

Super Shop Management System

Md. Shanewaz Akib

ID: 2016-3-60-050

Course Code: CSE435; Course title: Software Quality Assurance

Section: 01; Summer 2020

Dept. of Computer Science & Engineering; East West University, Bangladesh.

Introduction

This is a Super Shop Management System which is a web application. Here, there has mainly three interfaces such as admin, employee, and user interface. In the admin and user interface has multiple functionality also. Admin can be add, delete, and update the products in this system. The employee could take payment from customers by using this system. Customers could be purchase products online by using this system.

This system is implemented by the MVC pattern. The frontend of this system which is the user interface are implemented by HTML, CSS, and JavaScript programming. And the backend of this system is implemented by Django (python framework) which are controls data in MySQL and the user interface of HTML, CSS, and JavaScript files.

Analysis of Sequence Diagram

1. Online order procedure by customers (login as a customer)

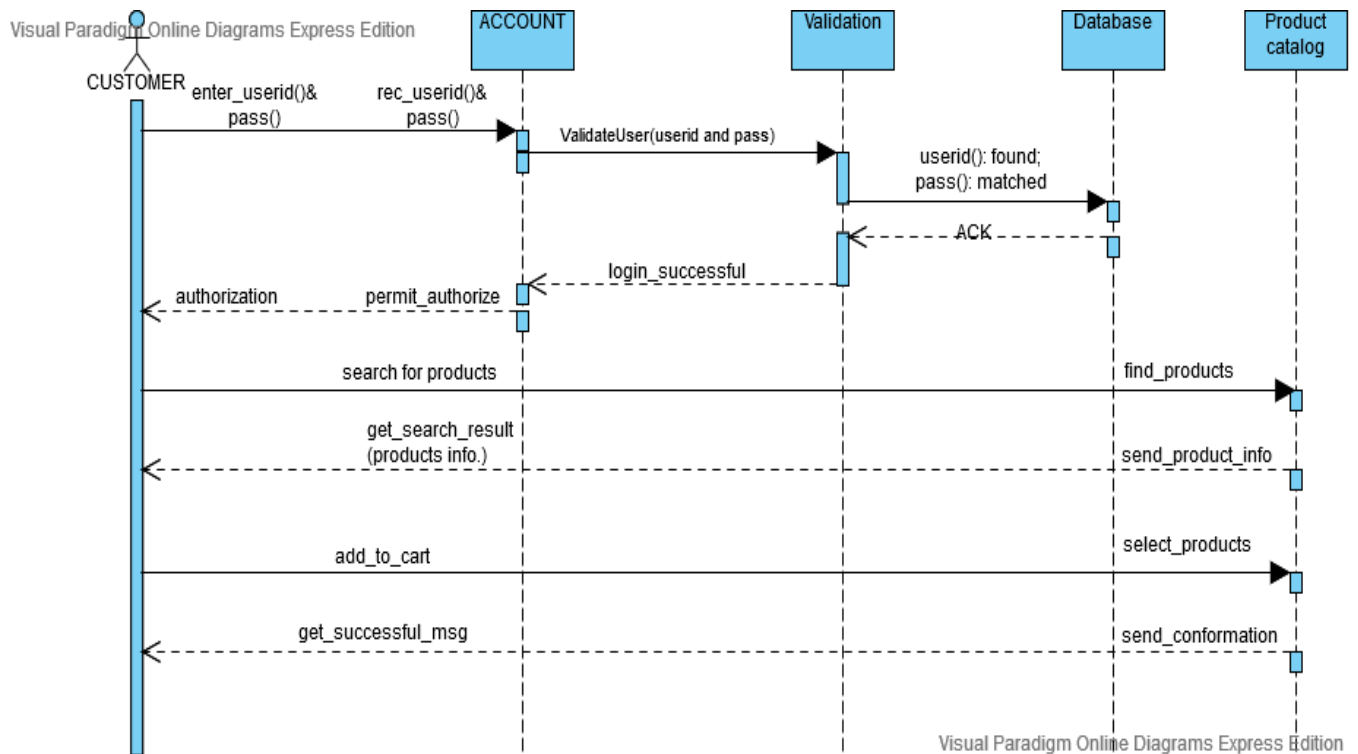


Figure 1: Online order system by customers

A. Finite State Processes (FSP) Code

CUSTOMER = (enter_userid_pass -> authorization -> search_products -> get_search_result -> add_to_cart -> get_successful_msg -> **CUSTOMER**).

ACCOUNT = (rec_userid_pass -> validate_user -> login_successful -> permit_authorize -> **ACCOUNT**).

