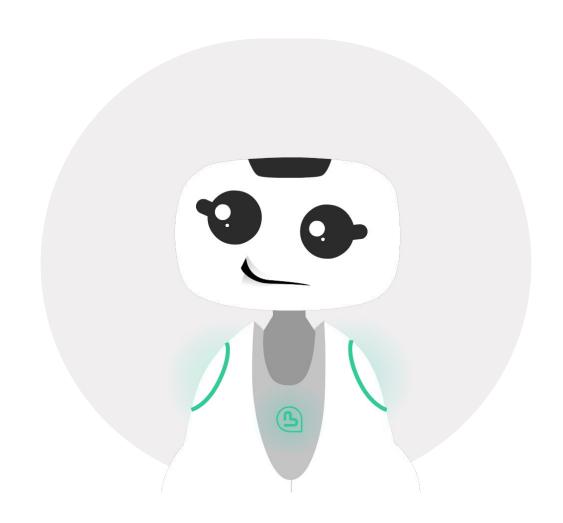


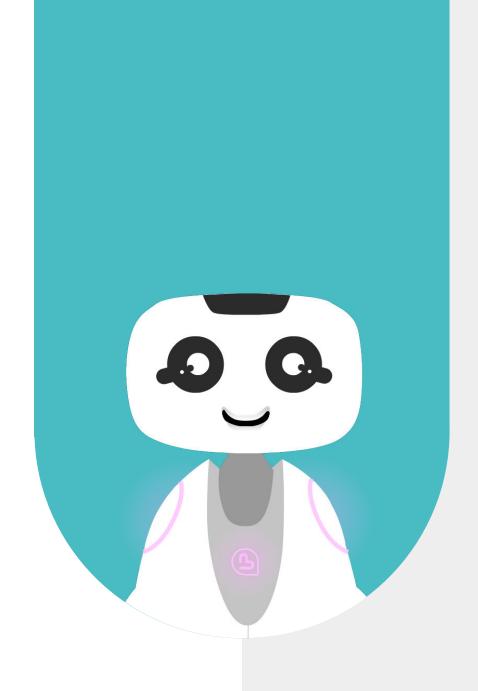
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2-ABOUT



2.1 - WHAT IS SPARK?

SPARK is a solution for creating and managing content (applications) for social robots, in particular Buddy, accessible from a website: https://spark.intuitive-robots.com/

This solution offers a simple content creation mode (no technical skills required) and an advanced mode (programming).

It includes an online catalog of applications, ready-to-use or to customize. It is possible to manage your content in several languages.

- The web interface is in English only.
- It is recommended to use the browser «Google Chrome»

Since SPARK is a cloud-based solution, at each backup the content is automatically updated on your robot (However the robot must be connected to the Internet)

2.2 - HOW TO INSTALL SPARK ON BUDDY?

You don't have to do anything. Blue Frog Robotics takes care of everything.

When you turn on your robot for the first time, it will display a 4-digit code on its tablet to enter in SPARK app when adding your robot (see following slides)



3 - INTERFACE PRESENTATION

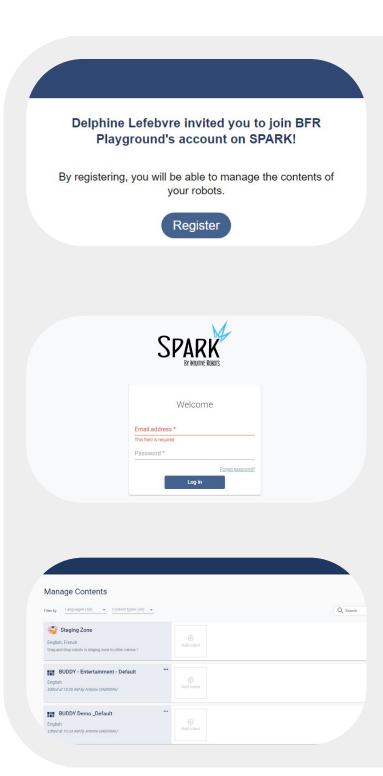
3.1 - HOW TO CREATE YOUR SPARK ACCOUNT?

Upon BFR's request, Intuitive Robots activates your license remotely.

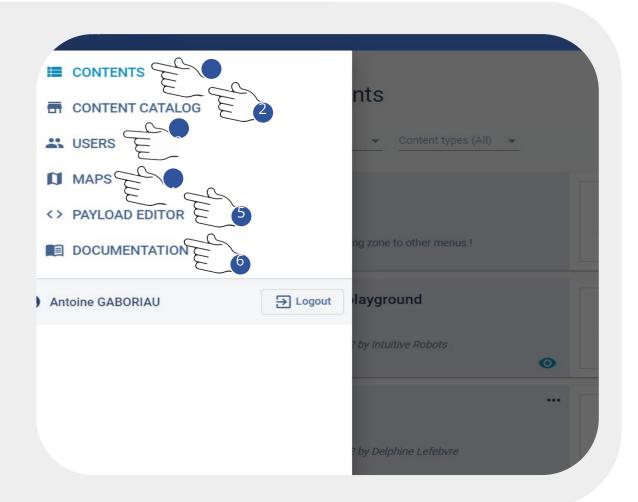
- 1. Reception of a registration email
- 2. Form registration

3. Now, you are connected to SPARK! You access to 3

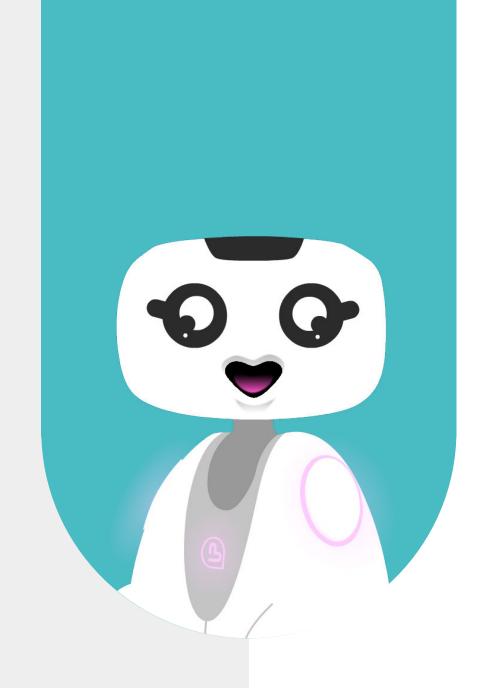
default menus.



3.2 - GENERAL INTERFACE PRESENTATION



- 1. Contents: Here will be collected your app menu(s) for Buddy.
- **2. Content Catalog:** Online applications catalog for your robot.
- **3. Users :** Gather all users who have access to your SPARK account. Possibility to add more, just fill in their emails.
- 4. Maps: Dedicated tab to the Cruzr robot only, do not use.
- **5. Payload Editor :** Developper / advanced mode. Do not use if you have not yet followed a dedicated training.
- **6. Documentation :** Direct link to access to the complete online documentation (english).

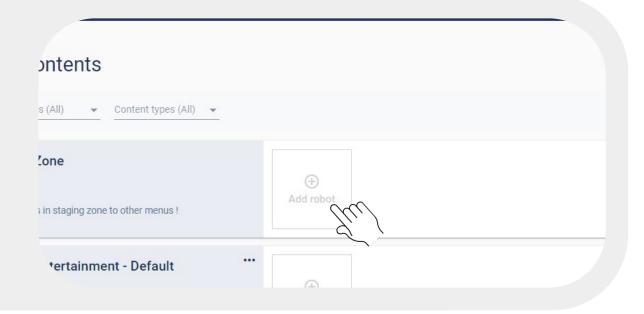


4 - ADD THE BUDDY ROBOT INTO SPARK

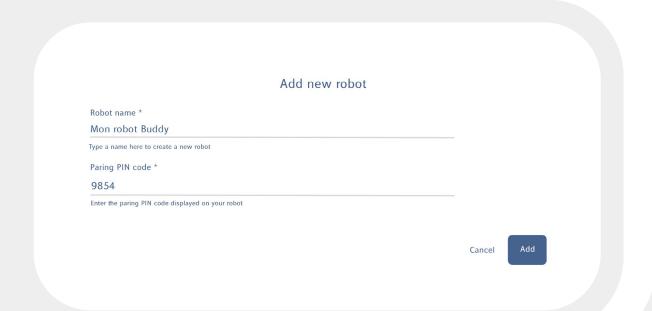
4.1 - HOW TO ADD BUDDY INTO SPARK?

