Functional Design

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Version:	v0.01

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Version history

Version	Date	Author(s)	Changes
v0.01	1-9-2021 10:50	Jurgen Kalkers, Remco van Swaemen, Mathijs Jansen, Teun van Brakel, Wesley Arends	

Crew

Jurgen Kalkers:

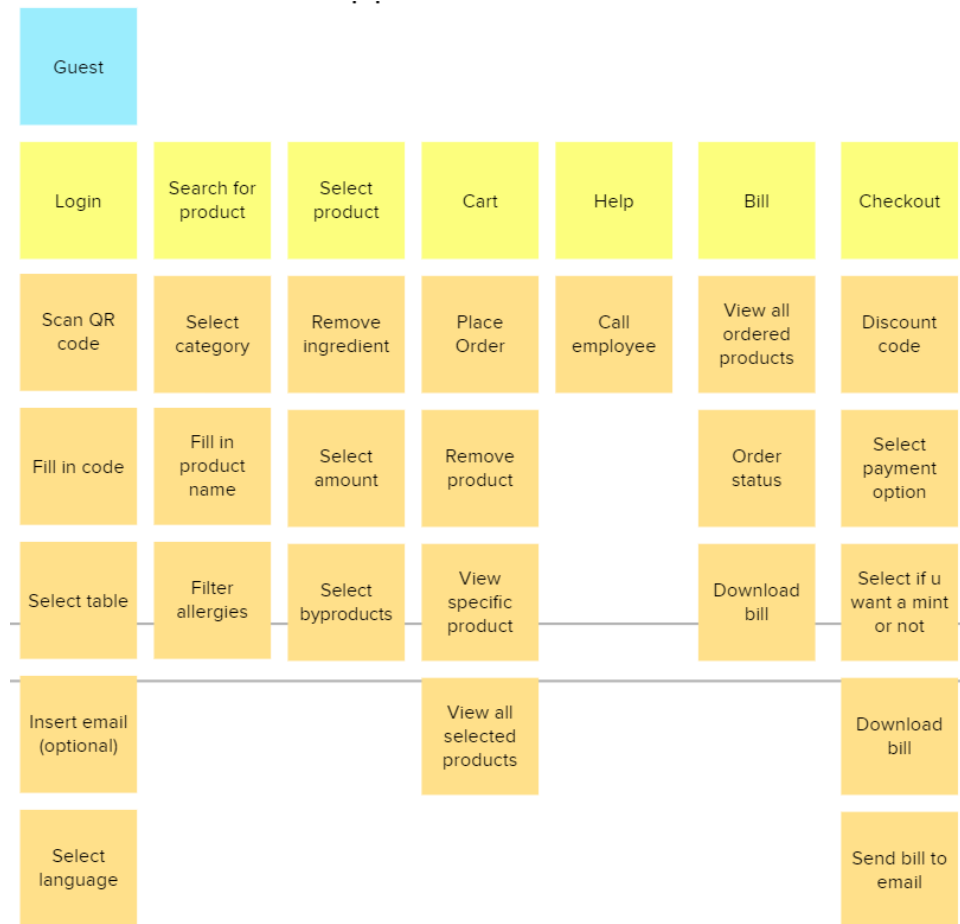**Remco van Swaemen**

Teun van Brakel

Wesley Arends

Mathijs Jansen

Requirements Guest app

Guest						
Login	Search for product	Select product	Cart	Help	Bill	Checkout
Scan QR code	Select category	Remove ingredient	Place Order	Call employee	View all ordered products	Discount code
Fill in code	Fill in product name	Select amount	Remove product		Order status	Select payment option
Select table	Filter allergies	Select byproducts	View specific product		Download bill	Select if u want a mint or not
Insert email (optional)			View all selected products			Download bill
Select language						Send bill to email

Login

        R 01. Guest can scan the QR code to start placing their order (they go to the website with the correct table when scanning the code).

        R 02. Guest can register table number. (As backup for QR-code, with optional access code)

        R 03. Guest can select language.

Search for product

        R 04. Guest filter by the category of food they need.

        R 05. Guest can search by product name.

        R 06. Guest can filter allergies.

Select product

        R 07. Guest can remove ingredients from a selected product. (At first this can be done as a message to the order, later as a selection menu.)

        R 08. Guest can select the number of products they need.

            Q 01 A number can be increased and decreased by 2 buttons.

            C 01 **The limit is defined by the stakeholder.**

        R 09. Guest can select the byproducts by the selected product.

        R 10. Guest can add a note to a product, before going to order (remove certain ingredients).