VALIDATION = (validate_user -> userid_pass_is_found -> ack -> login_successful -> **VALIDATION**).

DATABASE = (userid_pass_is_found -> ack -> **DATABASE**).

PRODUCT_CATALOG = (find_products -> send_product_info -> select_products -> send_conformation -> **PRODUCT_CATALOG**).

||ONLINE_PURCHASE = (**CUSTOMER** || **ACCOUNT** || **VALIDATION** || **DATABASE** || **PRODUCT_CATALOG**)

/ {enter_userid_pass/rec_userid_pass, authorization/permit_authorize, search_products/find_products, get_search_result/send_product_info, add_to_cart/select_products, get_successful_msg/send_conformation}.

B. Analysis Diagram

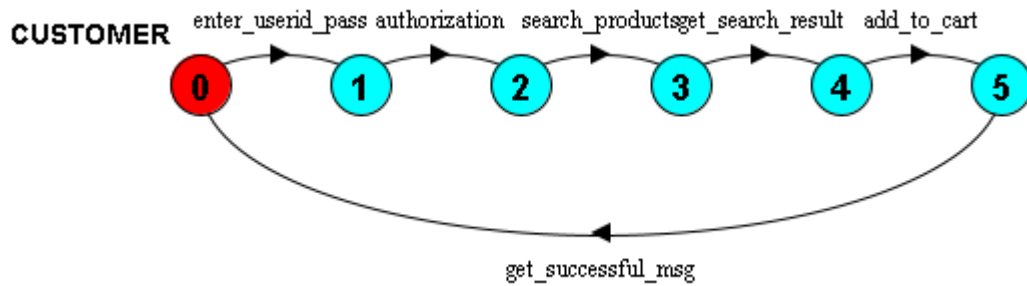


Figure 1.1: Process of CUSTOMER

