# CPSC 471 Functional Design

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## Notes:

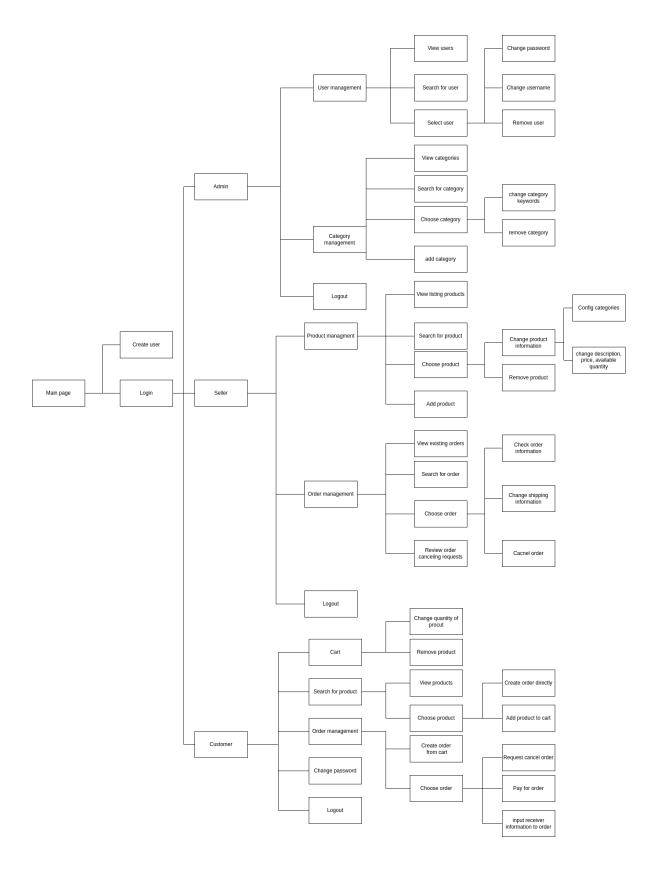
Our project YourStore will be built with HTML, CSS, Javascript, Bootstrap, ReactJS, ExpressJS, MongoDB.

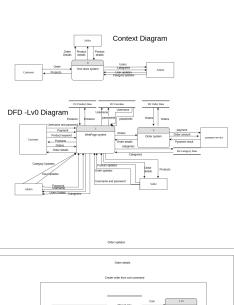
At this stage, we have initial design on the API, what data would be stored, and the static UI. However, software engineering is an iterative refining process, we would expect some changes down the road, and some design decision might be modified in the Final Submission.

