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1. Login and landing page

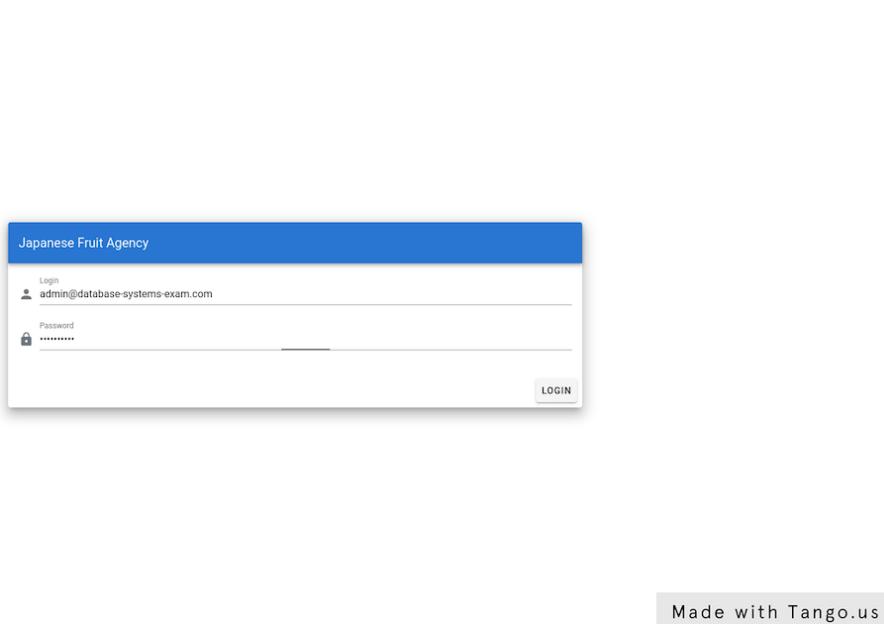
1. Go to Japanese Fruit Agency

2. Insert username and password and click on LOGIN

A default superuser exists with

username: admin@database-systems-exam.com

password: changethis



3. The landing page is /lots

The screenshot shows the main dashboard of the Japanese Fruit Agency. On the left is a "Main menu" sidebar with links like "Lots", "Fruits", "Allergies", "Recipes", "Sensors", "Analysis", "Profile", "View Notifications", "View Profile", "Edit Profile", "Change Password", "Admin", "Manage Operators", "Logout", and "Collapse". The main content area is titled "Manage Lots" and displays a table of fruit lots. The table has columns: Id, Name, Fruit, Arrival, Volume (m³), Weight (kg), Ripens level (0 to 1), Price, On display, Expired, and Actions. Three rows are listed:

Id	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

At the bottom, there are buttons for "Rows per page" (set to 10), "1 of 3", and navigation arrows. The footer includes a "Logged in" status, a "CLOSE" button, and a "Made with Tango.us" watermark.

2. Create and edit lots

1. Go to the lots page

This is default page after login and can be reached also from the side menu

2. To create a lot, click on CREATE LOT

The screenshot shows a table of lots with columns: Ripe level (0 to 1), Price, On display, Expired, and Actions. There are three rows of data. The 'CREATE LOT' button is highlighted with a red border.

Ripe level (0 to 1)	Price	On display	Expired	Actions
	0.9	false	false	
	1	false	false	
	2.5	false	true	

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3. Add all the required fields and click on SAVE

The screenshot shows the 'Create Lot' form. It includes fields for Name (A lot of oranges), Fruit id (5 - Orange), Arrival (11/27/2022, 05:07 PM), Volume (m³) (1), Weight (kg) (1), Ripe level (0.5), and Price (The price will be calculated automatically). The 'SAVE' button is highlighted with a red border.

Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications
- View Profile
- Edit Profile
- Change Password

Admin

- Manage Operators

Logout

Collapse

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4. The lot has been created and the user is brought back to the Lots page

The price has been automatically computed.

ID	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.5	1	false	false	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

5. To edit a lot, click on the corresponding pencil in the Lots table

ID	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.5	1	false	false	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9			

6. Make the desired changes and click on SAVE

Not on display PUT ON DISPLAY

Edit Lot

Id
4

Name
A lot of oranges

Fruit id
5 - Orange

Arrival
11/27/2022, 05:07 PM

Volume (m³)
1

Weight (kg)
1

Ripens level
0.9

Goes from 0 (unripe) to 1 (rotten)

Price
1

The price will be calculated automatically

Expired
false

CANCEL SAVE

7. The lot has been edited and the user is brought back to the Lots page

The price has been automatically edited.

≡ Japanese Fruit Agency

Manage Lots

Id ↓	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.9	0.6	false	false
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true

Rows per page: 10 ▾ 1-4

Lot successfully updated [CLOSE](#)

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3. Put and remove lots on display

1. Go to the lots page

The screenshot shows the 'Japanese Fruit Agency' application interface. On the left is a vertical menu bar with the following items:

- Main menu
- Lots (highlighted with a red box)
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis
- Profile

The main content area is titled 'Manage Lots' and displays a table of fruit lots:

ID ↓	Name	Fruit	Arrival
4	A lot of oranges	Orange	2022
3	A lot of bananas	Banana	2022
2	Test Lot n.2	Cranberry	2022
1	Test Lot n.1 of Oranges	Orange	2022

At the bottom right of the content area, it says 'Made with Tango.us'.