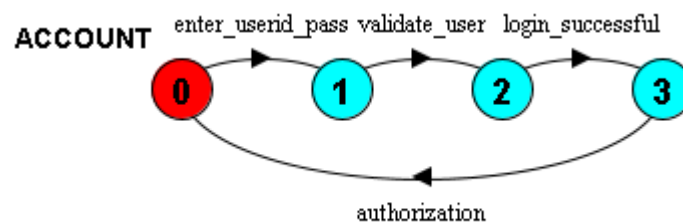


Figure 1.2: Process of ACCOUNT

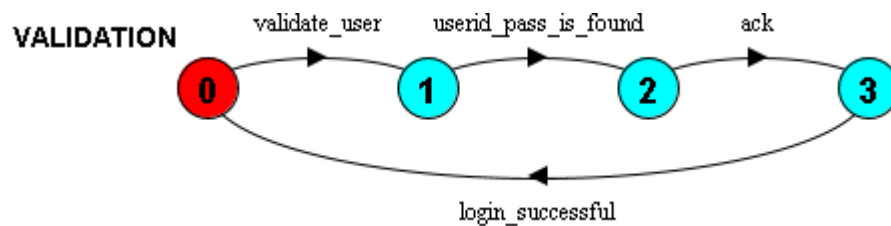


Figure 1.3: Process of VALIDATION

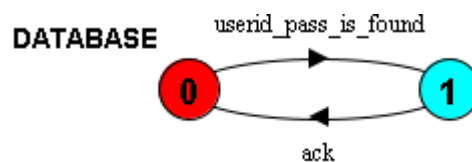


Figure 1.4: Process of DATABASE

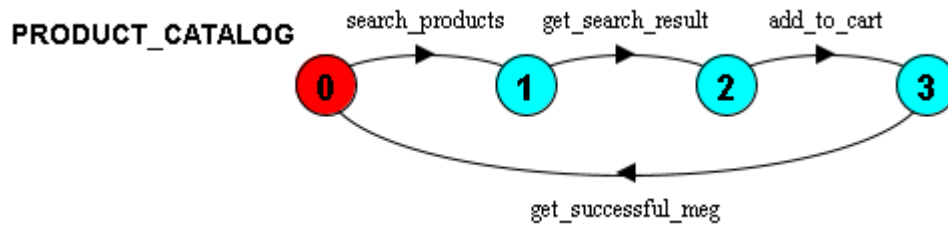


Figure 1.5: Process of *PRODUCT_CATALOG*

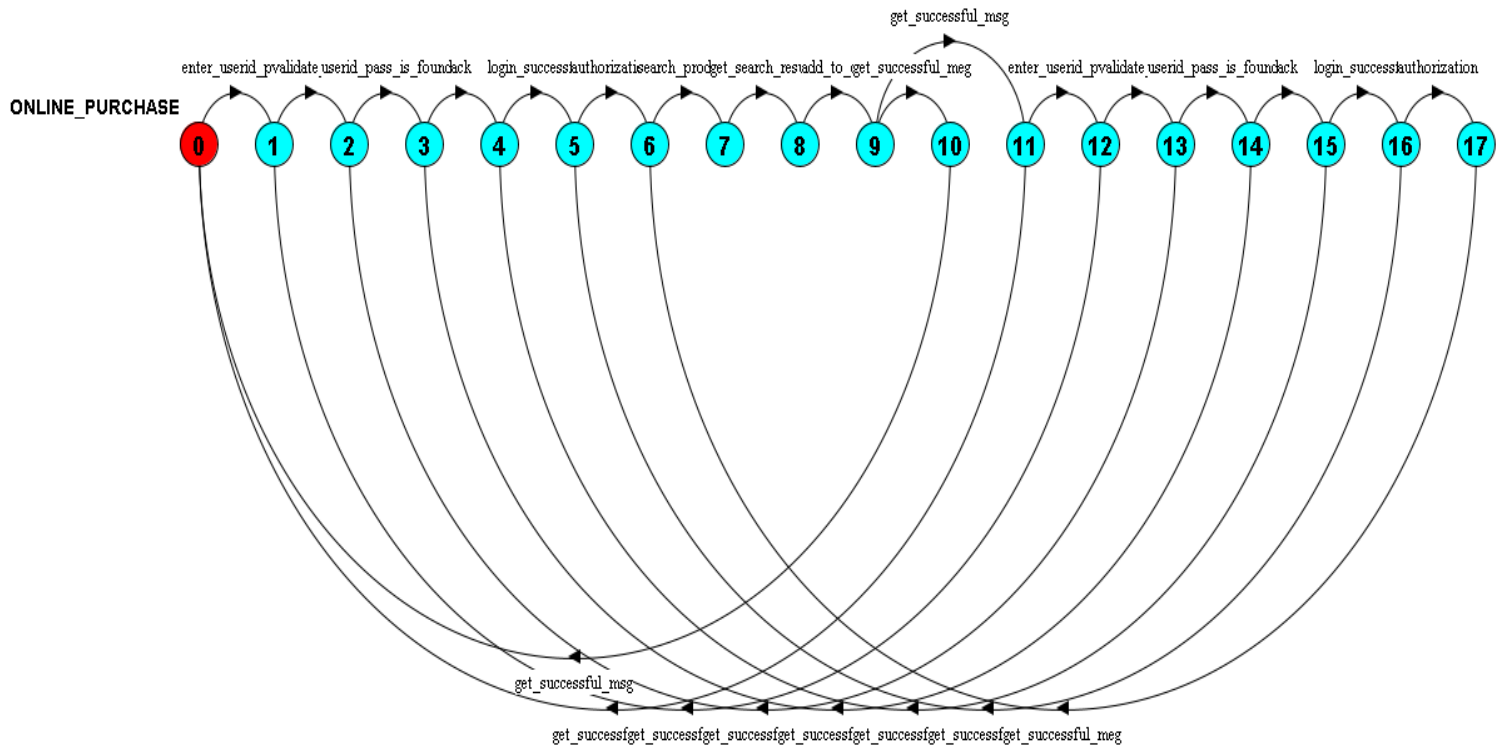


Figure 1.6: Online Purchase System

2. Online Payment procedure

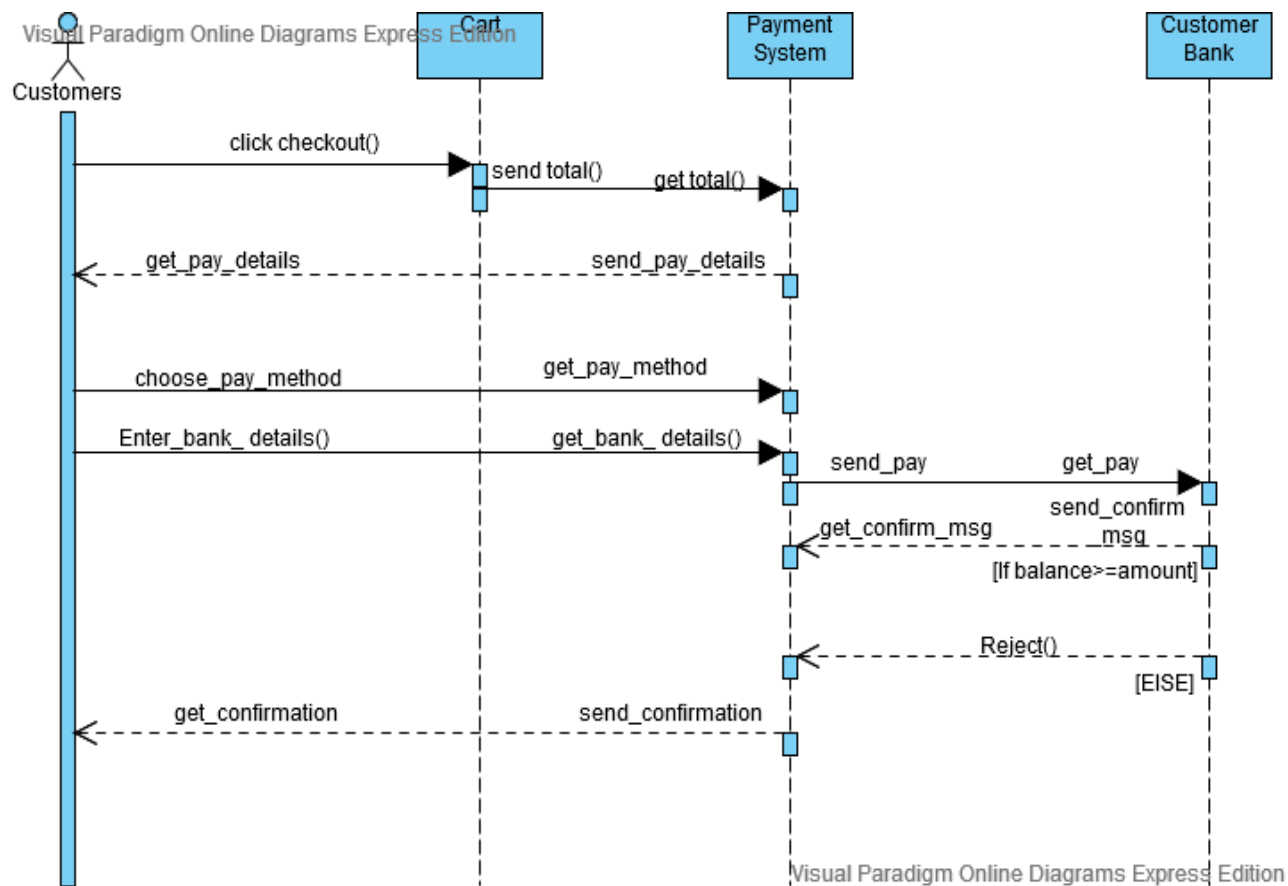


Figure 2: Online payment system

A. Finite State Processes (FSP) Code

```

CUSTOMER = (checkout -> get_pay_details -> choose_pay_method ->
enter_bank_details -> get_confirmation -> CUSTOMER
|not_success -> CUSTOMER).
CART = (checkout -> send_total_amt -> CART).
PAYMENT_SYSTEM = (get_total_amt -> send_pay_details -> get_pay_method ->
get_bank_details -> send_pay -> get_confirm_msg -> send_confirmation ->
PAYMENT_SYSTEM
| reject -> not_success -> PAYMENT_SYSTEM).
CUSTOMER_BANK = (get_pay -> send_confirm_msg -> CUSTOMER_BANK
| reject -> CUSTOMER_BANK).

```

||ONLINE_PAYMENT = (CUSTOMER || CART || PAYMENT_SYSTEM ||
CUSTOMER_BANK)
/{get_pay_details / send_pay_details, send_total_amt / get_total_amt,
choose_pay_method / get_pay_method, enter_bank_details / get_bank_details,
send_pay / get_pay, get_confirm_msg / send_confirm_msg, get_confirmarion /
send_confirmation }.

