

AOU

Software Design Specification for Around You Application

Prepared by Ravi Pilla
NORTHEASTERN UNIVERSITY | BOSTON

1. Introduction

1.1 Purpose

This Software Requirements Specification is intended to document the requirements for the Around You application (AOU). The requirements came from the daily needs and business models around the world. The project is supervised by Prof. Suneil Berajawala.

1.2 Overview

The application helps users find the resources around them and receive brokerage help for bulk orders from the participating businesses.

Application focuses on 2 categories and brokerage of Bulk Ordering

1. Restaurants
2. Markets/Grocery stores

2. Overall Description

2.1 Key Functionality –

The User selects a category and radius of search (i.e., AOU/ALL) and the application lists down the Category information (i.e., restaurants/market names) near the user based on his zip code.

Note : This is mainly useful for the analytics, by which the admin can use the information of potential customers and notify businesses around. (These analytics are not included in the project). In return the user may get offers because of his use of the application. And for businesses they may wish to register in our application which will help to increase the participating businesses in our app !!

Brokerage of Bulk Order -

If users wish to purchase any quantity in bulk, they may fill a form and submit it (here expected date of the event or deadline can be posted). The admin along with his team can negotiate with the dealer and get back to the customer with an offer.

Only the restaurants/markets registered will be shown to the user. User can choose from which restaurants/markets he wishes to hear from.

Based on the form, the admin communicates the bulk order request to the dealer and gets a quote for the user and informs user regarding the same.

Offers/Coupons -

Bulk Coupon – Given to a user for the bulk order.

3. Design Requirements

3.1 References

a. Major Frameworks Used -

- Spring - <https://spring.io/projects/spring-framework>
- Spring Security - <https://spring.io/projects/spring-security>

