**Mini-restaurant Management System
Use-Case Diagram and Specification**

Version 1.0

Revision History

Date	Version	Description	Author
13/03/2017	1.0	Cover basic use-cases	Nguyễn Toàn Anh

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2.1   Use-case: Add a new dish

Use case Name	Add a new dish
Brief description	This use case describes how an Executive User can add a new dish to the list of available dishes of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Add dish" from the dish management screen. 2. System displays the dish input form. 3. Executive User inputs all required information of the new dish. 4. Executive User clicks "Add" at the bottom of the input form. 5. The new dish is added to the system.

Alternative Flows	**2a: Lose network connection**
	   1. Prompt Executive User to check the network connection.
	   2. Go back to the beginning of step #1 (dish management screen).
	3a: Executive User incorrectly inputs the required information
	   1. Prompt Executive User to check the inputted information.
	3b: Executive User clicks "Cancel"
	   1. Go back to the dish management screen.
	4a: Executive User clicks "Cancel"
	   1. Warn the user that all inputted information will be lost.
	   2. Go back to the dish management screen if Executive User agrees to cancel.
	   3. Go back to the end of step #3 if Executive User refuses to cancel.
	5a: Lose network connection
	   1. Prompt Executive User to check the network connection.
	   2. Go back to the end of step #3.

Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	A new dish is successfully inserted to the system.

2.2   Use-case: Search for a dish

Use case Name	Search for a dish
Brief description	This use case describes how an Executive User can search for a dish to the list of available dishes of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User types in the search box on the dish management screen. 2. Executive User presses "Enter" or clicks "Search". 3. The system searches for items that matches the query. 4. The system displays search results to Executive User.

Alternative Flows	**2a: Lose network connection**
	   1. Prompt Executive User to check the network connection.
	   2. Go back to the end of step #1.
	3a: The system fails to find any items
	   1. Notify Executive User that the system fails to find dishes queried.

Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	Executive User is returned a list of relevant dishes.

2.3 Use-case: Update a dish

Use case Name	Update a dish
Brief description	This use case describes how an Executive User can update a dish to the list of available dishes of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Update" on a dish in the list of dishes. 2. System displays the dish update form with current information. 3. Executive User updates information of the dish. 4. Executive User clicks "Done" at the bottom of the input form. 5. The selected dish's information is updated.

Alternative Flows	**2a: Lose network connection**
	  1. Prompt Executive User to check the network connection.
	  2. Retry step #2.
	3a: Executive User incorrectly inputs information
	  2. Prompt Executive User to check the inputted information.
	3b: Executive User clicks "Cancel"
	  2. Go back to the dish management screen.
	4a: Executive User clicks "Cancel"
	  4. Warn the user that all inputted information will be lost.
	  5. Go back to the dish management screen if Executive User agrees to cancel.
	  6. Go back to the end of step #3 if Executive User refuses to cancel.
	5a: Lose network connection
	  3. Prompt Executive User to check the network connection.
	  4. Go back to the end of step #3.

Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	The selected dish's information is successfully updated in the system.

2.4 Use-case: Delete a dish

Use case Name	Delete a dish
Brief description	This use case describes how an Executive User can delete a dish from the list of available dishes of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Delete" on a dish in the list of dishes. 2. System warn user of the action. 3. Executive User confirms the deletion. 4. The dish is removed from the system.
Alternative Flows	**4a: Lose network connection** 1. Prompt Executive User to check the network connection.

	2. Go back to the dish management screen.
	3b: Executive User clicks "Cancel"
	1. Go back to the dish management screen.
Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	The selected dish is successfully deleted from the system.