Cart (Order)

R 11. Guest can place an order for selected products.
  Q 01   After an order is placed the cart will be reset.
  Q 02   If order is empty, order cannot be placed.
R 12. Guest can view all the products that are in their order.
  Q 01   The guest can view the total cost of the order by a sum of all product prices.
  Q 02   The guest can view the total cost of each product by a multiply of product price and product quantity.
R 13. Guest can remove products from their order (before confirming).
  Q 01   The product quantity will be set to 0.
R 14. Guest can view a product for specific details (Ingredients etc.).

Help

R 15. Guest can call an employee when he has a problem.
R 16. Guest can say that they want their next dish.

Bill

R 17. Guest can view all his/her ordered products.
R 18. Guest can view their order status.
R 19. Guest can download their bill.
R 20. Guest can add an extra tip to their order.

Checkout

R 21. Guest can use discount code.
R 22. Guest can select payment options.
R 23. Guest can select the option to have their bill sent to their email.
R 24. Guest can leave a review after checkout (if they want).

Additional

Select product

R 25. Guest can view all products on the menu.
  Q 01   Products are sorted by suitable category.

MoSCoW

Must	Should	Could	Would
1	2	3	
8	4	7	
11	5	9	
12	6	20	
13	10	21	
15	14	23	
17	16	24	
25	18		
	19		
	22		

Use Cases

UC-1 View/Select Products

Name	UC01 View/Select Products
Requirements	**R-8, R-25**
Summary	Guest wants to view which product are available and select them.
Actors	Guest
Assumptions	Actor has confirmed their table number.
Scenario	1. Actor opens the menu view of the application 2. The system shows a list of available products. 3. Actor selects a specific product. 4. System shows detailed information about the product.
Exception	Step 2: When there is no list of products that can be retrieved the application shows an error message to inform the user something has gone wrong. Go back to step 1
Result	Guest has seen an overview of products with their details.

UC-2 Order Products.

Name	UC02: Order products
Requirements	R-8, R-11, R-12, R-13
Summary	Guest wants to order one or multiple products.
Actors	Guest
Assumptions	Actor has confirmed their table number and has the menu page open.
Scenario	1. The actor selects one or multiple products. 2. System will add the selected item(s) to the order. 3. The actor wants to order the selected products. 4. System shows the selected products. 5. The actor orders the selected products in list. 6. System redirects order history page.

Exception	4a. When there is an unwanted product in the order list
	    a. The actor removes unwanted product.
	    b. System removes unwanted product from list.
	    c. Return to step 4.

Result	The order has been placed with all the selected items.

Name	UC03: Register a table
Requirements	R-1, R-2
Summary	Guests wants to check in a table.
Actors	Guest
Assumptions	Actor is inside the restaurant and on the website.
Scenario	1. The actor selects to scan QR code. 2. System opens the webcam. 3. The actor scans the QR code. 4. System registered table. 5. System redirected to menu page.

Exception	3a. When QR code failed to recognize.
	    a. The actor selects the correct table out the list of tables.
	    b. Return to step 4.

Result	The actor has the table registered and can start placing orders.

Name	UC04: View orders
Requirements	R-17
Summary	Guests wants to check in a table.
Actors	Guest
Assumptions	Actoris registered at a table and ordered.
Scenario	1. Actor opens ordered product view. 2. The system shows list with orders. 3. Actor select specific order. 4. The system shows details of order.
Exception	2a. There are no orders placed 1. System shows a message that there are no orders placed.
Result	The actor has the table registered and can start placing orders.

Test-Cases

Test case	Use case(s)	Input	Expected output

TC01	UC01	Description: "Select a product from products" Products:
		− "Cola"
		− "Fanta"
		− "Sprite"
		Selected Product:
		− "Fanta"
			Menu:
			    Products:
			      − "Cola"
			      − "Fanta"
			      − "Sprite"
			Order:
			    Products:
			      − "Fanta"

TC02	UC01	Description: "View empty list of products" Products: ""	System:
			    Message:
			    "Error file not found."

TC03	UC02	Description: "Order selected product" Table number: "1" Selected product: "Fanta"	Send Order:
			    Products:
			      − "Fanta"

TC04	UC02	Description: "Order null products" Table number: "1" Selected product: ""	System:
			    Message:
			    "Please select a product."

TC05	UC02	Description: "Order products without table number" Table number: "" Selected product: "Fanta"	System:
			    Message:
			    "Please select a table."

TC06	UC03	Description: "Scan false QR code" QR code url: "{url}/table/unvalidcode"	System: Message: "QR code kan niet herkend worden"
TC07	UC03	Description: "Scan correct QR code" QR code url: "{url}/tablevalidator/tableId"	System: Redirect actor to menu page.
TC08	UC04	Description: "View orders without orders" Orders: none	System: Message: "Er zijn nog geen orders geplaatst"