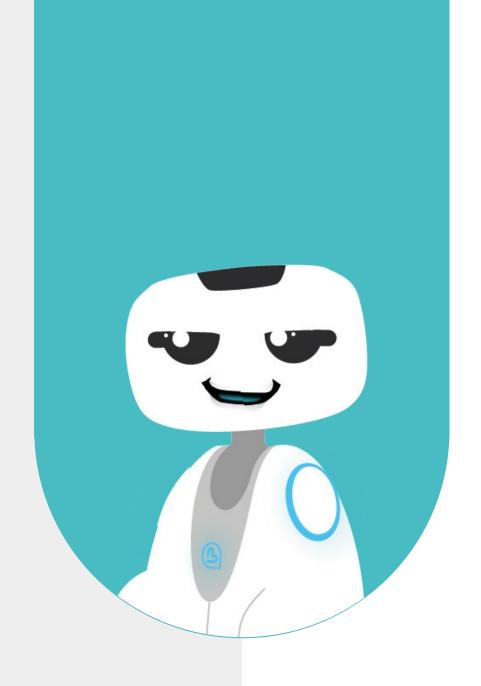
You don't have to do anything. Blue Frog Robotics and Intuitive Robots take care of everything. But just in case:

Click on " + Add robot"



Enter the name + the PIN code given by the robot

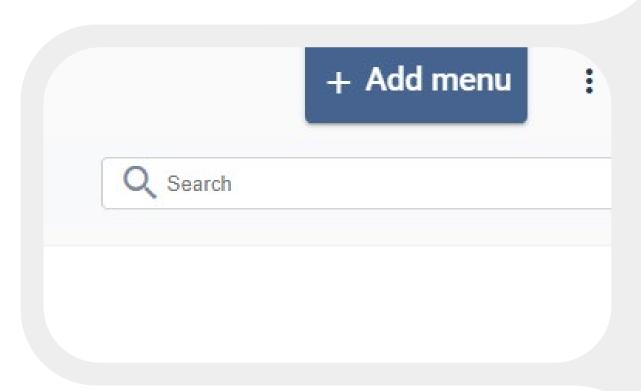


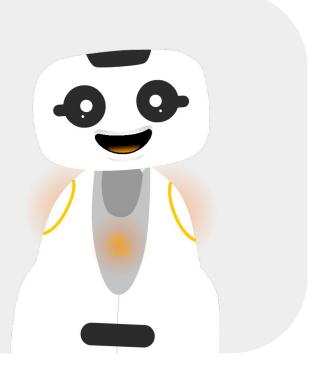


5 - MENU CREATION & CONFIGURATION

5.1 - HOW TO CREATE MY MENU?

Click on "+ Add menu" at the top rioght of the screen.





THE SPARK MENU

A MENU gathers all your applications available for the user.

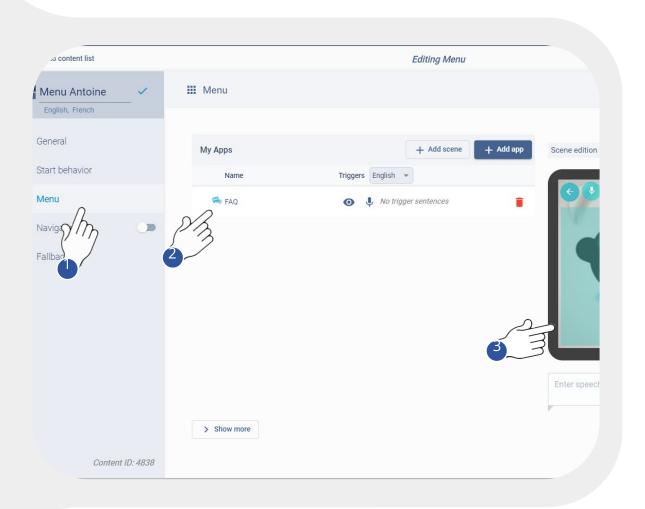
It contains:

- Ready-to-use applications
- Fully configurables applications

The MENU is customizable (colors, display...)

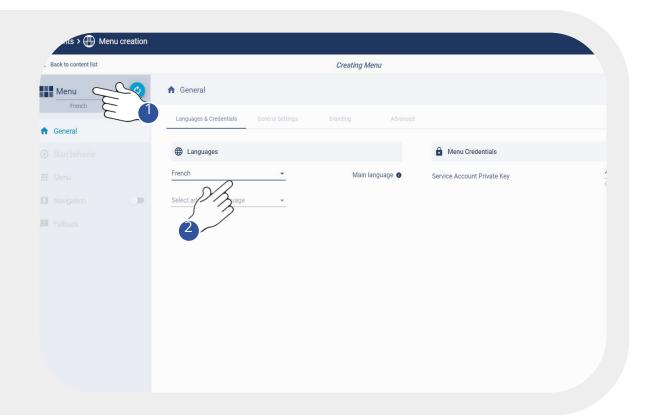
5.2 - MENU PRESENTATION

General interface of your menu. It is here that you'll be able to add your applications. You can configurate it as you wish



- 1. Main tabs to configure. Do not take into account the Navigation tab (dedicated to the Cruzr robot)
- 2. Here will be displayed your applications activated from the catalog
- 3. In this view, you can configure the menu display. It's already preconfigured for Buddy.

5.3 - HOW TO CONFIGURE MY MENU?





- 1. On the top left corner, rename your Menu
- 2. Select "English" form the languages
- 3. Save
- 4. After saving, you'll be redirected to the "General Settings" tab.

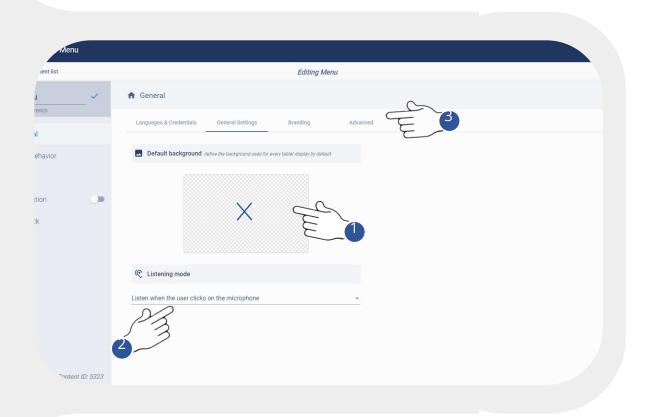
Important: the MENU display is preconfigured on the Buddy robot

- 1. Do not set "Default Background", it will hide the face of Buddy on its tablet.
- 2. You can choose the type of listening of the robot. (a click on the microphone is equivalent to the "ok Buddy" trigger)

 "Listen when the robot ends talking" the robot listens continuously.

"Listen when the user clicks on the microphone" the user has to activate the microphone (on the tactil tablet or with the trigger "ok Buddy") each time to speak to Buddy.

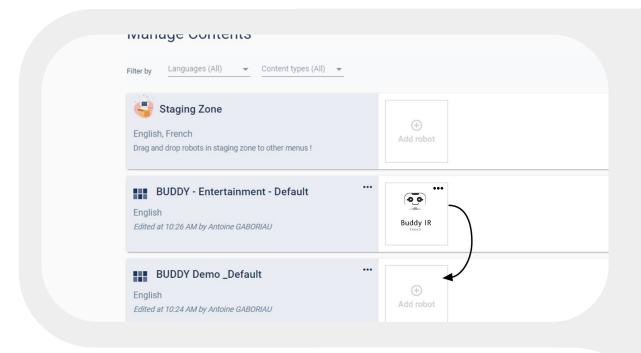
3. Do not modify the "Branding" and "Advanced" tabs at this stage.