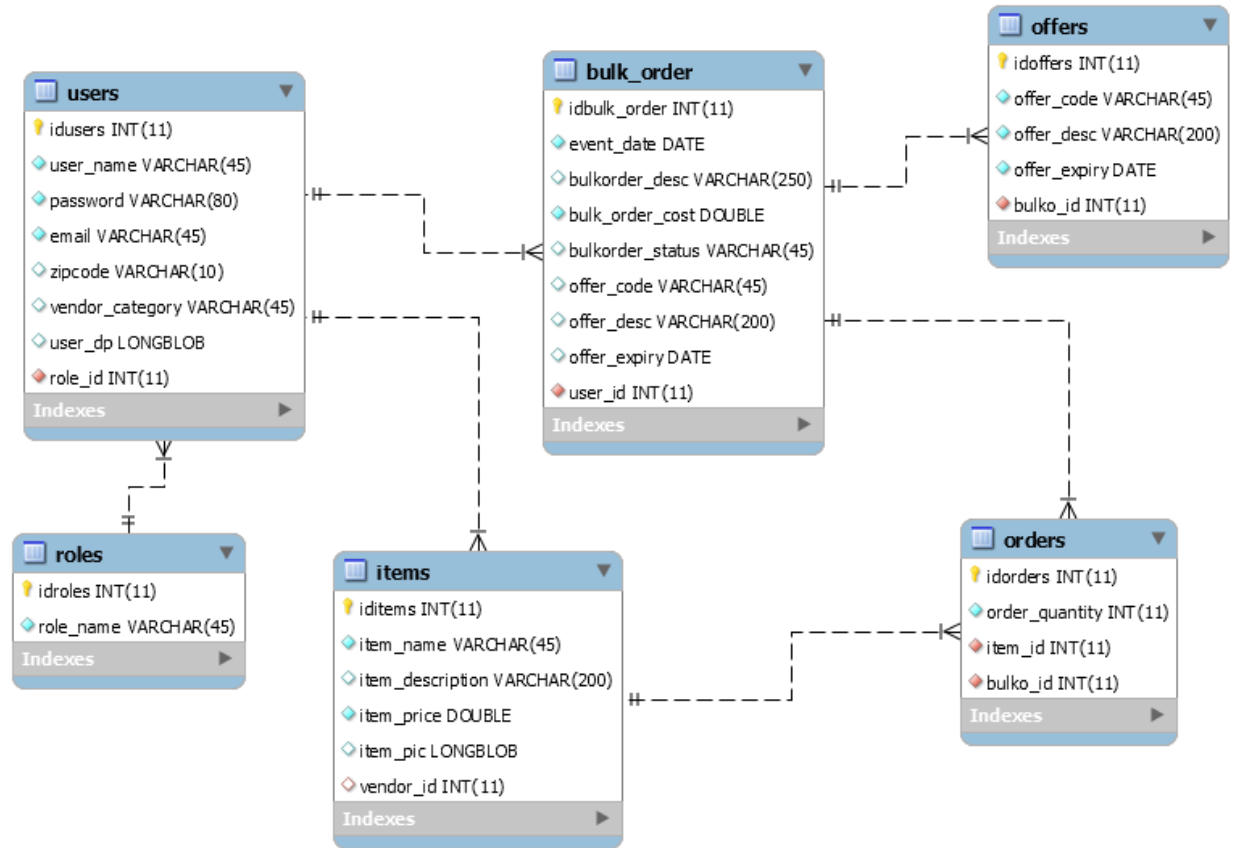
3.2 Design Methodology

The design methodology being employed here is the UML object-oriented technique. Using Hibernate support and ER model, the application is designed to handle user request.