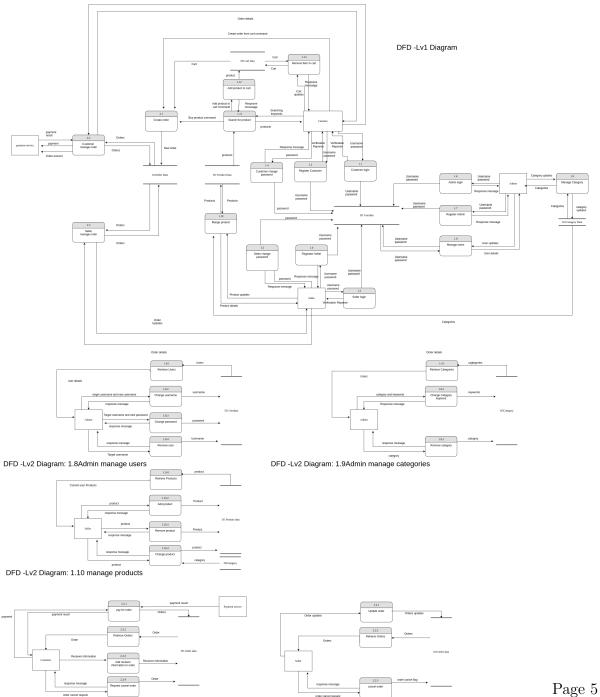
## HIPO & DFD

Contributors

1. Zixing Wei







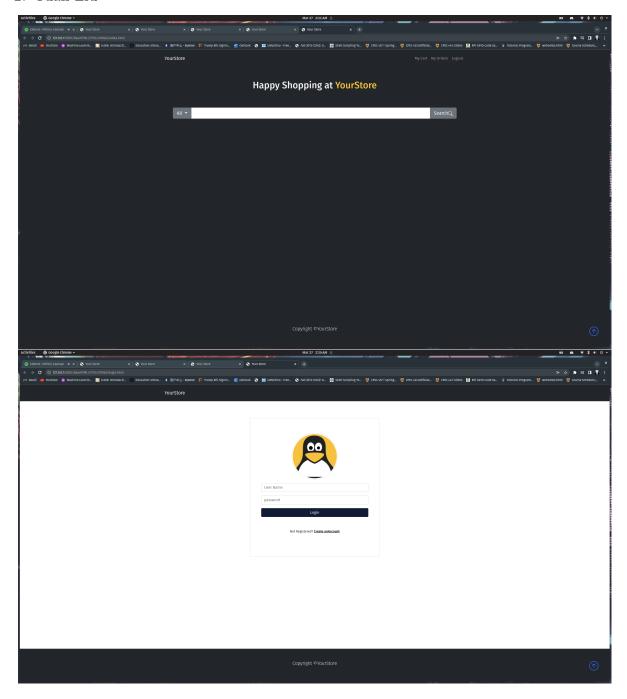
DFD -Lv2 Diagram: 2.2 Customer manage orders

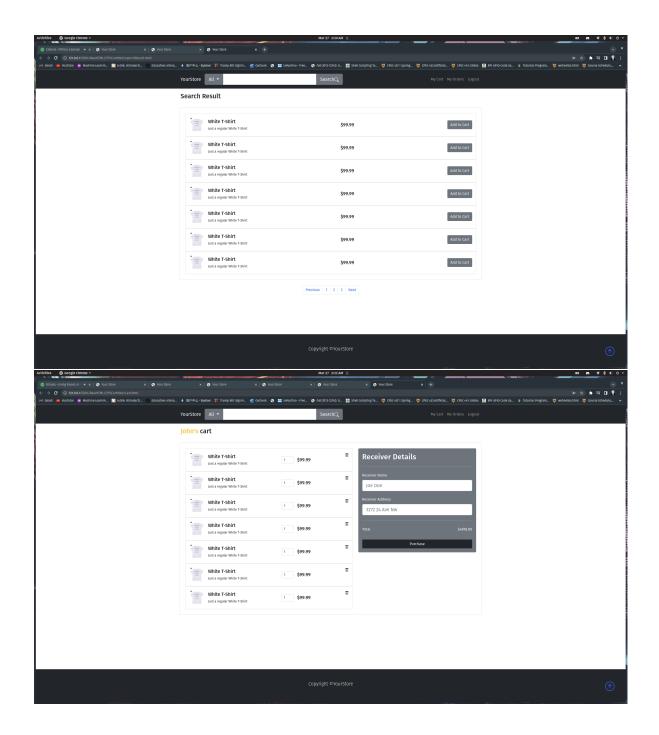
DFD -Lv2 Diagram: 2.3 Seller manage orders