2.5 Use-case: Add a new ingredient

Use case Name	Add a new ingredient
Brief description	This use case describes how an Executive User can add a new ingredient to the list of available ingredients of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Add ingredient" from the ingredient management screen. 2. System displays the ingredient input form. 3. Executive User inputs all required information of the new ingredient. 4. Executive User clicks "Add" at the bottom of the input form. 5. The new ingredient is added to the system.
Alternative Flows	**2a: Lose network connection** 1. Prompt Executive User to check the network connection. 2. Retry step #2. **3a: Executive User incorrectly inputs the required information** 1. Prompt Executive User to check the inputted information. **3b: Executive User clicks "Cancel"** 1. Go back to the ingredient management screen. **4a: Executive User clicks "Cancel"** 1. Warn the user that all inputted information will be lost. 2. Go back to the ingredient management screen if Executive User agrees to cancel. 3. Go back to the end of step #3 if Executive User refuses to cancel. **5a: Lose network connection** 1. Prompt Executive User to check the network connection. 2. Go back to the end of step #3.
Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	A new ingredient is successfully inserted to the system.

2.6 Use-case: Search for an ingredient

Use case Name	Search for an ingredient
Brief description	This use case describes how an Executive User can search for an ingredient to the list of available ingredients of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User types in the search box on the ingredient management screen. 2. Executive User presses "Enter" or clicks "Search".

	3. The system searches for items that matches the query.
	4. The system displays search results to Executive User.
Alternative Flows	**2a: Lose network connection** 1. Prompt Executive User to check the network connection. 2. Go back to the end of step #1. **3a: The system fails to find any items** 1. Notify Executive User that the system fails to find ingredients queried.
Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	Executive User is returned a list of relevant ingredients.

2.7   Use-case: Update an ingredient

Use case Name	Update an ingredient
Brief description	This use case describes how an Executive User can update an ingredient to the list of available ingredients of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Update" on an ingredient in the list of ingredients. 2. System displays the ingredient update form with current information. 3. Executive User updates information of the ingredient. 4. Executive User clicks "Done" at the bottom of the input form. 5. The selected ingredient's information is updated.
Alternative Flows	**2a: Lose network connection** 1. Prompt Executive User to check the network connection. 2. Retry step #2. **3a: Executive User incorrectly inputs information** 1. Prompt Executive User to check the inputted information. **3b: Executive User clicks "Cancel"** 1. Go back to the ingredient management screen. **4a: Executive User clicks "Cancel"** 1. Warn the user that all inputted information will be lost. 2. Go back to the ingredient management screen if Executive User agrees to cancel. 3. Go back to the end of step #3 if Executive User refuses to cancel. **5a: Lose network connection** 1. Prompt Executive User to check the network connection. 2. Go back to the end of step #3.
Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	The selected ingredient's information is successfully updated in the system.

2.8   Use-case: Delete an ingredient

Use case Name	Delete an ingredient
Brief description	This use case describes how an Executive User can delete an ingredient from the

	list of available ingredients of the restaurant.
Actors	Executive Users (i.e. the Owner of the restaurant and the Chef de Cuisine)
Basic Flow	1. Executive User clicks "Delete" on an ingredient in the list of ingredients. 2. System warn user of the action. 3. Executive User confirms the deletion. 4. The ingredient is removed from the system.
Alternative Flows	**3b: Executive User clicks "Cancel"** 1. Go back to the ingredient management screen. **4a: Lose network connection** 2. Prompt Executive User to check the network connection. 3. Go back to the ingredient management screen.
Pre-conditions	Executive User successfully logged in to the system. Network connection is available.
Post-conditions	The selected ingredient is successfully deleted from the system.

2.9   Use-case: Update a dish's availability

Use case Name	Update a dish's availability
Brief description	This use case describes how a Chef can update a dish's availability.
Actors	Chef (including Executive Chef)
Basic Flow	1. Chef clicks on "Dishes" tab. 2. Chef clicks on the check box next to a dish indicating its availability. 3. The system updates the dish's availability.
Alternative Flows	**2a: Lose network connection** 1. Prompt Chef to check the network connection. 2. Go back to the end of step #1.
Pre-conditions	Chef successfully logged in to the system. Network connection is available.
Post-conditions	The selected dish's availability is successfully updated.

