Functional Viewpoint

August 23, 2023

1 Customer Client

1.1 Interfaces

- **Basket GUI**: display items in current order.

  - **Type:** GUI
  - **Input:** Click event & AuthToken.
  - **Pre-condition:** AuthToken != None.
  - **Output:** Json of items in order.
  - **Post-condition:** Json format.

- **Add Item GUI**: add item to current order.

  - **Type:** GUI
  - **Input:** Click event & AuthToken & item-dto.
  - **Pre-condition:** AuthToken != None & item-dto != None
  - **Output:** add-flag.
  - **Post-condition:** add-flag! == None & add-flag.type == boolean.

- **Remove Item GUI**: remove item in current order.

  - **Type:** GUI.
  - **Input:** Click event & AuthToken & item-id.
  - **Pre-condition:** AuthToken != None & item-id != None & item-id.type == integer.
  - **Output:** item-id of deleted item & delete-flag.
  - **Post-condition:** delete-flag != None & delete-flag.type == boolean.

- **Checkout GUI**: 1st stage to checkout order with items in current order.

  - **Type:** GUI.
  - **Input:** Click event & AuthToken & [json]item-list.
  - **Pre-condition:** AuthToken != None & [json]item-list.length $\geq$ 1.
  - **Output:** [json]order-dto.
  - **Post-condition:** [json]order-dto.item-list.length $\geq$ 1.

- **Delivery GUI**: 2nd stage to input delivery date & location.

  - **Type:** GUI.
  - **Input:** Click event & [json]delivery-dto.
  - **Pre-condition:** [json]delivery-dto != None.
  - **Output:** validation-flag.
  - **Post-condition:** validation-flag != None.

- **Order confirmation GUI**: 3rd stage to submit order.

  - **Type:** GUI.
  - **Input:** Click event & [json]order-dto{item-list, delivery-dto}.
  - **Pre-condition:** [json]order-dto{item-list, delivery-dto} != None.
  - **Output:** validation-flag.
  - **Post-condition:** validation-flag != None.

- **Order Cancel GUI**: canel an order.

  - **Type:** GUI.
  - **Input:** Click event & [int]order-id & AuthToken.
  - **Pre-condition:** [int]order-id != None.
  - **Output:** validation-flag.
  - **Post-condition:** validation-flag != None.

2   Staff Client

2.1   Interfaces

- **Order display GUI**: display items in current order.

  - **Type:** GUI
  - **Input:** AdminAuthToken.
  - **Pre-condition:** AdminAuthToken != None.
  - **Output:** Json list of all orders.
  - **Post-condition:** Json format.

- **Order remove GUI**: remove an order.

  - **Type:** GUI
  - **Input:** AdminAuthToken.
  - **Pre-condition:** AdminAuthToken != None.
  - **Output:** validation-flag.
  - **Post-condition:** validation-flag != None.

3   Server

3.1   Interfaces

- **Basket retrieve API**: retrieve items from a user' s basket.

  - **Type:** GET:HTTP
  - **Input:** AuthToken.
  - **Pre-condition:** AuthToken != None.
  - **Output:** [json] list of items in user' s order.
  - **Post-condition:** True.

- **Basket item remove API**: delete an item from a user' s basket.

  - **Type:** DELETE:HTTP
  - **Input:** AuthToken & item-id.

- **Pre-condition:** AuthToken != None & item-id in DB & item-id in order.
- **Output:** [boolean] validation-flag.
- **Post-condition:** [boolean] validation-flag != None

- **Basket item remove API**: delete an item from a user' s basket.

  - **Type:** DELETE:HTTP
  - **Input:** AuthToken & item-id.
  - **Pre-condition:** AuthToken != None & item-id in DB & item-id in order.
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean] validation-flag != None

- **Basket item addition API**: add an item from a user' s basket.

  - **Type:** POST:HTTP
  - **Input:** AuthToken & item-id & item-dto$\{quantity, id, customizations\}$.
  - **Pre-condition:** AuthToken != None & item-id in DB & item-id in order & item-dto$\{quantity, id, customization$
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean] validation-flag != None

- **Order item validation API**: validate the order quantity & type.