Important: the MENU display is preconfigured on the Buddy robot

5.4 - ADD MY BUDDY IN MY MENU

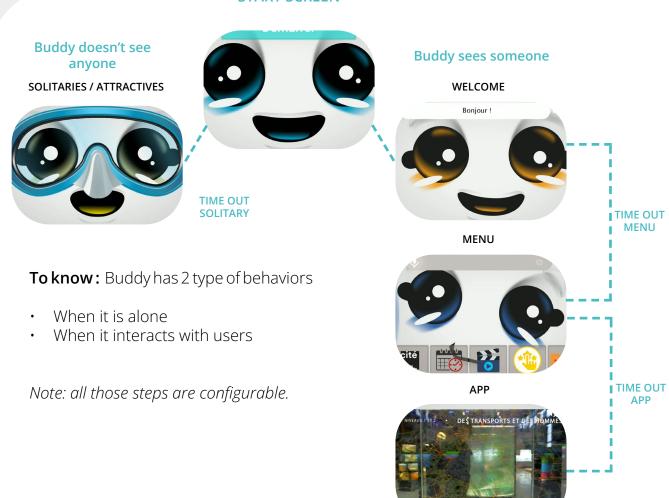
You have just created your menu, you can select your robot and drag it inside



- Once your modifications have been saved, select your Buddy robot and drag
 it into your newly created menu
- 2. Click on your menu, then on the left, click on "Start behavior"

5.5 - THE BUDDY'S LIFE

- 1. The "Start Screen" is displayed by default when there is no one.
- 2. "Solitaries": random behaviors played by the robot when there is no one.
- 3. "Welcome": welcome behavior of Buddy.
- 4. "Menu": all applications available for the users.
- 5. "Time out App": Duration before returning to the menu screen (When someone leaves).
- 6. "Time out Menu": Duration before returning to the start screen (When someone leaves).
- 7. "Time out Solitary" Frequency of occurrence of the Solitaries.

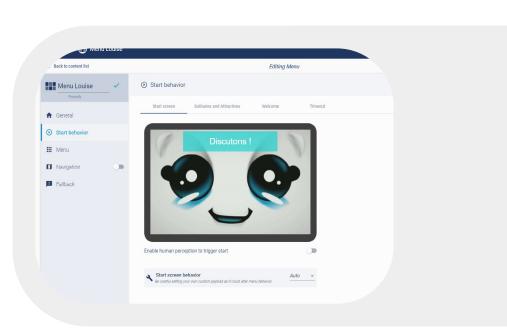


5.6 - THE « START BEHAVIOR »

The "Start Screen" is the first screen displayed just before the interaction. This screen is already configured by default for Buddy.

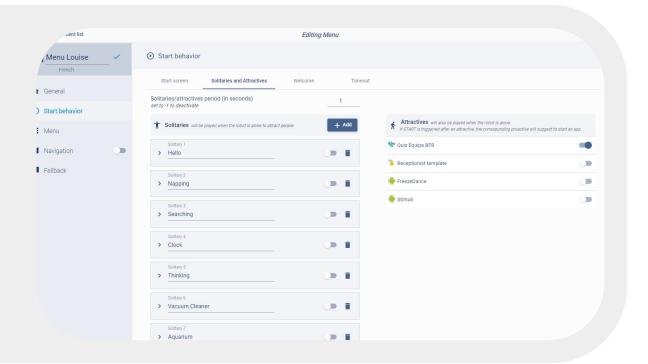
You can modify the text (title + sub-title) in the blue button. Examples:

- Start
- Speak with Buddy
- Speak with me



To change the button color, refer to "Branding" slide.

Leave this page as is it for now, everything is already pre-configured.



- The Solitaries are autonomous behaviors played by the robot when no one is around. They are played randomly.
- The Attractives are behaviors including phrases said by the robot to attract people around it to discover a particular application. You can disable some of them if needed. Do not delete them.

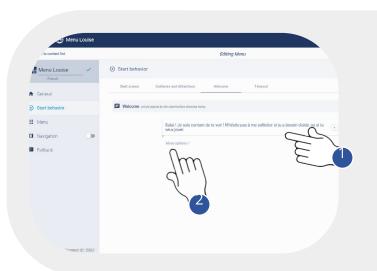
To go futher: refer to the dedicated to the solitaries & attractives management.

First step of content creation. This view is identical in most content creation templates. You can configure the global behavior of the robot, namely:

- The robot speech
- The display on the tablet (images, videos...)
- The generic animation (Buddy head + the body of the robot)
- Add sounds, music

- 1. In this edit field, you can enter a phrase said by Buddy as a greeting, for example:
- Hello, welcome to "..."
- · Hello, I'm glad to see you
- 2. To go further in the configuration of this step, click on "More options"

Do not modify the "Timeout' tab.
Do not forget to save!



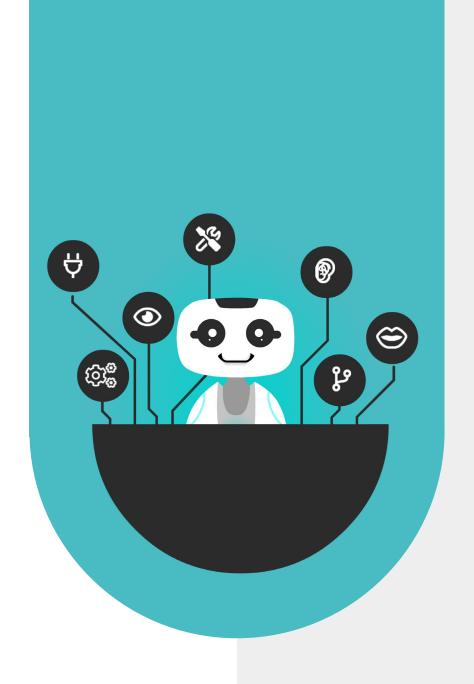
The "Welcome" is the welcome behavior of Buddy. This is the first stage of interaction with humans.



In addition to the welcome sentence said by Buddy, you can play a "Body Animation" (e.g: Happy) and "Face animation" to change the robot head (e.g: Buddy Love)

Select the animations illustrated with the Buddy face. On the "Tablet Preview", you can add a title to be displayed on the tablet.

Don't do anything else. Do not modify the "Timeout' tab. Save!



6 - ADD APPLICATIONS INTO YOUR MENU FROM THE ONLINE CATALOG

6.1 - PRESENTATION OF THE SPARK CATALOG

SPARK includes two type of contents that you can add and configure. Activate all the applications on your robot in few clicks from the online SPARK catalog.



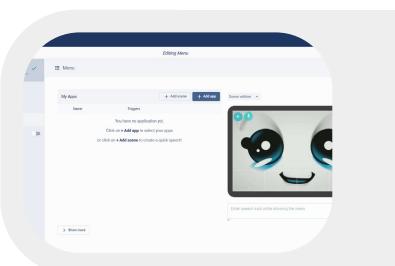
6.2 - ACCESS TO THE APPLICATIONS CATALOG

During this step, you will add in a few clicks ready-to-use applications (not modifiable) and to customize.