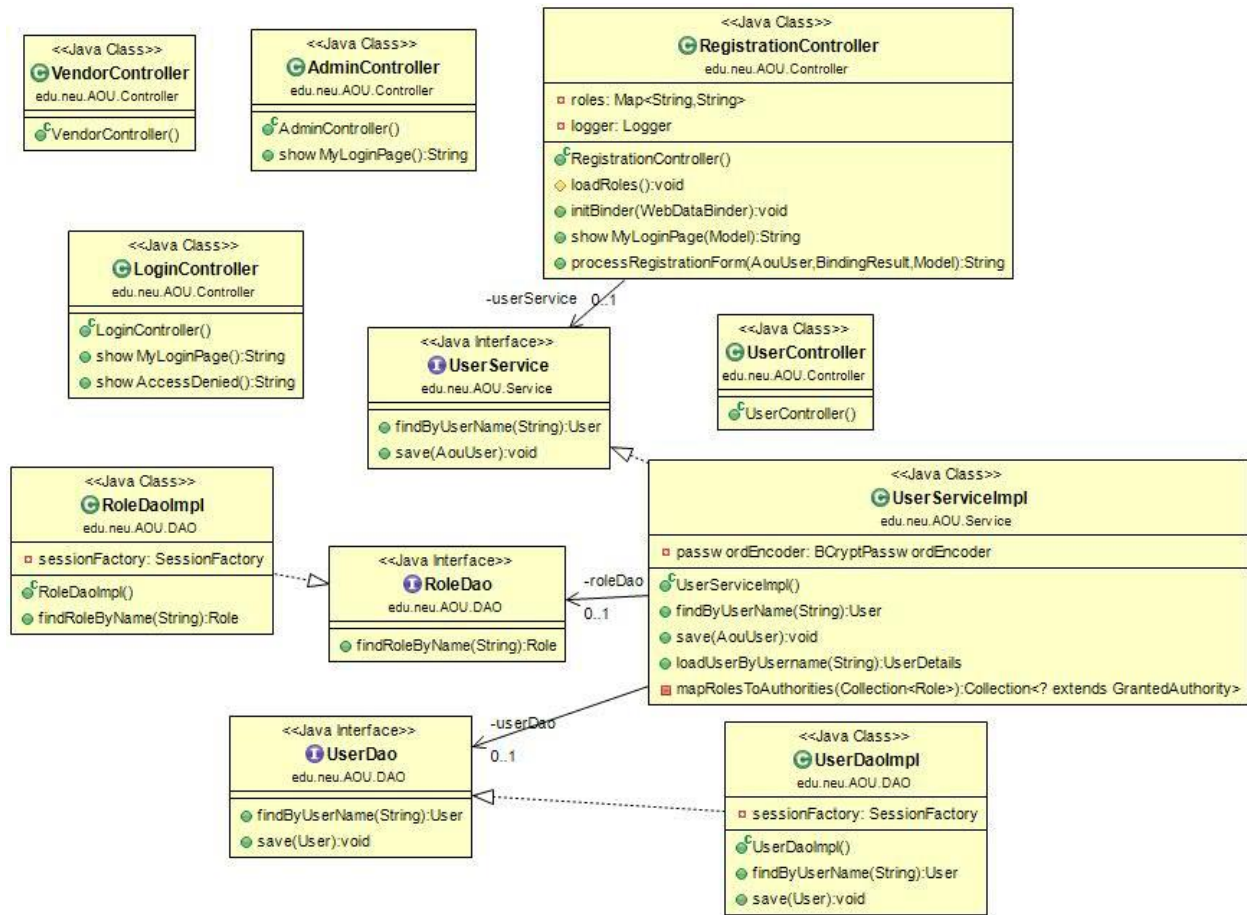
3.3 High-Level Design

AOU web application is designed using Spring Framework. The architecture being considered is MVC. User requests will be mapped onto controllers and controllers use Services to communicate with Data Access Objects. DAO are responsible for communicating with Database. MySQL Server is used to store data. As stated in the SRS document, the user actions will be handled using related controllers.