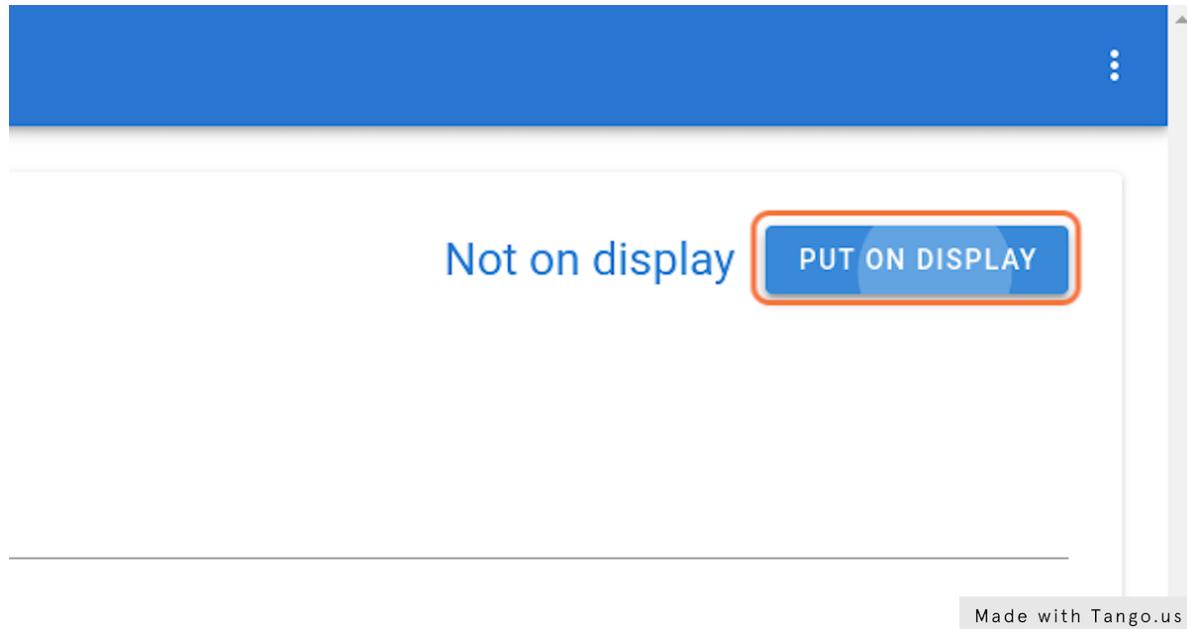
2. Edit a lot

The screenshot shows a table of lots for editing:

Level (0 to 1)	Price	On display	Expired	Actions
	0.6	false	false	
	0.9	false	false	
	1	false	false	
	2.5	false	true	

At the top right of the table area, there is a blue button labeled 'CREATE LOT'. At the bottom right of the table area, it says 'Made with Tango.us'.

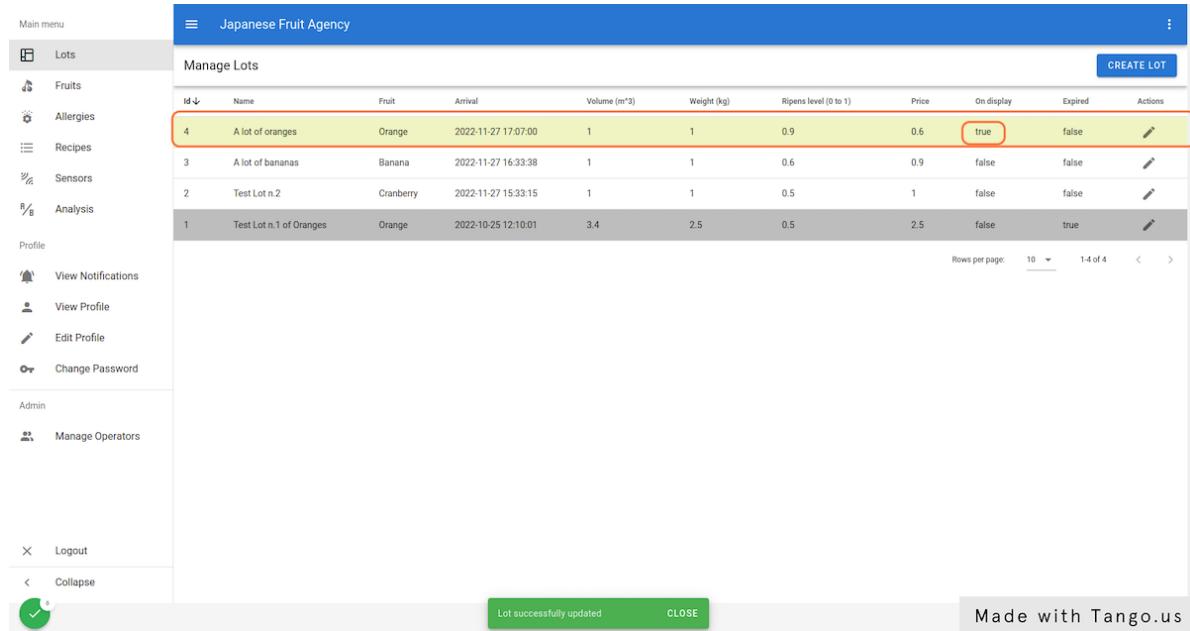
3. Click on PUT ON DISPLAY



4. Return to the Lots page

A screenshot of the Japanese Fruit Agency mobile application. At the top, there is a blue header bar with the text "Japanese Fruit Agency" and a menu icon on the left. Below the header, the main content area has a light gray background. On the left side, there is a vertical navigation menu with several items: "Main menu" (with a house icon), "Lots" (which is highlighted with a red box and has a gray background), "Fruits" (with a fruit icon), "Allergies" (with a gear icon), "Recipes" (with a list icon), "Sensors" (with a sensor icon), "Analysis" (with a graph icon), and "Profile" (with a person icon). On the right side, there is a form titled "Edit Lot". It contains fields for "Id" (with the value "4"), "Name" (with the value "A lot of oranges"), "Fruit id" (with the value "5 - Orange"), and "Arrival" (which is currently empty). At the bottom right of the screen, there is a small gray box containing the text "Made with Tango.us".

5. The lot has been put on display and is visible thanks to the yellow row color in the table



Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

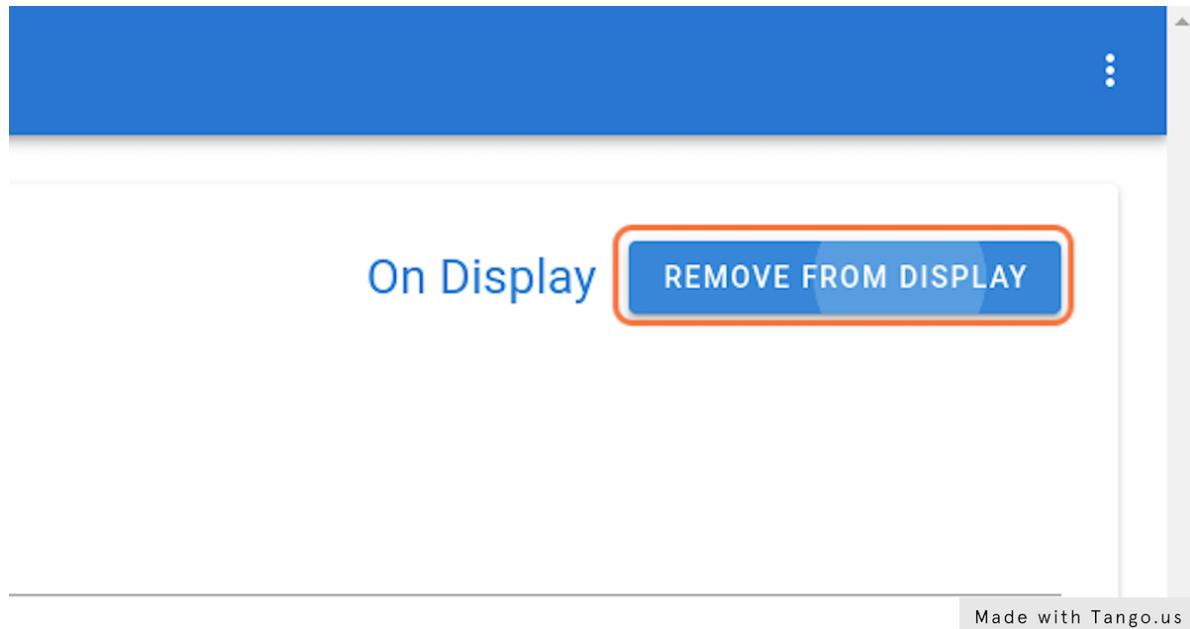
Manage Lots

ID	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.9	0.6	true	false	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