To add your first applications, click on "Add app". A new screen opens (see next slide)

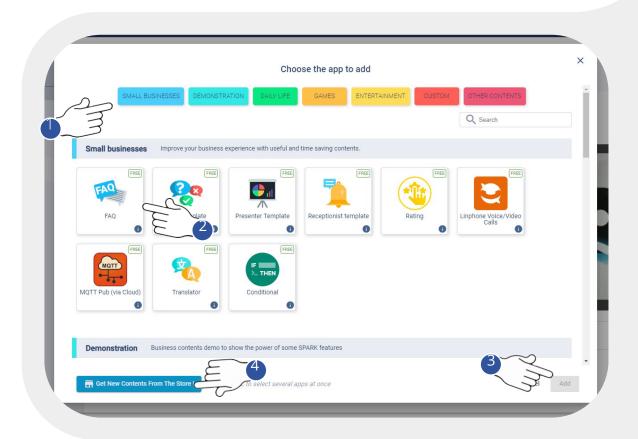
On this page, it's also possible to add a simple Scene ("Add scene", accessible from the menu, which proposes a simple content, without the need to create a dedicated application.

From now, do not add any.



6.3 - DISCOVERY OF THE CATALOG

In this screen, you can see all the applications that are already available when you registered. It's your own app library. Other apps are paid apps and visible in the "Store".



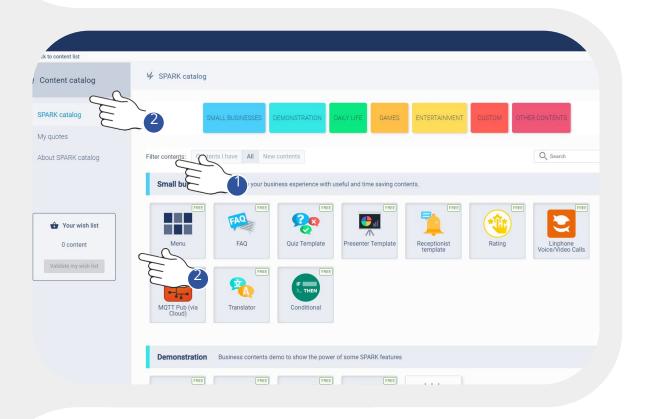
- 1. Possibility to filter the contents by 3. Add your applications, they will category.
- 2. Click on the applications that FAQ, Weather and Quick, Draw! for example. By clicking on each of them, you will access to their description.
- automatically appear in your menu. Then return to your menu.
- interest you and activate them. Add 4. You're looking for other contents? Click on "Get new contents from the store"

Tip: You can make a multiple selection by pressing "ctrl".

6.4 - DISCOVERY OF THE SPARK STORE

The Store SPARK lists all available (and future) applications. Some are free (and therefore can be directly activated), others are paid apps.

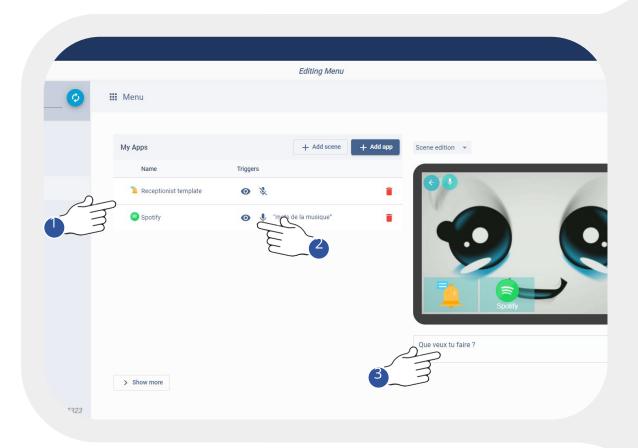
Contact your Blue Frog Robotics' sales contact to purchase a paid application license.



- 1. Possibility to filter the contents by category.
- 2. Do not use the tabs"My Quotes" and "Your whish list

6.5 - APPS DISPLAY INTO THE MENU

Reminder: the display of your applications in the menu is already configured by default for Buddy. However, you can change the icons or the color of the backgrounds.



- 1. Your applications are now visible in the list as well as in the tablet preview. You can change: the apps order, the title, the icon
- 2. Display/ Hide, trigger an app in the menu by voice:
- 3. Fill in a sentence said by the robot when the menu is displayed.
- Show / hide, or hide an app in your menu, but it can still be activated by voice.

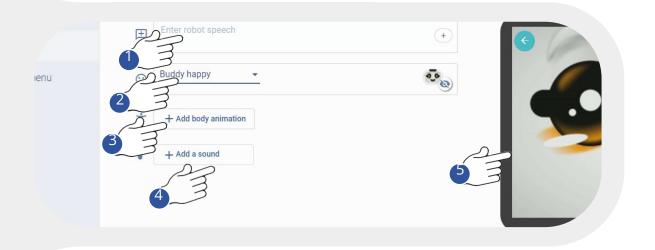


Trigger or not an application by voice.

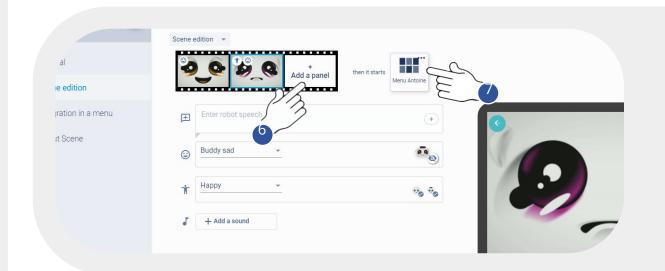


6.6 - «SCENE» EDITION IN THE MENU

In different places (menu, app), you will see the possibility of creating scenes and panels



- 1. Enter the TTS "Sentence". Click on "+" for filling several alternatives.
- 2. Add a type of face "Add robot Face"
- 3. Add a BI "Add a body animation"
- 4. Select a sound "Add a sound"
- 5. The "Tablet Preview" allows to preview the rendering



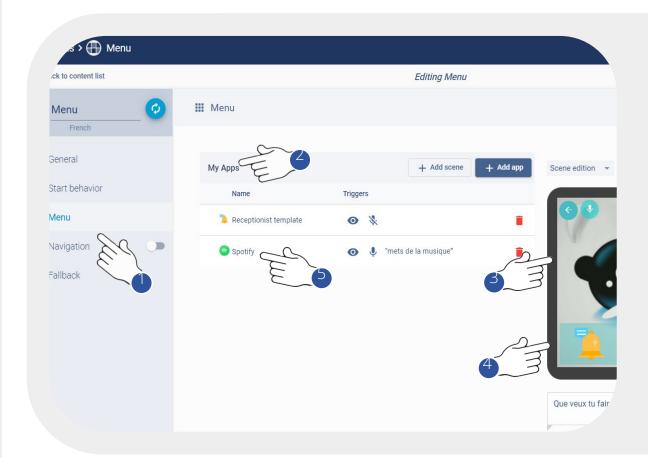
- 6. Possibility to add several panels to the scene "Add a panel"
- 7. Sometimes, it'll be possible to continue on an application or another menu "Set Next action"



7 - CREATION OF AN APPLICATION FROM A TEMPLATE

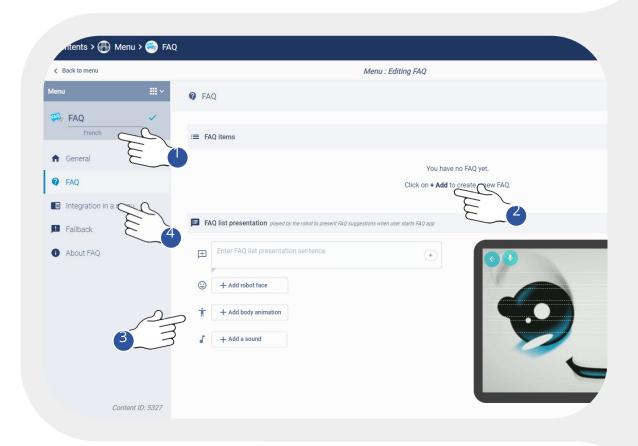
7.1 - APPLICATION CREATION

In this section, we'll learn how to create a simple FAQ app. For this exercise, this app will be dedicated to FAQs on the Buddy robot



- 1. Select the "Menu" tab.
- 2. View the list of all your apps in the "My Apps" section
- 3. In the "tablet preview" appear your apps as they will appear on the robot
- 4. You can already change the title, or the icon of your FAQ application in the menu. To do this, click on it and access your media content.
- 5. From your Menu, open the FAQ application visible in the list of your applications.