B. Analysis Diagram

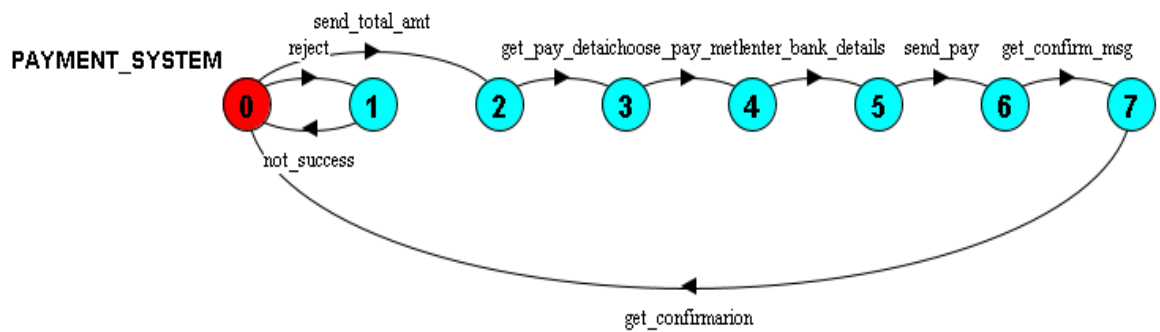


Figure 2.1: Process of Payment System

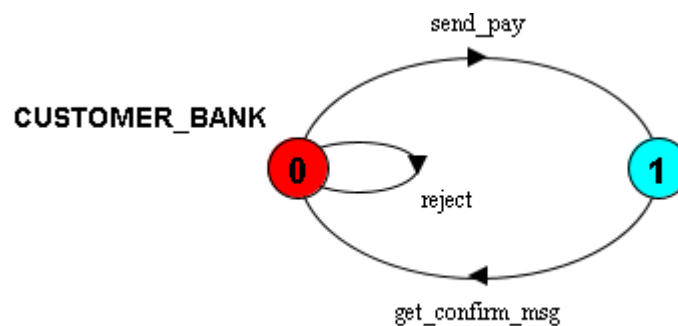


Figure 2.2: Process of Customer Bank

3. Insert/Delete/Update products by Admin (login as admin)

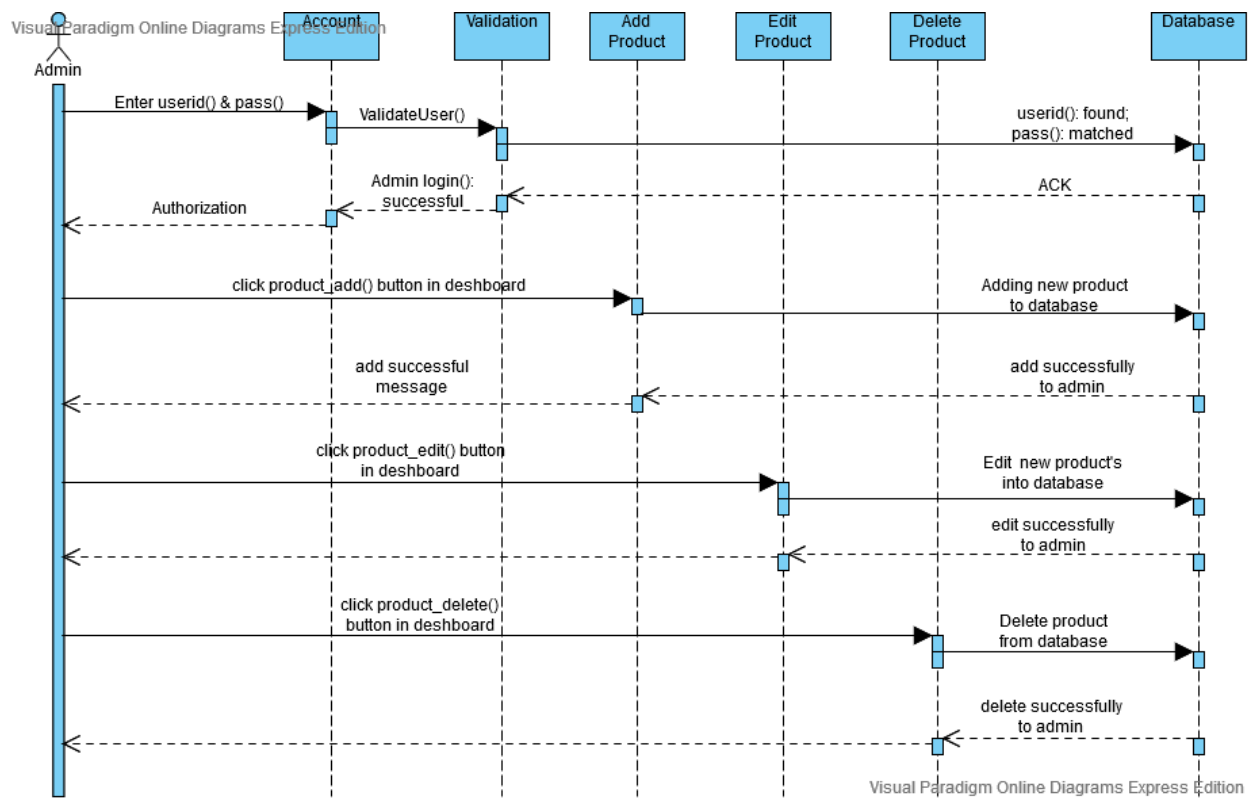


Figure 3: Admin Panel System