Rows per page: 10 | 1-4 of 4 | < >

Logout | Collapse | Made with Tango.us

6. To remove a lot from display, edit the lot and click on REMOVE FROM DISPLAY



On Display

REMOVE FROM DISPLAY

Made with Tango.us

7. The lot has been removed from display

☰ Japanese Fruit Agency ⋮

Lots

- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications
- View Profile
- Edit Profile
- Change Password

Admin

- Manage Operators

X Logout

< Collapse



Manage Lots										CREATE LOT
ID	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.9	0.6	false	false	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

Rows per page: 10 ⋮ 1-4 of 4 < >

Lot successfully updated [CLOSE](#)

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3.1 Put expired lots on display

1. Go to Lots

The screenshot shows the 'Manage Lots' section of the Japanese Fruit Agency application. On the left is a sidebar with a 'Lots' icon selected. The main area displays a table of lot information with columns: Id, Name, Fruit, Arrival, Volume (m³), Weight (kg), Ripeness level (0 to 1), Price, On display, Expired, and Actions. There are four rows of data:

Id	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripeness level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2022-11-27 17:07:00	1	1	0.9	0.6	false	false	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

At the bottom right of the table are buttons for 'Rows per page' (set to 10), '1-4 of 4', and navigation arrows. The footer of the page says 'Made with Tango.us'.

2. Edit an expired lot

The screenshot shows the same 'Manage Lots' page as above, but with a specific row highlighted. The fourth row, which contains the lot with ID 1 and name 'Test Lot n.1 of Oranges', is highlighted with a gray background. The 'Actions' column for this row contains a pen icon, which is circled in orange to indicate it is the target of the next step. The other three rows are white.

Below the table are pagination controls: 'Rows per page:' set to 10, '1-4 of 4', and navigation arrows. The footer of the page says 'Made with Tango.us'.

3. Click on PUT ON DISPLAY

Main menu

- Lots
 - Fruits
 - Allergies
 - Recipes
 - Sensors
 - Analysis
- Profile
 - View Notifications
 - View Profile
 - Edit Profile
 - Change Password
- Admin
 - Manage Operators

[Logout](#)

[Collapse](#)



Made with [Tango.us](#)

Edit Lot

Not on display [PUT ON DISPLAY](#)

Id	1
Name	Test Lot n.1 of Oranges
Fruit id	5 - Orange
Arrival	10/25/2022, 12:10 PM
Volume (m³)	3.4
Weight (kg)	2.5
Ripens level	0.5
Goes from 0 (unripe) to 1 (rotten)	
Price	2.5
The price will be calculated automatically	
Expired	true

[CANCEL](#) [SAVE](#)

4. An error is raised

Main menu

- Lots
 - Fruits
 - Allergies
 - Recipes
 - Sensors
 - Analysis
- Profile
 - View Notifications
 - View Profile
 - Edit Profile
 - Change Password
- Admin
 - Manage Operators

[Logout](#)

[Collapse](#)



Edit Lot

Not on display [PUT ON DISPLAY](#)

Id	1
Name	Test Lot n.1 of Oranges
Fruit id	5 - Orange
Arrival	10/25/2022, 12:10 PM
Volume (m³)	3.4
Weight (kg)	2.5
Ripens level	0.5
Goes from 0 (unripe) to 1 (rotten)	
Price	2.5
The price will be calculated automatically	
Expired	true

[CANCEL](#) [SAVE](#)

(ex_Oracle-Database-Error) ORA-20042: Cannot put on display an expired lot ORA-06512:
at "DSEXAM CHECK_ON_DISPLAY_ON_EXPIRED_LOT" line 3 ORA-04088: error during
execution of trigger DSEXAM.CHECK_ON_DISPLAY_ON_EXPIRED_LOT"

[CLOSE](#)

Made with [Tango.us](#)

4. Create and edit fruits

1. Go to the Fruits page

The Fruits page is accessible via the side menu

The screenshot shows the Japanese Fruit Agency interface. On the left, there is a vertical 'Main menu' with icons and labels: Lots, Fruits (which is highlighted with a red box), Allergies, Recipes, Sensors, Analysis, Profile, and Admin. The 'Lots' section contains a table with columns: Id, Name, Fruit, and Arrival Date. The table has five rows, with the last row (Id 1, Name: Test Lot n.1 of Oranges, Fruit: Orange, Arrival Date: 2022) highlighted in grey. On the right, the title 'Japanese Fruit Agency' is displayed above a 'Manage Lots' section. At the bottom right of the main content area, it says 'Made with Tango.us'.

2. Click on CREATE FRUIT

The screenshot shows the Japanese Fruit Agency interface. The 'Fruits' section of the main menu is highlighted. The 'Manage Fruits' page is displayed, featuring a table with columns: Id, Name, Peel Type, Size, Maximum stationary time (h), Base price, and Actions. The table lists six fruit entries: Cranberry, Orange, Melon, Apple, Banana, and Pear. A 'CREATE FRUIT' button is located in the top right corner of the table header. At the bottom of the page, there are pagination controls for 'Rows per page' (set to 10), '1-6 of 6', and navigation arrows. The footer of the page also says 'Made with Tango.us'.

3. Compile the required information and click on SAVE

Main menu

- Lots
- Fruits**
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications** (1)
- View Profile**
- Edit Profile
- Change Password

Admin

- Manage Operators

X Logout

< Collapse



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Create Fruit

Id	-
Name	Cherries
Size	MEDIUM
Peel Type	EDIBLE
Maximum stationary time	12
Base price	2
A price multiplier	

CANCEL **SAVE**

4. The fruit has been created and the user is brought back to the Fruits page

Main menu

- Lots
- Fruits**
- Allergies

Manage Fruits

Id	Name	Peel Type	Size	Maximum stationary time (h)	Base price
10	Cherries	EDIBLE	MEDIUM	12	

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5. To edit a fruit, click on the corresponding pencil in the fruits table

CREATE FRUIT

Base price	Actions
2	
1	
1	
1	

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6. Made the wanted changes and click on SAVE.

If the base price of the fruit is editd, the price of any corresponding lot is editd.