Reminder: The way to create content (Speech, tablet display, animations) is similar to the previous steps (welcome, scene)



- 1. Give a title to your application, it will be visible in the menu, under "My Apps".
- 2. Here is displayed the list of all your questions / answers.
- 3. Here you can configure how Buddy

will present your FAQs menu.

4. Before creating your questions / answers, we will configure the app in the menu. Click on the "Integration in the menu"

7.2 - INTEGRATION IN THE MENU

In different places (menu, app), you will see the possibility to create scenes and panels.

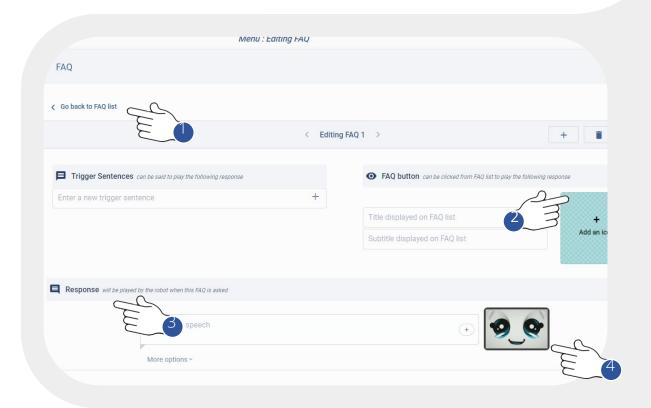


- 1. In this tab, you have access to several types of configuration.
- 2. Let's start by defining the type of keywords / small phrases that the robot is likely to understand to launch the application. You can configure several of them.
- 3. Here you can change the icon that appears in the menu, title and subtitle. If you deactivate this option, then the app will not appear in the menu, but can be activated by voice (if the "trigger sentence" is activated)
- 4. Activate or not the "Attractive" / "Proactives", and define the behavior.
- 5. Define the behavior at the introduction (before the app actually starts), or at the end (once the app is finished and before returning to the "Menu")

7.3 - FAQ APP

We are going to focus on creating Questions/Answers of a FAQ application dedicated to the Buddy robot.

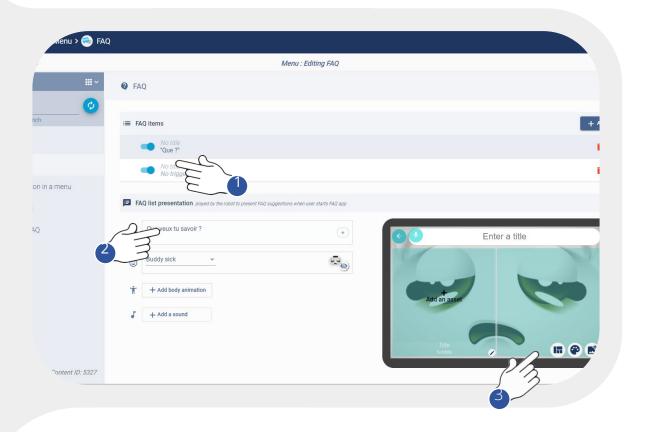
- From the "Integration in the Menu" tab, come back to the "FAQ" tab.
- Click on "+ Add"



The content creation procedure here is identical to the previous steps. Repeat the operation as many times as necessary.

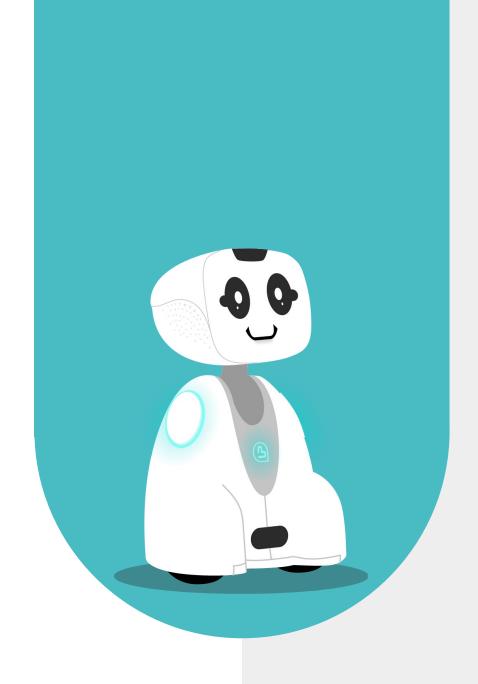
- 1. Set keywords and short phrases to trigger the app by voice.
- 2. Define a title for your FAQ as well as an icon / image to illustrate it in your app menu.
- 3. Set the robot speech (= the answer to the question) Add a "face" and/or "body" animation if you want.
- 4. Add a title, image or video to illustrate your answer (not mandatory)

Save, then return to the FAQ tab.



- 1. Find here the list of newly created questions.
- 2. Here you write an intro speech presenting the Q/A content of this app, you can also animate the robot.
- 3. Your titled and illustrated FAQs are also displayed on the tablet. You can choose between a list or grid view. You have the possibility to modify the branding / display of the FAQs (see slide Branding)





8 - BRANDING AND DESIGN

8.1 - BRANDING / DESIGN IN SPARK

The modification of the display of content on the tablet can be done atomically (a single screen / panel in an app for example) or evenly regardless of the content (identical everywhere) This can therefore be done at several levels, to guarantee total flexibility in your creativity.

Regardless of the Tablet Preview, if you want to change the branding, click on the blue palette. Otherwise, go to the tab General > Branding of your menu.



All of the Company's content (menus, apps, etc.) will have the same graphic charter.

All applications in the same menu will be displayed in the same way (color, size, etc.)

All the contents (items) of the same app (template only) will have the same graphic charter.

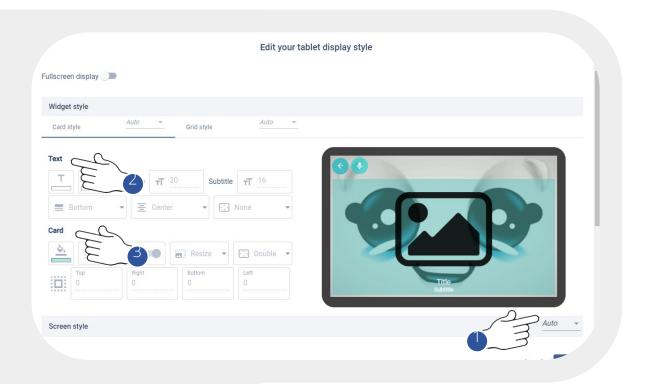
Only one screen (panel), one view.

MENU
APP
PANEL

8.2 - BRANDING : CARD STYLE (MENU)

The modification of the display of content on the tablet can be done atomically (a single screen / panel in an app for example) or evenly regardless of the content (identical everywhere).

We are here in your app menu branding/design, settings are set by default.



1. AUTO MANUAL

To modify the settings, switch to the Manual mode.

2. TEXT

To configure the display of the text and in particular the titles (font, color, positioning, etc.)

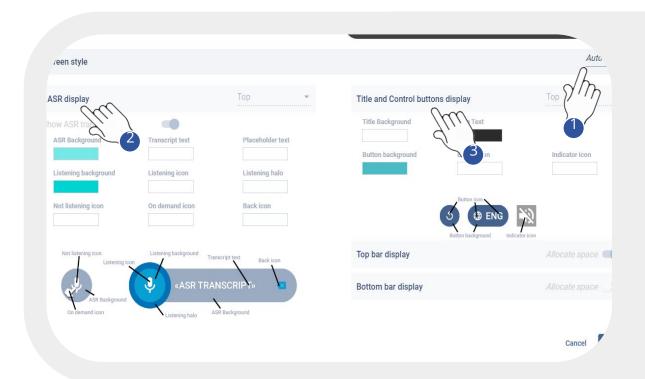
3. CARD

To configure the display of a card (Ex: icon of an app, image, video, etc.), size, positioning, background color, etc.