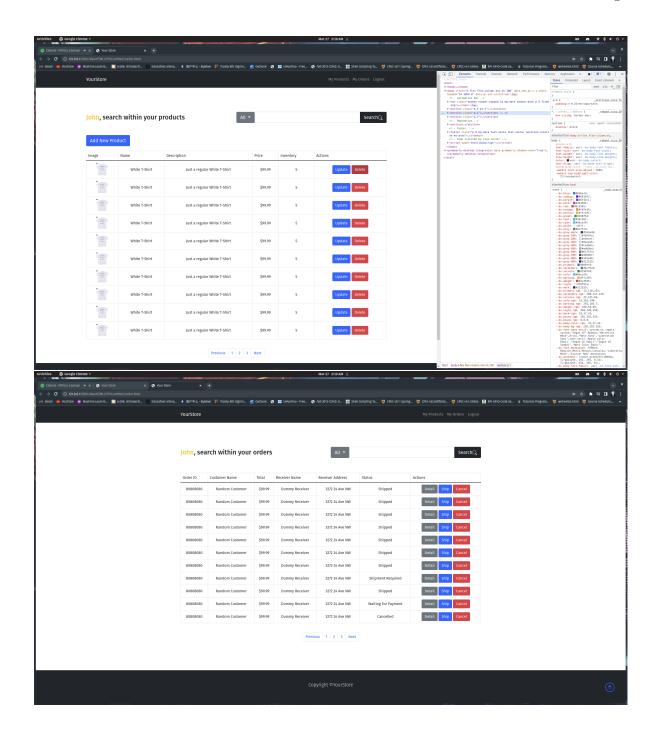
## Website

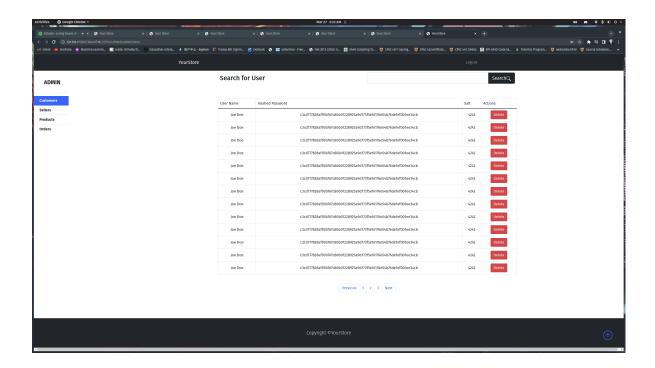
Contributors

- 1. Zhijie Xia
- 2. Yuan Liu









## Contributors

## 1. Zhijie Xia

```
Description: Users(customer, seller, and admin) login
URL: /login
METHOD: PUT
INPUT:
    [{
        "user_name":string,
        "password":string
    }]
OUTPUT:
    [{
        "session_token":string
    }]
/**
 * APIs about SELLER
 */
Description: Get a list of sellers with page size and page number
URL: /sellers?pageSize=m&pageNumber=n
METHOD: GET
INPUT: N/A
OUTPUT:
    [
       {
            "user_name":string,
            "password":string,
            "card_number":string
        },
        . . .
    ]
Description: Get a particular seller
URL: /sellers/:id
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "user_name":string,
            "password":string,
```

```
"card_number":string
        }
    ]
Description: Create new seller
URL: /sellers
METHOD: POST
INPUT:
    [{
        "user_name":string,
        "password":string,
        "card_number":string
    }]
OUTPUT: N/A
Description: Delete a particular seller
URL: /sellers/:id
METHOD: DELETE
OUTPUT: N/A
Description: Get a list orders of a particular seller with page size and page nu
URL: /sellers/:id/orders?pageSize=m&pageNumber=n
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        },
    ]
Description: Get a particular order of a particular seller
URL: /sellers/:id/orders/:id
METHOD: GET
INPUT: N/A
```

```
OUTPUT:
    {
            "order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        }
    ]
/**
* APIs about CUSTOMER
*/
Description: Get a list of customers with page size and page number
URL: /customers?pageSize=m&pageNumber=n
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "user_name":string,
            "password":string,
            "cart_id":string
        },
        . . .
    ]
Description: Get a particular customer
URL: /customers/:id
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "user_name":string,
            "password":string
            "cart_id":string
```

```
}
    ]
Description: Create new customer
URL: /customers
METHOD: POST
INPUT:
    [{
        "user_name":string,
        "password":string
    }]
OUTPUT: N/A
Description: Delete a particular customer
URL: /customer/:id
METHOD: DELETE
OUTPUT: N/A
Description: Get a list orders of a particular customer with page size and page
URL: /customers/:id/orders?pageSize=m&pageNumber=n
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        },
    ٦
Description: Get a particular order of a particular customer
URL: /customers/:id/orders/:id
METHOD: GET
INPUT: N/A
OUTPUT:
    {
```

```
"order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        }
    ]
Description: Get a customer's cart
URL: /customers/:id/cart
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "cart_id":string,
            "products":[{"product_id":number,"quantity"=number}...],
            "total":number
        }
    ]
Description: Add a product to the customer's cart
URL: /customers/:id/cart/product:id
METHOD: PUT
INPUT: N/A
OUTPUT: N/A
Description: Delete a product from the customer's cart
URL: /customers/:id/cart/product:id
METHOD: DELETE
INPUT: N/A
OUTPUT: N/A
* APIs for ORDER
```

```
Description: Get a list of all orders with page size and page number
URL: /orders?pageSize=m&pageNumber=n
METHOD: GET
INPUT: N/A
OUTPUT:
    {
            "order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        },