The screenshot shows the 'Edit Fruit' form within the Japanese Fruit Agency application. The left sidebar contains a navigation menu with items like Main menu, Lots, Fruits (selected), Allergies, Recipes, Sensors, Analysis, View Notifications (with a green notification badge), View Profile, Edit Profile, Change Password, Logout, and Admin. The main content area is titled 'Edit Fruit' and displays the following fields:

- Id:** 10
- Name:** Cherries
- Size:** MEDIUM
- Peel Type:** EDIBLE
- Maximum stationary time:** 12
- Base price:** 2.5
- A price multiplier:** (empty field)

At the bottom right of the form are two buttons: 'CANCEL' and 'SAVE', with 'SAVE' being highlighted by a red box.

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5. Create and edit allergies

1. Go to the Allergies page

The Allergies page is accessible via the side menu

Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis
- Profile

≡ Japanese Fruit Agency

Manage Fruits

Id ↓	Name	Peel Type
10	Cherries	EDIBLE
6	Cranberry	EDIBLE
5	Orange	NOT EDIBLE
4	Melon	NOT EDIBLE

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2. Click on CREATE ALLERGY

cause this allergy

on

ge

Actions

CREATE ALLERGY

Rows per page: 10 ▾ 1-2 of 2 Made with Tango.us

3. Compile the required information and click on SAVE

The screenshot shows the 'Create Allergy' form. On the left is a sidebar with a 'Main menu' containing links like Lots, Fruits, Allergies (which is selected and highlighted in grey), Recipes, Sensors, Analysis, Profile, Admin, and Logout. The main content area has a blue header 'Japanese Fruit Agency'. The form itself has fields for 'Id' (with a dropdown arrow), 'Name' (containing 'A very nasty allergy'), 'Symptoms' (containing 'Cold, sickness'), and 'Fruits that can cause this allergy' (containing '1 - Pear, 2 - Banana'). At the bottom right are 'CANCEL' and 'SAVE' buttons, with 'SAVE' being highlighted by a red box.

4. The new allergy has been created and the user is brought back on the Allergies page

The screenshot shows the 'Manage Allergies' table. The sidebar on the left is identical to the previous screenshot. The main content area has a blue header 'Japanese Fruit Agency'. The table has columns for 'Id', 'Name', 'Symptoms', and 'Fruits that can cause this allergy'. One row is visible: Id 3, Name 'A very nasty allergy', Symptoms 'Cold, sickness', and Fruits 'Pear, Banana'. A 'Made with Tango.us' watermark is in the bottom right corner.

Id	Name	Symptoms	Fruits that can cause this allergy
3	A very nasty allergy	Cold, sickness	Pear, Banana

5. To edit an allergy, click on the corresponding pencil in the allergy table

The screenshot shows the 'Manage Allergies' table again. The sidebar is the same. The main content area has a blue header 'Japanese Fruit Agency'. The table has columns for 'Id', 'Name', 'Symptoms', 'Fruits that can cause this allergy', and 'Actions'. The 'Actions' column contains icons for edit and delete. The first row (Id 3) has an edit icon highlighted with a red box. A 'CREATE ALLERGY' button is at the top right. A success message 'Allergy successfully created' with a 'CLOSE' button is at the bottom. A 'Made with Tango.us' watermark is in the bottom right corner.

Id	Name	Symptoms	Fruits that can cause this allergy	Actions
3	A very nasty allergy	Cold, sickness	Pear, Banana	
2	Ragweed pollen	lightheadedness	Banana, Melon	
1	Grass pollen	itching or tingling in the mouth	Melon, Orange	

6. edit the information and click SAVE

The screenshot shows a web-based application interface for the Japanese Fruit Agency. On the left, there is a vertical sidebar menu with the following items:

- Main menu
 - Lots
 - Fruits
 - Allergies
 - Recipes
 - Sensors
 - Analysis
- Profile
 - View Notifications (3)
 - View Profile
 - Edit Profile
 - Change Password
- Admin
 - Manage Operators

At the bottom of the sidebar, there are links for Logout and Collapse, along with a user icon.

The main content area is titled "Edit Allergy". It contains the following fields:

- Id**: 3
- Name**: A very nasty allergy
- Symptoms**: Cold, sickness
- Fruits that can cause this allergy**:
1 - Pear, 2 - Banana, 3 - Apple

At the bottom right of the main area are two buttons: "CANCEL" and "SAVE".

In the bottom right corner of the main content area, there is a watermark that says "Made with Tango.us".

6. Create and edit recipes

1. Go to the Recipes page

The Recipes page is accessible via the side menu

The screenshot shows the Japanese Fruit Agency application interface. On the left is a sidebar with various menu items: Lots, Fruits, Allergies, Recipes (which is highlighted with a red box), Sensors, Analysis, and Profile. The main content area is titled "Manage Lots" and displays a table of fruit lots. The columns are Id (down arrow), Name, Fruit, and Arrival Date. There are four entries:

Id ↓	Name	Fruit	Arrival Date
4	A lot of oranges	Orange	2022
3	A lot of bananas	Banana	2022
2	Test Lot n.2	Cranberry	2022
1	Test Lot n.1 of Oranges	Orange	2022

In the bottom right corner of the main area, there is a "Made with Tango.us" watermark.

2. Click on CREATE RECIPE

The screenshot shows the "CREATE RECIPE" page. At the top, there is a blue header bar with a three-dot menu icon on the right. Below the header is a large orange button labeled "CREATE RECIPE". The main content area is a table with two rows of recipe data. The columns are Budget, Fruits used by this recipe, and Actions (with a pencil icon). The first row has a note: "Go to the grocery stores or bakery when you're piled on top. Couldn't be easier!" and a budget of LOW, using Apple and Cranberry. The second row has a note: "Angostura bitters instead and add a" and a budget of MEDIUM, using Pear.

	Budget	Fruits used by this recipe	Actions
Go to the grocery stores or bakery when you're piled on top. Couldn't be easier!	LOW	Apple, Cranberry	
Angostura bitters instead and add a	MEDIUM	Pear	

At the bottom, there are pagination controls: "Rows per page:" (set to 10), a dropdown arrow, "1-2 of 2", and another "Made with Tango.us" watermark.

3. Compile the required information and click on SAVE

The screenshot shows the 'Create Recipe' page of the 'Japanese Fruit Agency' application. On the left is a sidebar with a 'Main menu' containing links like Lots, Fruits, Allergies, Recipes (which is selected and highlighted in grey), Sensors, Analysis, Profile (with notifications), and Admin (Manage Operators). Below the sidebar are 'Logout' and 'Collapse' buttons, along with a user icon.

The main content area has a blue header bar with the title 'Create Recipe'. The form fields include:

- Name:** A new recipe
- Description:** I don't really know any recipe...
- Fruits used by this recipe:** 1 - Pear, 6 - Cranberry

At the bottom right of the form are 'CANCEL' and 'SAVE' buttons, with 'SAVE' being highlighted with a red border.