2.10   Use-case: Update an ingredient's amount

Use case Name	Update an ingredient's amount
Brief description	This use case describes how a Chef can update an ingredient's amount.
Actors	Chef (including Executive Chef)
Basic Flow	1. Chef clicks on "Ingredients" tab. 2. Chef clicks on an ingredient in the list of ingredients. 3. Chef chooses the remaining amount of the selected ingredient. 4. Chef clicks "Update". 5. The system update the amount of the selected ingredient accordingly.
Alternative Flows	**4a: Lose network connection** 1. Prompt Chef to check the network connection. 2. Go back to the end of step #3.
Pre-conditions	Chef successfully logged in to the system. Network connection is available.

Post-conditions	The selected ingredient's amount is successfully updated.

2.11   Use-case: Notify that a dish is done

Use case Name	Notify that a dish is done
Brief description	This use case describes how a Chef can notify a Waiter that an ordered dish has been done.
Actors	Chef (including Executive Chef) Waiter
Basic Flow	1. Chef finishes an ordered dish. 2. Chef clicks on "Orders" tab. 3. Chef marks that dish in the list of dishes to be made as "Done". 4. The system notifies all Waiters who are not taking orders (i.e. not opening the order screen). 5. Waiter receives notification. 6. The app asks Waiter if he/she will be going to deliver the dish 7. Waiter choose "Yes", app marks dish as "Delivered". 8. Waiter delivers dish to Customer.
Alternative Flows	**3a: Lose network connection** 1. Prompt Chef to check the network connection. 2. Go back to the end of step #2. **7a: Waiter chooses "Yes" but the dish was marked "Delivered"** 1. Tell Waiter that another Waiter chose to deliver the dish already. **7b: Waiter chooses "No"** 1. Notify all Waiter again if absolutely no Waiter wants to deliver the dish.
Pre-conditions	An ordered dish has been done. Chef and Waiter successfully logged in to the system. Network connection is available.
Post-conditions	All Waiters are notified that there is a dish that can be delivered to a customer.

2.12   Use-case: Record an order

Use case Name	Record order
Brief description	This use case describes how a Waiter can record a Customer's order.
Actors	Waiter Chef (including Executive Chef)
Basic Flow	1. Waiter clicks "New order". 2. Waiter types in the table number. 3. For each ordered dish, Waiter clicks on the corresponding dish in the list of available dishes. 4. For each chosen dish, Waiter enters serving number and note as needed. 5. Waiter reads order to customer to confirm. 6. Waiter clicks "Confirm". 7. The order is automatically send to the kitchen. 8. The system notify Chefs of the incoming order .

Alternative Flows	**3a: The chosen dish has been marked "Unavailable" recently.** 　　1.　Waiter tells Customer of the unavailability of the dish and prompts Customer to choose another dish. **5a: Customer changes order** 　　1.　Go back to step #3. **6a: Lose network connection** 　　1.　Prompt Waiter to check the network connection. 　　2.　Go back to the end of step #5.
Pre-conditions	Chef and Waiter successfully logged in to the system. Network connection is available.
Post-conditions	The order is sent to the kitchen and Chefs are notified.

2.13　Use-case: Export the bill

Use case Name	Export the bill
Brief description	This use case describes how a Waiter can export the bill for a Customer.
Actors	Waiter
Basic Flow	1.　Waiter clicks "Orders". 　2.　Waiter clicks "Export bill" on the order item in the list of order, with orders identifiable through table number. 　3.　The system export the bill. 　4.　Waiter shows Customer the bill on a device and asks if Customer wants the bill printed. 　5.　Waiter clicks "Print". 　6.　Waiter gets the printed bill and hands the bill to Customer.
Alternative Flows	**5: Customer does not want bill to be printed.** 　　1.　End use-case.
Pre-conditions	Waiter successfully logged in to the system. Network connection is available.
Post-conditions	The bill of the order is exported.