        ...]
Description: Get a particular order
URL: /orders/:id
METHOD: GET
INPUT: N/A
OUTPUT:
        [{
            "order_id":number,
            "customer_id":string,
            "seller_id":string,
            "total":float,
            "receiver_name":string,
            "receiver_address":string,
            "payment":boolean,
            "shipped":boolean,
            "cancelled":boolean,
            "shipment_label":string,
            "products":[{"product_id":number, "quantity"=number},...]
        }]
Description: Update a order
URL: /orders/:id
METHOD: PUT
INPUT: // the updated method does not necessary include every element of the fol
    [{
```

```
"customer_id":string,
        "seller_id":string,
        "total":float,
        "receiver_name":string,
        "receiver_address":string,
        "payment":boolean,
        "shipped":boolean,
        "cancelled":boolean,
        "shipment_label":string,
        "products":[{"product_id":number, "quantity"=number},...]
    }]
OUTPUT: N/A
Description: Create a order
URL: /orders/:id
METHOD: POST
INPUT:
    [{
        "customer_id":string,
        "seller_id":string,
        "total":float,
        "receiver_name":string,
        "receiver_address":string,
        "products":[{"product_id":number, "quantity"=number},...]
    }]
OUTPUT:
    [{
        "order_id":string
    }]
Description: Delete a particular order
URL: /orders/:id
METHOD: Delete
INPUT: N/A
OUTPUT: N/A
/**
* APIs for PRODUCT
*/
Description: Get a list of products with search keyword, category, page size and
URL: /products?pageSize=m&pageNumber=n&key=k&category=c
METHOD: GET
INPUT: N/A
```

```
OUTPUT:
    [
       {
            "product_id":string,
            "seller_id":string,
            "price":float,
            "search_keys":[string,...],
            "description":string
        },
        . . .
    ]
Description: Get a particular product
URL: /products/:id
METHOD: GET
INPUT: N/A
OUTPUT:
    [{
        "product_id":string,
        "seller_id":string,
        "price":float,
        "search_keys":[string...],
        "description":string
    }]
Description: Create a product
URL: /products
METHOD: POST
INPUT:
    [{
        "seller_id":string,
        "price":float,
        "search_keys":[string...],
        "description":string
        }]
OUTPUT:
    [{
        "product_id":string
    }]
Description: Update a particular product
URL: /products/:id
METHOD: PUT
INPUT:
    [{
```

```
"seller_id":string,
        "price":float,
        "search_keys":[string...],
        "description":string
        }]
OUTPUT: N/A
Description: DELETE a particular product
URL: /products/:id
METHOD: DELETE
INPUT: N/A
OUTPUT: N/A
/**
* APIs for Category
*/
Description: Get the complete list of all category
URL: /categories
METHOD: GET
INPUT: N/A
OUTPUT:
    { "category_id":string,
            "title":stirng}
   ]
Description: Create a new category
URL: /categories
METHOD: POST
INPUT:
    [{
        "title":string
    }]
OUTPUT:
    [{
        "category_id":string
    }]
Description: Update a category
URL: /categories/:id
METHOD: PUT
```

```
INPUT:
    [{
        "title":string
    }]
OUTPUT: N/A
Description: Delete a category
URL: /categories/:id
METHOD: DELETE
INPUT: N/A
OUTPUT: N/A
Description: Add a product into a category
URL: /categories/:id/products/:id
METHOD: PUT
INPUT: N/A
OUTPUT: N/A
Description: Delete a product from a category
URL: /categories/:id/products/:id
METHOD: DELETE
INPUT: N/A
OUTPUT: N/A
```