In the bottom right corner of the page, there is a watermark that says 'Made with Tango.us'.

4. The recipe has been created and the user is brought back to the Recipes page

The screenshot shows the 'Manage Recipes' page of the 'Japanese Fruit Agency' application. The sidebar is identical to the previous screenshot. The main content area has a blue header bar with the title 'Manage Recipes' and a 'CREATE RECIPE' button.

The table displays three rows of recipe data:

ID	Name	Description	Budget	Fruits used by this recipe
3	A new recipe	I don't really know any recipe...	MEDIUM	Pear, Cranberry
2	Apple-Cranberry Crostada	While a good pie crust ought to be a part of every cook's repertoire, sometimes there just isn't the time. But why leave the baking to the grocery stores or bakery when puff pastry is a simple, high-quality stand-in for the original? In this Crostada, the sheet dough is baked free-form with ingredients piled on top. Couldn't be easier!	LOW	Apple, Cranberry
1	Spiced Pear Old-Fashioned	This old-fashioned with rosemary and pear is the perfect fall cocktail. If you can't find cardamom bitters, you can use orange or Angostura bitters instead and add a pinch of ground cardamom.	MEDIUM	Pear

In the bottom right corner of the page, there is a watermark that says 'Made with Tango.us'.

5. To edit a recipe, click on the corresponding pencil in the recipes table

The screenshot shows the 'Manage Recipes' page again, with the sidebar and main content area identical to the previous screenshot. The table displays the same three rows of recipe data.

The 'Actions' column for each row contains a small pencil icon, which is highlighted with a red border in the third row (the 'A new recipe' row).

In the bottom right corner of the page, there is a green success message box that says 'Recipe successfully created' with a 'CLOSE' button, and a watermark that says 'Made with Tango.us'.

6. Made the wanted changes and click on SAVE.

The screenshot shows the Japanese Fruit Agency application interface. On the left, there is a sidebar with the following menu items:

- Main menu
- Lots
- Fruits
- Allergies
- Recipes** (selected)
- Sensors
- Analysis
- Profile
 - View Notifications** (with a green badge showing 3)
 - View Profile**
 - Edit Profile
 - Change Password
- Admin
 - Manage Operators

At the bottom of the sidebar, there are links for Logout and Collapse, along with a user icon.

The main content area is titled "Create Recipe". It contains the following fields:

- Id**: 3
- Name**: A new recipe
- Description**: I don't really know any recipe...But I could try...
- Fruits used by this recipe**: 1 - Pear, 6 - Cranberry, 2 - Banana

At the bottom right of the form are two buttons: **CANCEL** and **SAVE**.

In the bottom right corner of the page, there is a watermark that says "Made with Tango.us".

7. Create and edit sensors

1. Go to the Sensors page

The Sensors page is accessible via the side menu

Manage Lots

Id ↓	Name	Fruit	Arrive
4	A lot of oranges	Orange	2022
3	A lot of bananas	Banana	2022
2	Test Lot n.2	Cranberry	2022
1	Test Lot n.1 of Oranges	Orange	2022

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2. Click on CREATE SENSOR

Cost	Brand	Actions
50		

Rows per page: 10

1-1 of 1

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3. Compile the required information and click on SAVE

The screenshot shows the 'Create Sensor' form. On the left is a sidebar with a 'Sensors' section highlighted. The main form has fields for 'Name' (A very cool and cheap sensor), 'Medium Energy Consumption' (10), 'Cost' (50), 'Brand' (EVIL COMPANY), and 'Size' (MEDIUM). A 'SAVE' button is at the bottom right, which is outlined in red.

Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications (2)
- View Profile
- Edit Profile
- Change Password

Admin

- Manage Operators

Logout

Collapse

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4. The sensors has been created and the user is brought back to the Sensors page

The screenshot shows the 'Manage Sensors' table. It lists one sensor entry: Id 3, Name 'A very cool and cheap sensor', Fruit size 'MEDIUM', Medium Energy Consumption '10', Cost '50', and Brand 'EVIL COMPANY'. A 'Made with Tango.us' watermark is in the bottom right.

Id	Name	Fruit size	Medium Energy Consumption	Cost	Brand
3	A very cool and cheap sensor	MEDIUM	10	50	EVIL COMPANY

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5. To edit a sensor, click on the corresponding pencil in the sensors table

The screenshot shows the 'Manage Sensors' table again. The first row, which contains the sensor details from the previous screenshot, has its 'Actions' column highlighted with a red circle around the edit icon (a pencil icon).

CREATE SENSOR		
Cost	Brand	Actions
50	EVIL COMPANY	
50		

Rows per page: 10 1-2 of 2 < >

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6. Make the wanted changes and click on SAVE.

The screenshot shows the Japanese Fruit Agency application interface. On the left is a sidebar with a 'Main menu' containing links like Lots, Fruits, Allergies, Recipes, Sensors (which is selected and highlighted in grey), Analysis, View Notifications (with a green notification badge), View Profile, Edit Profile, Change Password, Logout, and Manage Operators. Below the sidebar is a user profile section with a green circular profile picture, a collapse arrow, and a 'Logout' link. At the bottom of the sidebar is a footer bar with 'Made with Tango.us'. The main content area is titled 'Edit Sensor' and contains fields for 'Name' (A very cool and cheap sensor), 'Medium Energy Consumption' (10), 'Cost' (50), 'Brand' (GOOD COMPANY), and 'Size' (MEDIUM). At the bottom right of the form are 'CANCEL' and 'SAVE' buttons, with 'SAVE' being highlighted by a red box.

8. Create and edit analysis

1. Go to the Analysis page

The Analysis page is accessible via the side menu

The screenshot shows the mobile application's side menu. At the top, there is a header with a profile picture and the name "Tango". Below the header, the menu items are listed:

- Allergies
- Recipes
- Sensors
- Analysis** (This item is highlighted with an orange rectangle)
- Profile
- View Notifications** (This item has a green notification badge with the number "2")
- View Profile**

On the right side of the menu, there is a table titled "Sensors" with two rows of data:

Id ↓	Name
3	A very cool and cheap sensor
1	GTX42

In the bottom right corner of the menu area, there is a small text "Made with Tango.us".