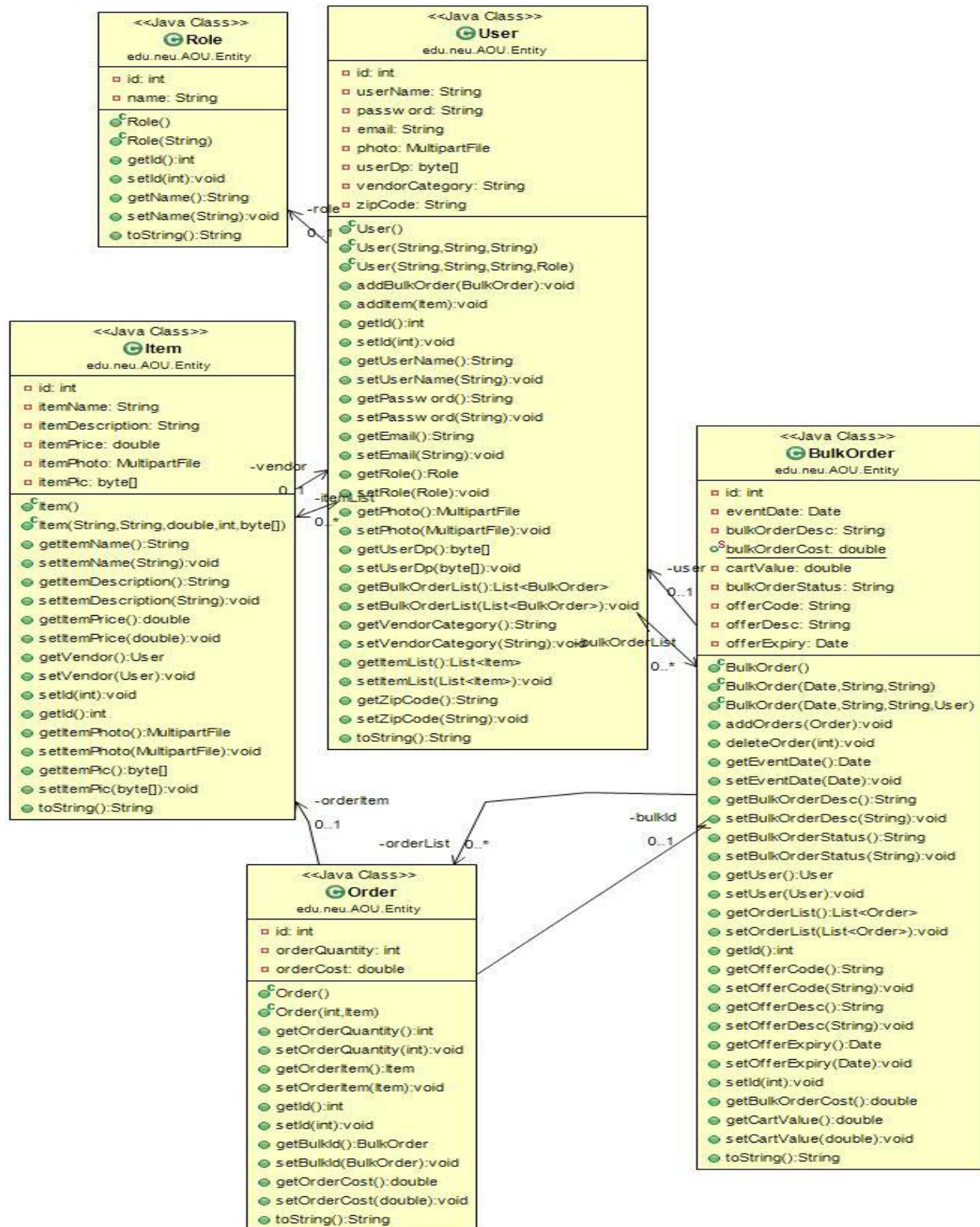
3.4 Database Design



3.5 Low Level Design

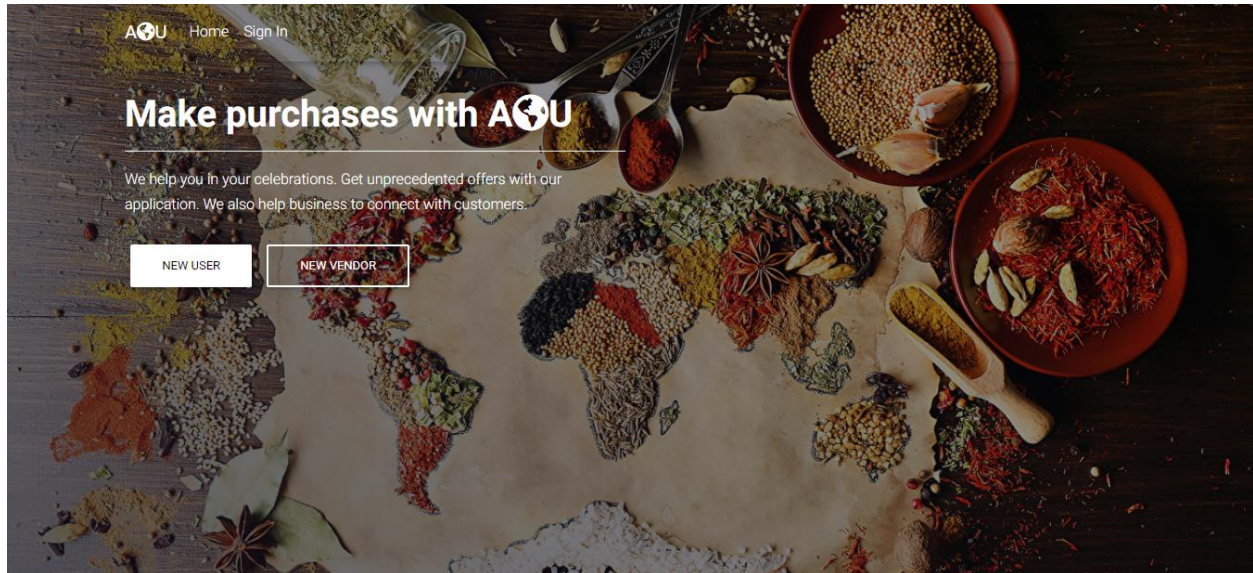


3.5.1 Entity Design Model



3.5.2 User Interface Design


Landing Page




User Registration Form

The user registration form is presented on a dark background. At the top, a navigation bar includes the AOU logo, 'Home', and 'Sign In' links. The form is titled 'User Form' in a light blue font. It contains five input fields, each with a corresponding icon: a person icon for 'username (*)', a lock icon for 'password (*)', an '@' symbol for 'email (*)', a location pin icon for 'zipCode', and a file icon for 'Choose File'. The 'Choose File' field also displays 'No file chosen'. A blue 'SAVE' button is positioned at the bottom of the form.