8.3 - BRANDING: ASR AND BUTTONS (MENU)

The modification of the display of content on the tablet can be done atomically (a single screen / panel in an app for example) or evenly regardless of the content (identical everywhere).

The settings here are set by default.



1. AUTO MANUAL

To modify the settings, switch to the Manual mode.

2. ASR DISPLAY

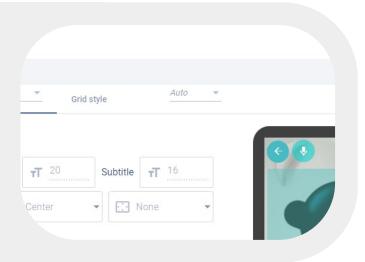
The ASR includes the display of a microphone and a bar that transcribes what the robot has understood from the user. We recommend leaving it enabled. Leave in "top" mode. However, you can change the color.

3. TITLE & CONTROL BUTTON DISPLAY

If some display options are activated (language, volume, pause, etc.), you can also change the color of the elements. Leave in "top" mode.

8.4 - BRANDING : GRID STYLE (MENU)

To modify the settings, switch to the Manual mode.



Your content illustrated by an image or an icon are displayed in the form of a grid.

It is recommended to keep the default settings.

However, you can change the positioning of the contents (by default at the bottom), as well as the number of rows and columns

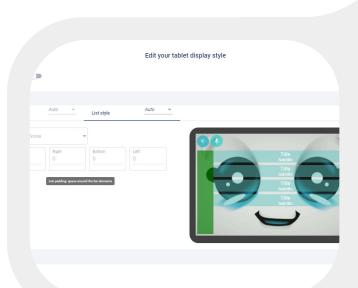
Your display settings are automatically updated in the Tablet Preview

8.5 - BRANDING : LIST STYLE (GENERAL)

In some apps (Template FAQ), you can choose grid view or list view.

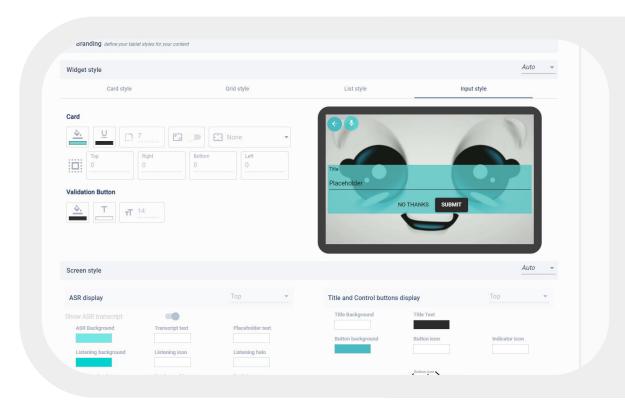
You can change the background color and the positioning of list items.

The modification of the display of content on the tablet can be done atomically (a single screen / panel in an app for example) or evenly regardless of the content (identical everywhere).



8.4 - BRANDING: INPUT STYLE (GENERAL)

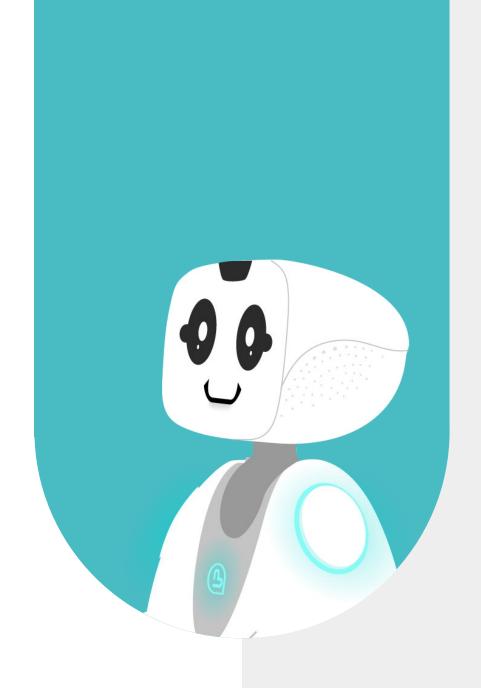
Some apps like the Receptionist use "widgets" which are content-specific fields (Ex: email address, phone number, etc.), these can be configured.



In some applications (Ex: Template Receptionist), you can choose the display of certain fields. You can modify the color of the background, the size, the positioning of the elements as well as the buttons under the controls.

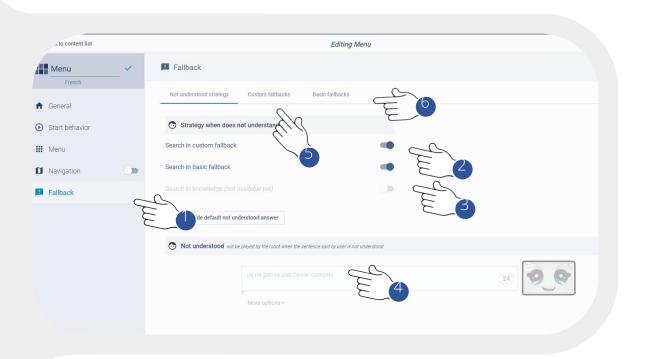
The modification of the display of content on the tablet can be done atomically (a single screen / panel in an app for example) or evenly regardless of the content (identical everywhere).

Your display settings are automatically updated in the Tablet Preview

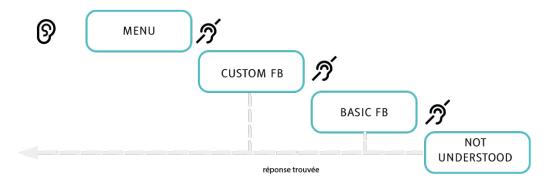


9 - TO GO FURTHER (ADVANCED MODE) FALLBACKS & SOLITARIES

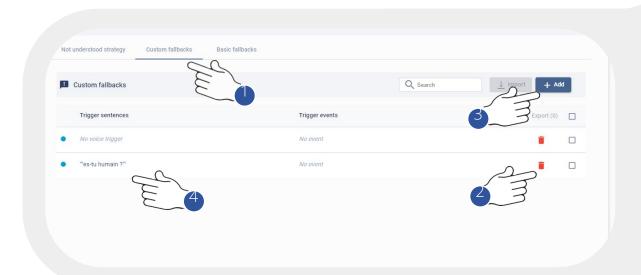
9.1 - CONFIGURE THE FALLBACKS



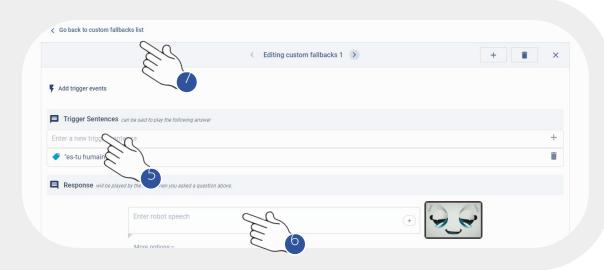
- 1. Access to the "Fallbacks" from your menu (basic topics triggered if the robot does not understand anything else).
- 2. Choose your strategy when the robot does not understand (e.g : when no vocal intention corresponds to the triggers of the apps in the menu).
- 3. Never activate the strategy "knowledge"
- 4. What the robot will say (optional) when it does not understand: neither a menu trigger, nor any fallback, wether "Custom" or "Basic".
- 5. To access and set your onw fallbacks.
- 6. To access and choose the "Basic fallbacks" by default, categorize according to themes.