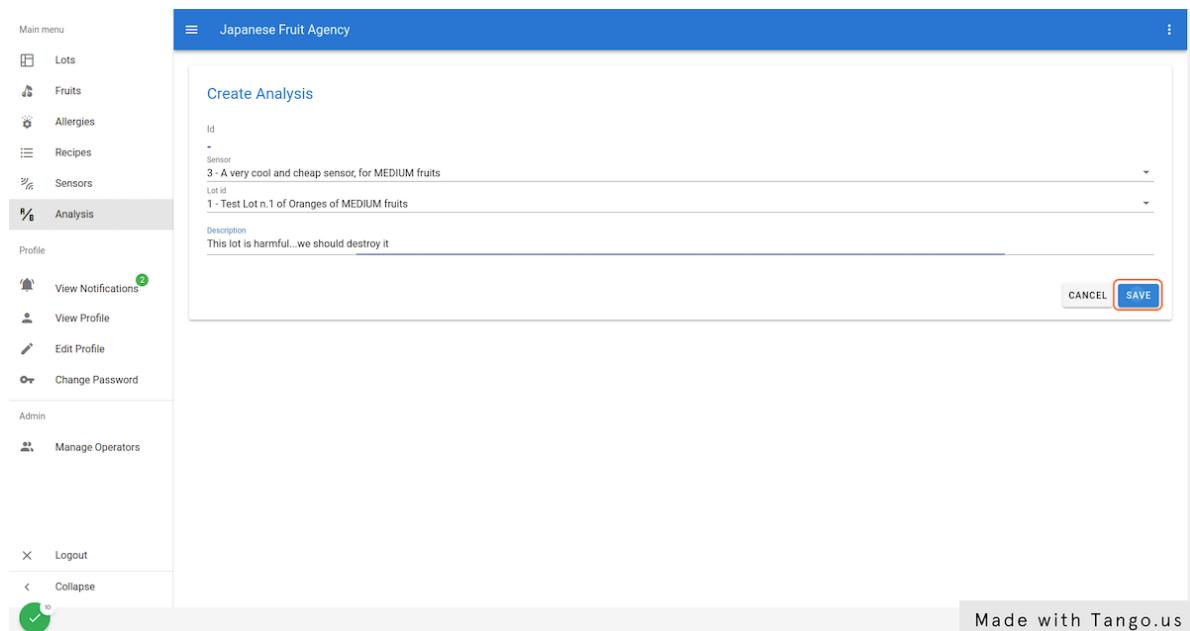
2. Click on CREATE ANALYSIS

The screenshot shows the "Analysis" page. At the top, there is a blue header bar with a "Logout" button on the right. Below the header, there is a large blue button labeled "CREATE ANALYSIS" with an orange border. This button is also highlighted with an orange rectangle.

Below the "CREATE ANALYSIS" button, there is a section titled "Actions" which contains a list of items. At the bottom of the page, there is a pagination control with the text "Rows per page: 10" and arrows for navigating through the data.

In the bottom right corner of the page, there is a small text "Made with Tango.us".

3. Compile the required information and click on SAVE



Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis**

Profile

- View Notifications (2)
- View Profile
- Edit Profile
- Change Password

Admin

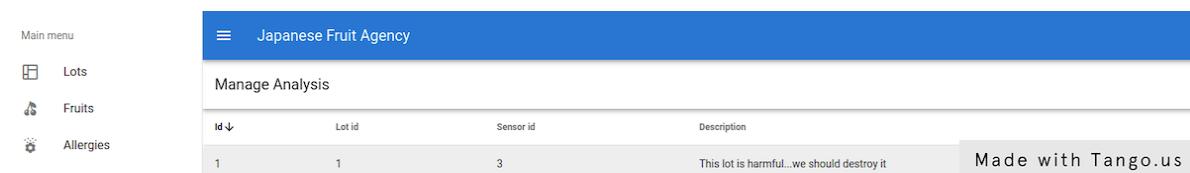
- Manage Operators

X Logout

C Collapse

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4. The analysis has been created and the user is brought back to the Analysis page



Main menu

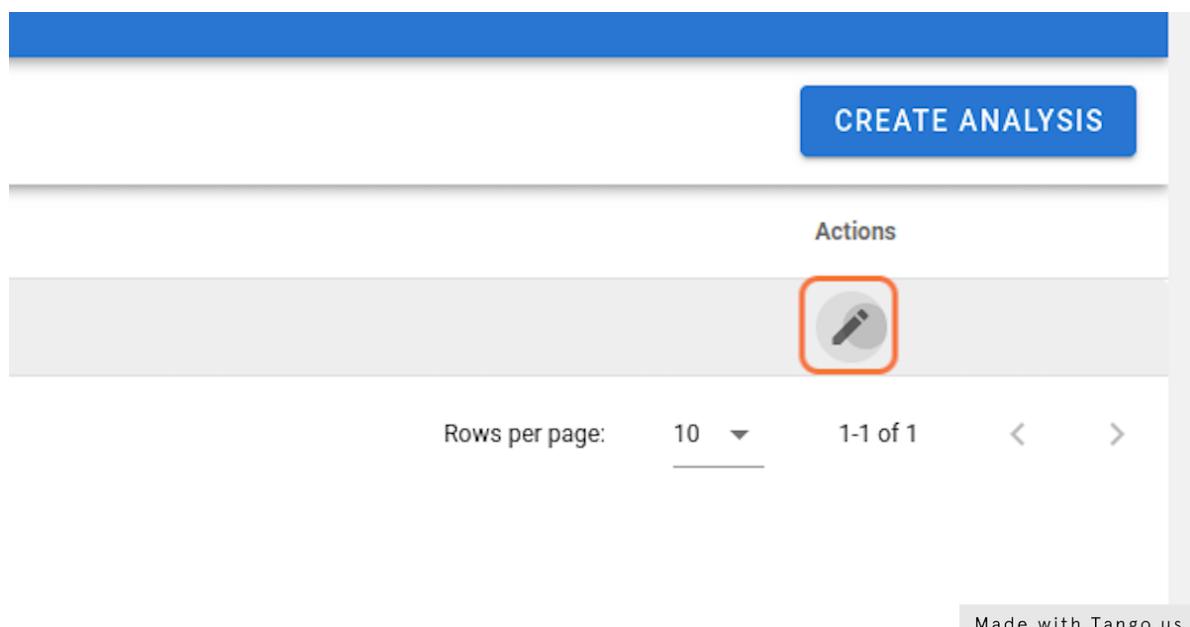
- Lots
- Fruits
- Allergies

Manage Analysis

Id	Lot id	Sensor id	Description
1	1	3	This lot is harmful...we should destroy it

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5. To edit an analysis, click on the corresponding pencil in the sensors table



CREATE ANALYSIS

Actions

Rows per page: 10

1-1 of 1 < >

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6. Made the wanted changes and click on SAVE.

The screenshot shows the Japanese Fruit Agency application interface. On the left, there is a sidebar with the following menu items:

- Main menu
 - Lots
 - Fruits
 - Allergies
 - Recipes
 - Sensors
 - Analysis** (highlighted)
- Profile
 - View Notifications (with a green badge)
 - View Profile
 - Edit Profile
 - Change Password
- Admin
 - Manage Operators

At the bottom of the sidebar are links for Logout and Collapse, along with a user icon.