Vendor Registration Form

 [Home](#) [Sign In](#)


Vendor Form




username (*)




password (*)




email (*)



zipCode



Restaurant ▼




Choose File

No file chosen

SAVE

Sign In Page

 [Home](#) [Sign In](#)

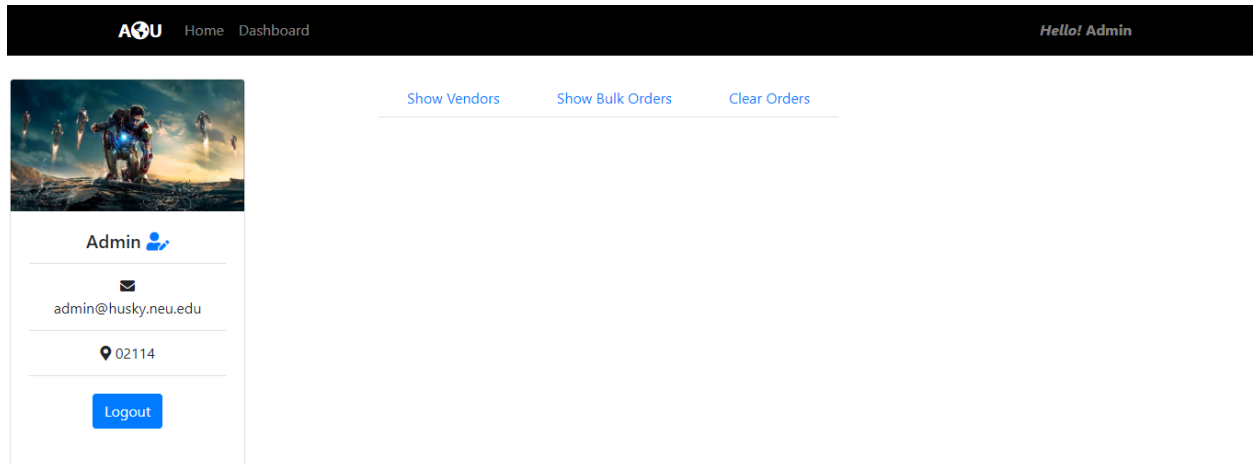
Sign In

username

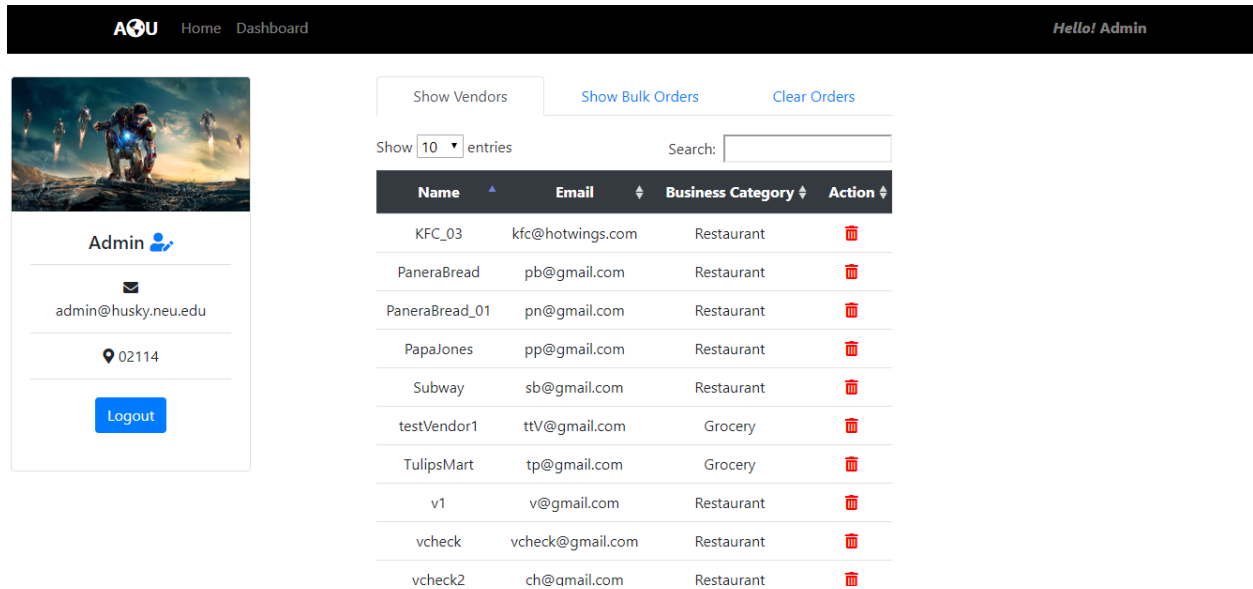
password

LOGIN

Dashboard View for Admin




Show Vendors Action UI of Admin



AOU Software Design Specifications Document

Show Bulk Orders View for Admin



Admin

admin@husky.neu.edu

02114

Logout

Show Vendors

Show Bulk Orders


Clear Orders

Show entries

Search:

Event Date	Comment	Cart Value	Order Summary				Action