9.2 - CONFIGURE THE "CUSTOM FALLBACKS"

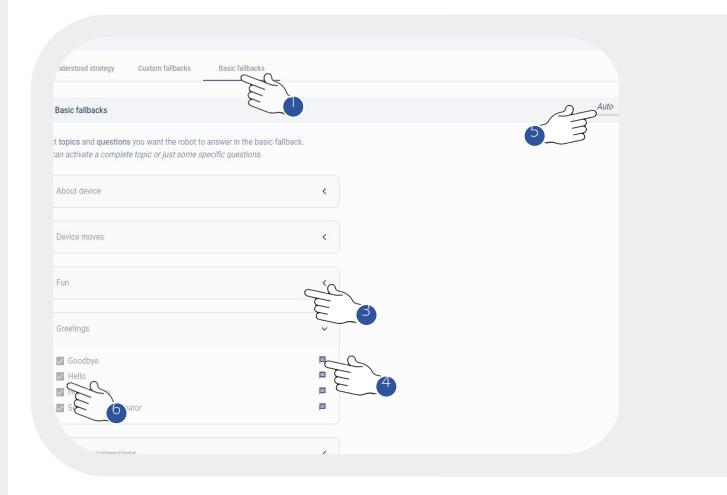


- 1. Access to "Custom Fallbacks"
- 2. "View" the list of existing fallbacks
- 3. "Create" a new fallback
- 4. Or "edit" an existing fallback



- 5. During the creation or modification of a fallback, set the "Trigger Sentences" (words or sentences to be recognized)
- 6. Enter the behavior to adopt for the response when editing the scene (text, face, animation, etc.)
- 7. Come back to the list of "custom fallbacks"

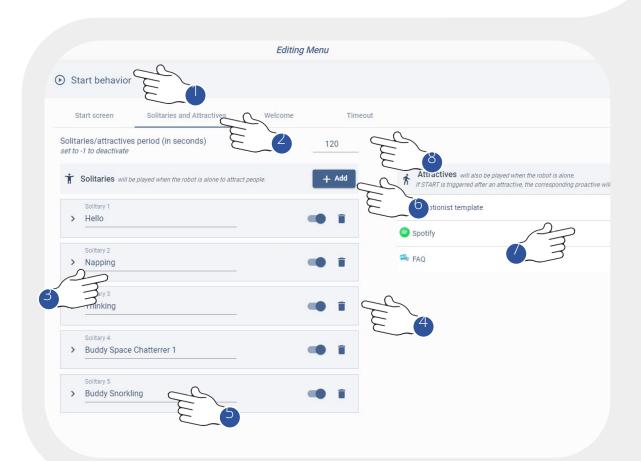
9.3 - CONFIGURE THE "BASIC FALLBACKS"

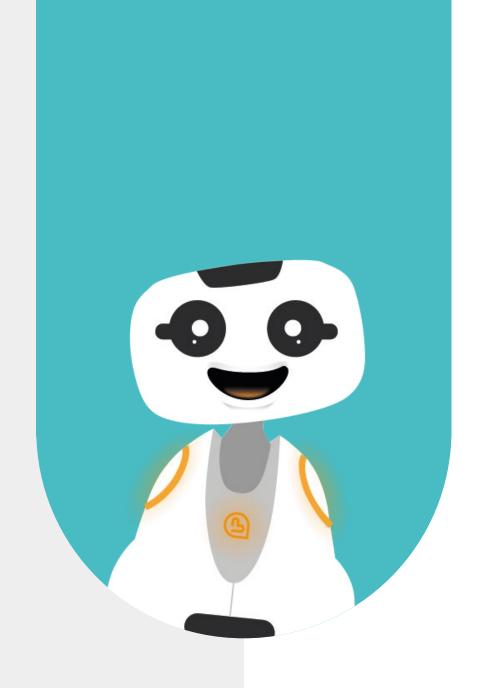


- 1. Access to the "Basic Fallbacks"
- 2. View the list of basic fallbacks
- 3. Drop down a category
- 4. View the sub-category
- 5. Swith from the "auto" to "manual" mode
- 6. Enter the behavior to adopt for the response when editing the scene (text, face, animation, etc.)
- 7. Do not forget to save ("Save" at the top right)

9.4 - SOLITARIES AND ATTRACTIVES MANAGMENT

- 1. Click "Start Behavior" of your Menu
- 2. Access to the tab "Solitaries & Attractives"
- 3. "View" the list of your Solitaries and Attractives
- 4. "Activate, desactivate or delete" the Solitaries
- 5. "Modify" the existing Solitaries
- 6. "Add" some Solitaries from the Solitaries catalog
- 7. Activate, deactivate the Attractives, from your Apps in the Menu
- 8. Set the frequency of display in seconds of the "Solitaries" or "Attractives" among those activated



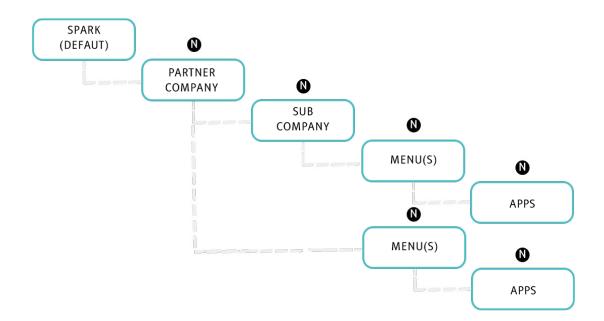


10 - TO GO FURTHER (ADVANCED MODE) CONFIGURATION INHERITANCE

10.1 - CONTENT HIERARCHY

Some configurations are ranked in SPARK

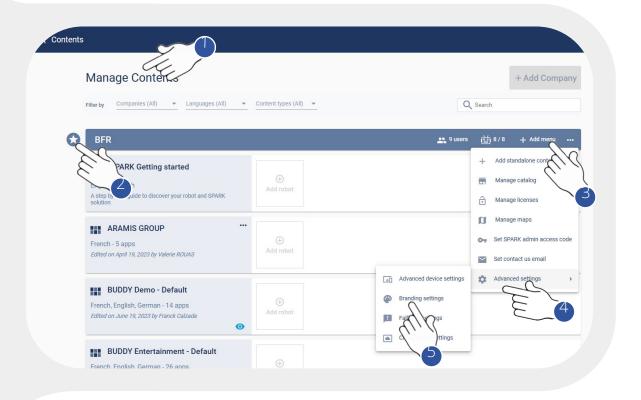
- 1. "Partner Company" allowing the managment of client sub-company ("Sub Company"), whether content or configuration.
- 2. "Sub Company" Customer account with its own contents and configurations.
- 3. "Menus" Contents ("Contents") aggregated in the form of menus belonging to the "Company" or "Sub-Company".
- 4. "Apps" applications belonging to a menu/
- Multiple instances can exist



At each level, it's possible to switch "Auto" to "Manual" mode.

- When the "Auto" mode is used at a level, SPARK will go up until a "Manual" mode is set, or go up to the SPARK root configuration.
- The configurations that we will see concerned: "Advanced Devices Settings", "Branding Settings", "Fallback Settings", "Cloud Action Settings"

10.2 - "COMPANY" CONFIGURATION



- 1. Access to your "Company"
- 2. This icon appears of your "Company" is a "Partner Company" (in this case you have certain privileges, such as read and write rights for "Sub-company".)
- 3. Access to the settings of the Company
- 4. Click on "Advanced Settings"
 Here are the 4 types of configurations that can be defined at the Company level.

Configuration related to:

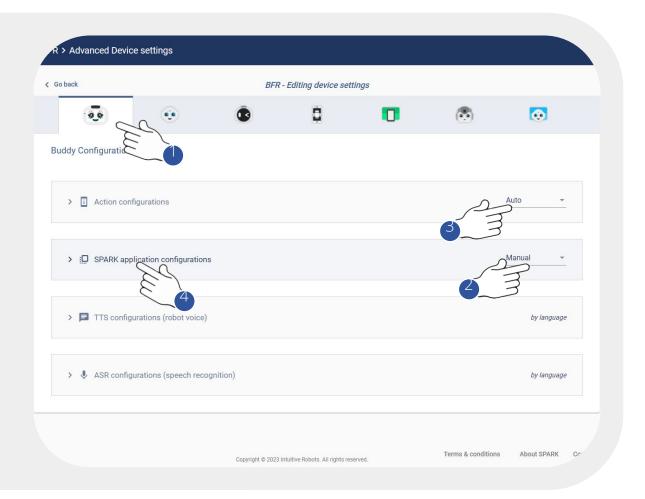
- · The robots
- The types of design and branding
- The fallbacks and defined strategy
- The actions of external services.