  - **Type:** POST:HTTP
  - **Input:** AuthToken & item-list$\{item : \{quantity, type\}\}$.
  - **Pre-condition:** AuthToken != None & item-list.length ¿ 0.
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean] validation-flag != None

- **Order item validation API**: validate the order quantity & type.

  - **Type:** POST:HTTP
  - **Input:** AuthToken & item-list$\{item : \{quantity, type\}\}$.
  - **Pre-condition:** AuthToken != None & item-list.length ¿ 0.
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean] validation-flag != None

- **Latest arrival date API**: calculate the latest delivery date.

  - **Type:** GET:HTTP
  - **Input:** AuthToken.
  - **Pre-condition:** AuthToken != None.
  - **Output:** [json] arrivalDate$\{day.month.year\}$.
  - **Post-condition:** [json] arrivalDate$\{day.month.year\}$!= None

- **Latest arrival date API**: calculate the latest delivery date.

  - **Type:** GET:HTTP
  - **Input:** AuthToken.
  - **Pre-condition:** AuthToken != None.
  - **Output:** [json] arrivalDate$\{day.month.year\}$.
  - **Post-condition:** [json] arrivalDate$\{day.month.year\}$!= None

- **Location validation API**: validate delivery location.

- **Type:** POST:HTTP
- **Input:** AuthToken & location-dto{*ward.district.road*}.
- **Pre-condition:** AuthToken != None & location-dto{*ward.district.road*} != None.
- **Output:** [boolean] validation-flag.
- **Post-condition:** [boolean]validation-flag != None

- **Order create API**: create an order.

  - **Type:** POST:HTTP
  - **Input:** AuthToken & [json]order-dto{item-list, delivery-dto}.
  - **Pre-condition:** AuthToken != None & [json]order-dto{item-list, delivery-dto} != None.
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean]validation-flag != None

- **Order cancel API**: create an order.

  - **Type:** POST:HTTP
  - **Input:** AuthToken & [json]order-date & order-id.
  - **Pre-condition:** AuthToken != None & order-date ¡ 24h & order-id exist.
  - **Output:** [boolean] validation-flag.
  - **Post-condition:** [boolean]validation-flag != None

- **Order update API**: update an item in an order.

  - **Type:** PUT:HTTP
  - **Input:** AuthToken & [json]order-item{*quantity*}.
  - **Pre-condition:** AuthToken != None & [json]order-item.quantity != 0.
  - **Output:** [boolean] validation-flag & [json]order-item.
  - **Post-condition:** [boolean]validation-flag != None & [json]order-item != None

- **Order list API**: list all order in batches.

  - **Type:** GET:HTTP
  - **Input:** AdminAuthToken & [int]batch-quantity.
  - **Pre-condition:** AdminAuthToken != None & [int]batch-quantity != 0.
  - **Output:** [json]orders.
  - **Post-condition:** [json]orders != None

- **Order remove API**: list all order in batches.

  - **Type:** DELETE:HTTP
  - **Input:** AdminAuthToken & [int]order-id.
  - **Pre-condition:** AdminAuthToken != None & [int]order-id != None.
  - **Output:** [boolean]validation.
  - **Post-condition:** [boolean]validation != None

- **Add new Item to catalog API**: add new item to menu.

  - **Type:** POST:HTTP
  - **Input:** AdminAuthToken & [json]item{*item − name.item − type.item − ingridient.item − minumum − quantity.*}.
  - **Pre-condition:** AdminAuthToken != None & [json]item{*item − name.item − type.item − ingridient.item − minumum − quantity.*} != None.

- **Output:** [boolean]validation & [json]item$\{item-name.item-type.item-ingridient.item-minumum-quantity.\}$.
- **Post-condition:** [boolean]validation != None & [json]item$\{item-name.item-type.item-ingridient.item-minumum-quantity.\}$

- **Remove an item from catalog API**: add new item to menu.
  - **Type:** DELETE:HTTP
  - **Input:** AdminAuthToken & [int]item-id.
  - **Pre-condition:** AdminAuthToken != None & [int]item-id != None
  - **Output:** [boolean]validation
  - **Post-condition:** [boolean]validation != None