The main content area is titled "Edit Analysis". It contains the following fields:

- Id**: **1** (Sensor)
- Lot id**: **1 - Test Lot n.1 of Oranges of MEDIUM fruits**
- Description**: **LGTMI! (Definitely not paid to say this :)**

At the bottom right of the form are two buttons: **CANCEL** and **SAVE**, with **SAVE** being highlighted with a red box.

In the bottom right corner of the main content area, there is a watermark that says "Made with Tango.us".

8.1 Add an analysis with sensor and fruit size mismatch

1. Go to Analysis

The screenshot shows a mobile application interface. On the left is a sidebar with the following items:

- Allergies
- Recipes
- Sensors
- Analysis** (This item is highlighted with a red rectangle)
- Profile
- View Notifications** (Has a green badge with the number 2)
- View Profile**

The main content area displays a table of analysis results:

	Name	Fruit	Arrival
4	A lot of oranges	Orange	2022
3	A lot of bananas	Banana	2022
2	Test Lot n.2	Cranberry	2022
1	Test Lot n.1 of Oranges	Orange	2022

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2. Click on CREATE ANALYSIS

The screenshot shows a mobile application interface with a large blue header bar. In the center of the screen is a blue rectangular button with the text "CREATE ANALYSIS" in white. This button is highlighted with a red rectangle. Below the button is a section titled "Actions" with a pencil icon. At the bottom of the screen, there is a navigation bar with the following elements:

- Rows per page: 10
- 1-1 of 1
- < >

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3. Select a sensor and a fruit with different fruit size and click on SAVE

E.g. select a sensor for medium fruits and a lot of small fruits

The screenshot shows the 'Create Analysis' page of the Japanese Fruit Agency. On the left is a sidebar with a 'Main menu' containing links for Lots, Fruits, Allergies, Recipes, Sensors, and Analysis (which is highlighted). Below that are Profile and Admin sections. At the bottom are Logout and Collapse buttons, along with a user icon.

The main content area has a title 'Create Analysis'. It contains fields for 'Id' (set to '3 - A very cool and cheap sensor, for MEDIUM fruits'), 'Sensor' (set to '3 - A very cool and cheap sensor, for MEDIUM fruits'), 'Lot id' (set to '2 - Test Lot n.2 of LITTLE fruits'), and 'Description' (containing the text 'Why the sensor didn't work? Mah...'). At the bottom right are 'CANCEL' and 'SAVE' buttons, with 'SAVE' being highlighted by a red box.

In the bottom right corner of the page, there is a watermark that says 'Made with Tango.us'.

4. An error is raised and the analysis is not added

The screenshot shows the 'Manage Analysis' page of the Japanese Fruit Agency. The sidebar is identical to the previous screenshot, with the 'Analysis' link still highlighted.

The main content area displays a table titled 'Manage Analysis' with columns for Id, Lot id, Sensor id, Description, and Actions. There is one row in the table with values: Id 1, Lot id 1, Sensor id 3, Description 'LGTMI! (Definitely not paid to say this.:))', and Actions showing a pencil icon.

At the bottom of the page, there is a red error message box containing the text '(cx_Oracle.DatabaseError) ORA-20042: Sensor fruit size and fruit size mismatch ORA-06512: at "DSEXAM.CHECK_SENSOR_TYPE", line 10 ORA-04088: error during execution of trigger "DSEXAM.CHECK_SENSOR_TYPE"' and a 'CLOSE' button.

In the bottom right corner of the page, there is a watermark that says 'Made with Tango.us'.

9. Notifications

Description:

When some events occur, notifications are sent to the user.

On the sidebar, a chip shows the number of unread notifications.

The events that cause a notification are:

- the edit of the price of a lot. This happens when its volume or ripens_level changes, or when the base price of its corresponding fruit is edited
- the expiration of 1 ore more lots. This is checked every minute

The screenshot shows the Japanese Fruit Agency application interface. On the left is a sidebar with a main menu and user profile sections. The main content area is titled "Manage Lots" and displays a table of four fruit lots. The table columns include Id, Name, Fruit, Arrival, Volume (m³), Weight (kg), Ripens level (0 to 1), Price, On display, Expired, and Actions. A "CREATE LOT" button is located at the top right of the table. At the bottom right of the content area, there are buttons for "Rows per page" (set to 10), "1-4 of 4", and navigation arrows. The footer of the page says "Made with Tango.us".

ID	Name	Fruit	Arrival	Volume (m³)	Weight (kg)	Ripens level (0 to 1)	Price	On display	Expired	Actions
4	A lot of oranges	Orange	2021-11-27 17:07:00	1	1	0.9	0.6	false	true	
3	A lot of bananas	Banana	2022-11-27 16:33:38	1	1	0.6	0.9	false	false	
2	Test Lot n.2	Cranberry	2022-11-27 15:33:15	1	1	0.5	1	false	false	
1	Test Lot n.1 of Oranges	Orange	2022-10-25 12:10:01	3.4	2.5	0.5	2.5	false	true	

1. Click on View Notifications

The screenshot shows a sidebar with icons for Sensors, Analysis, and Profile. Below the sidebar is a table of fruit lots. The 'View Notifications' button in the sidebar has a green notification badge with the number '1'.

3	A lot of bananas	Banana	2022
2	Test Lot n.2	Cranberry	2022
1	Test Lot n.1 of Oranges	Orange	2022

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2. The list of notification is showed to the user. All the notifications are marked as read and the chip disappears.

The screenshot shows the 'Read Notifications' section. The sidebar highlights the 'View Notifications' option. The main area displays a table of notifications with columns for ID, Trigger name, Description, and Timestamp.

ID	Trigger name	Description	Timestamp
10	CHECK_AND_UPDATE_LOT_EXPIRATION	1 lots have expired.	2022-11-27T17:15:14
9	UPDATE_LOT_PRICE_ON_BASE_PRICE_CHANGE	Updated all prices for lots of Cherries	2022-11-27T16:41:26
8	UPDATE_LOT_PRICE_ON_BASE_PRICE_CHANGE	Updated all prices for lots of Cherries	2022-11-27T16:38:07
7	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot A lot of oranges new price .6	2022-11-27T16:07:23
6	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot A lot of oranges new price 1	2022-11-27T16:07:11
5	CHECK_AND_UPDATE_LOT_EXPIRATION	1 lots have expired.	2022-11-27T15:34:14
4	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot A lot of bananas new price .9	2022-11-27T15:34:02
3	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot A lot of bananas new price 1	2022-11-27T15:33:50
2	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot Test Lot n.2 new price 2.5	2022-11-27T15:33:15
1	UPDATE_LOT_PRICE	Run trigger UPDATE_LOT_PRICE on lot Test Lot n.1 of Oranges new price 2.5	2022-11-27T15:33:15

Rows per page: 10 1-10 of 10 Made with Tango.us

10. User operations

Description:

There are other sections where users can view or edit information about their profile:

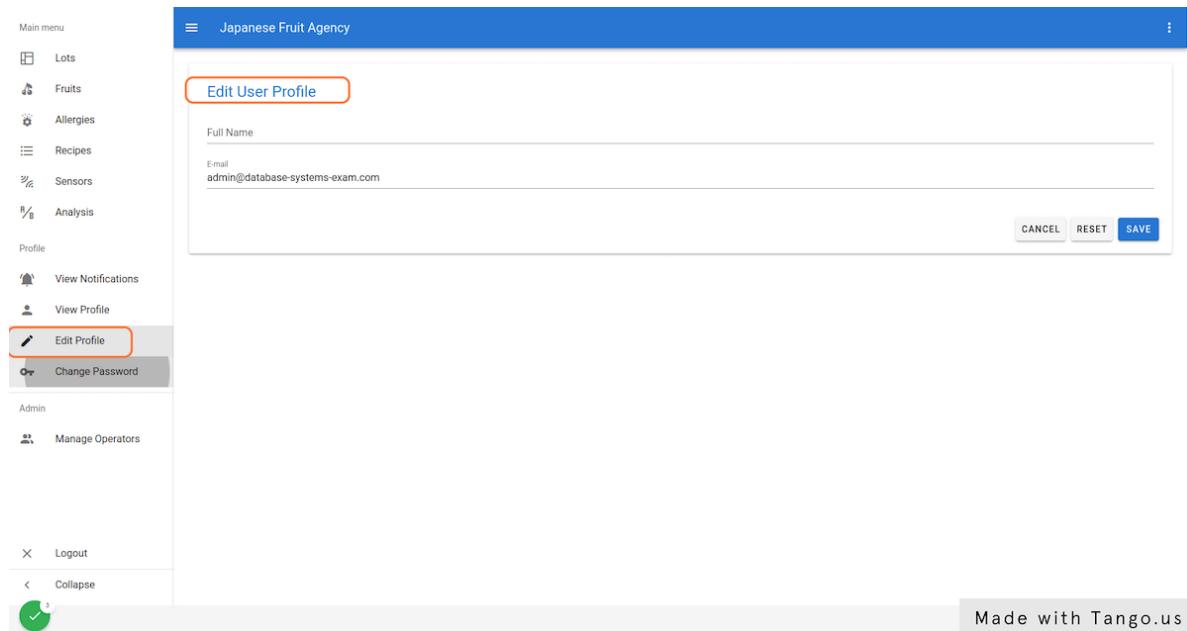
- view profile
- edit profile
- change password

Only superusers can view the Manage Operators section, where they can create or edit other profiles

1. Click on View Profile

The screenshot shows the Japanese Fruit Agency application. At the top, there is a blue header bar with the title "Japanese Fruit Agency". Below the header is a sidebar menu titled "Main menu". The sidebar includes links for Lots, Fruits, Allergies, Recipes, Sensors, Analysis, View Notifications, View Profile (which is highlighted with a red border), Edit Profile, and Change Password. Under the "Admin" section, there is a link for Manage Operators. At the bottom of the sidebar are Logout and Collapse buttons, along with a user icon. The main content area displays a "User Profile" section with fields for Full Name (redacted) and Email (admin@database-systems-exam.com). Below these fields are "EDIT" and "CHANGE PASSWORD" buttons. The footer of the application says "Made with Tango.us".

2. Click on Edit Profile



Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications
- View Profile
- Edit Profile**
- Change Password**

Admin

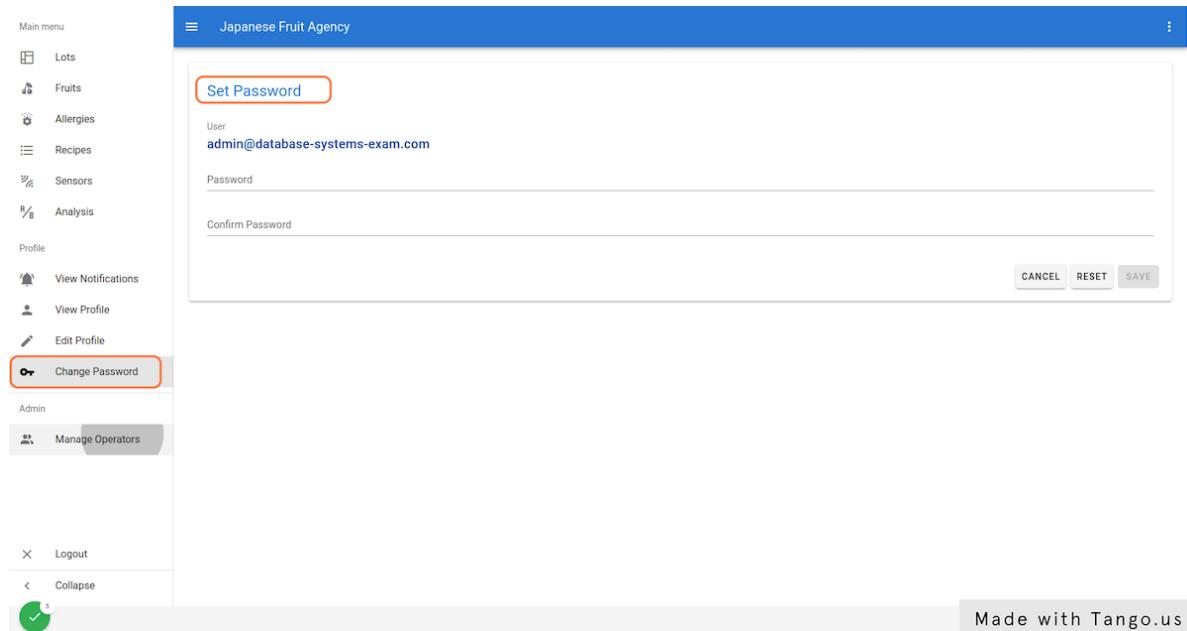
- Manage Operators

X Logout

Collapse

Made with Tango.us

3. Click on Change Password



Main menu

- Lots
- Fruits
- Allergies
- Recipes
- Sensors
- Analysis

Profile

- View Notifications
- View Profile
- Edit Profile
- Change Password**

Admin

- Manage Operators

X Logout

Collapse

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4. Click on Manage Operators

Main menu

- [Lots](#)
- [Fruits](#)
- [Allergies](#)
- [Recipes](#)
- [Sensors](#)
- [Analysis](#)

Profile

- [View Notifications](#)
- [View Profile](#)
- [Edit Profile](#)
- [Change Password](#)

Admin

- [Manage Operators](#)

Japanese Fruit Agency

Manage Operators

CREATE OPERATOR

Name	Email	Full Name	Is Active	Is Superuser	Actions
admin@database-systems-exam.com			✓	✓	

Rows per page: 10 < 1-1 of 1 >

X Logout

< Collapse



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