Those configurations can be overloaded at different levels

"Sub-Company", "Menu", "Application"

10.3 - « DEVICE ADVANCED SETTINGS » CONFIGURATION

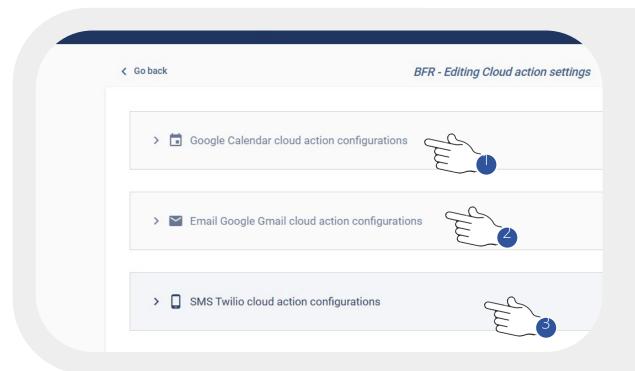
Configuration related to the robots



- 1. Type of robots available in SPARK.
- 2. Configuration of the "actions" (connected devices), such as "NFC", "Printer", "Payment" (Not applicable for Buddy)
- 3. SPARK specificities (type of buttons of the top right menu, cache size, engine activation, face tracking, ...)
- 4. Configuration of the voice type (Not applicable for Buddy)
- 5. Configuration of the ASR (Automatic Speech Recognition) type

10.4 - "ACTIONS" - CONFIGURATION

For the external services

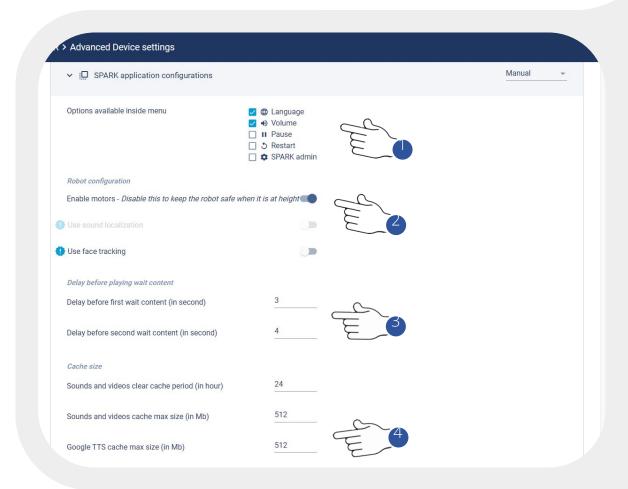


- 1. Not applicable useful only when using advanced Scene editing mode or when developing payloads. This configuration will be used when playing in a Google calendar:
- Via the payload edition using the associated action
- 2. Useful only when using advanced Scene editing mode or when developing payloads. This configuration will be used when sending emails:
- Via a template (like "receptionist")
- Via the payload edition using the associated action
- 3. Useful only when using advanced Scene editing mode or when developing payloads. This configuration will be used when sending SMS thankls to the Twilio service:
- Via a template (like "receptionist")
- Via the payload edition using the associated action

Create a Twilio account et follow their recommandations to retrieve the 3 necessary values for SPARK.

10.5 - « SPARK APP CONFIGURATION »

SPARK specificities



- 1. Define the options (buttons) that will appear in the SPARK application menu. By default, only the language is available. Check the settings you need.
- 2. Allow to deactivate/activate the motors of the Buddy (Wheels).
- 3. Allow to set the time before a Panel indicates that the internet connection is slow.
- 4. Cache is the application memory that stores images, sounds and videos so that they can be read more quickly by the robot, instead of having to load them from the Internet each time.

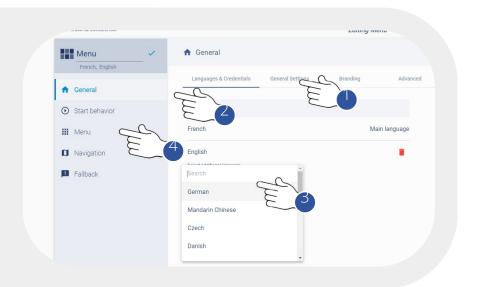
It is recommanded to keep the values set by default.



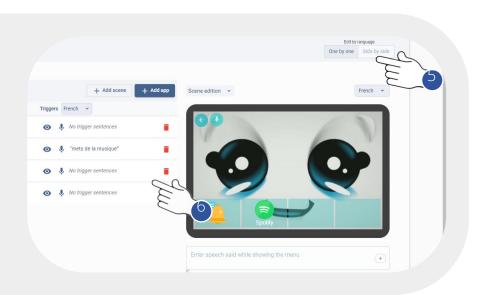
11-TO GO FURTHER (ADVANCED MODE) ADD AND MANAGE THE LANGUAGES

11.1 - SPARK AND THE MULTI-LANGUAGES

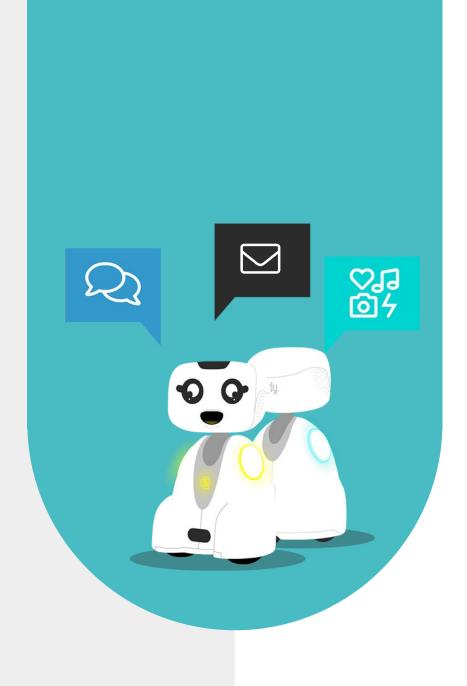
Select the menu in which you want to add a language



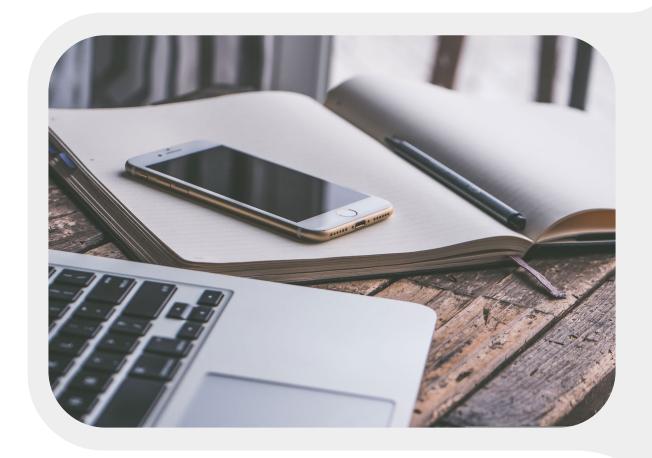
- 1. Go to section "General"
- 2. Click on "Languages & Credentials"
- 3. Select the Language to add
- 4. Go back to your "Menu"



- 5. Select your "Side by side" to view the content into the two languages
- 6. You can view your content in multiple languages side-by-side



12 - CONTACT US



12.1 - CONTACT INFORMATION

If you wish to contact us for further information, please refer to the following address:

SUPPORT spark-support@intuitive-robots.com

GENERAL INFORMATION info@bluefrogrobotics.com