2019-05-02	give me best deal	800.0	Vendor Name	Item Name	Item Description	Quantity	
			KFC_03	Hot Chilli Wings	Spicy and rich in cheese	40	
2019-05-04	Best deal needed	700.0	Vendor Name	Item Name	Item Description	Quantity	
			PaneraBread	Chicken Dum Biryani	Hyderabadi Specials with extra onions	20	
			PaneraBread	Chicken Joints	Smoked and salty	40	
2019-05-09	some comment	700.0	Vendor				

Offer Form for Admin



Admin

admin@husky.neu.edu

02114

Logout

Show Vendors

Show Bulk Orders

Clear Orders

Offer Form

navyasai_p

2019-05-02

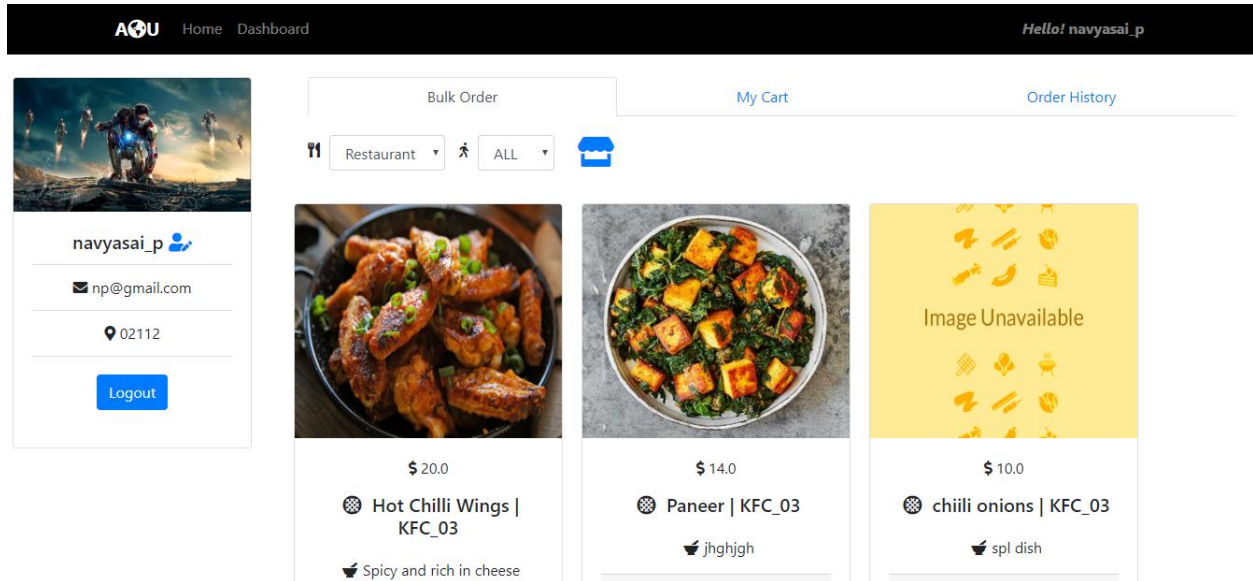
offerCode (*)

offerDescription (*)

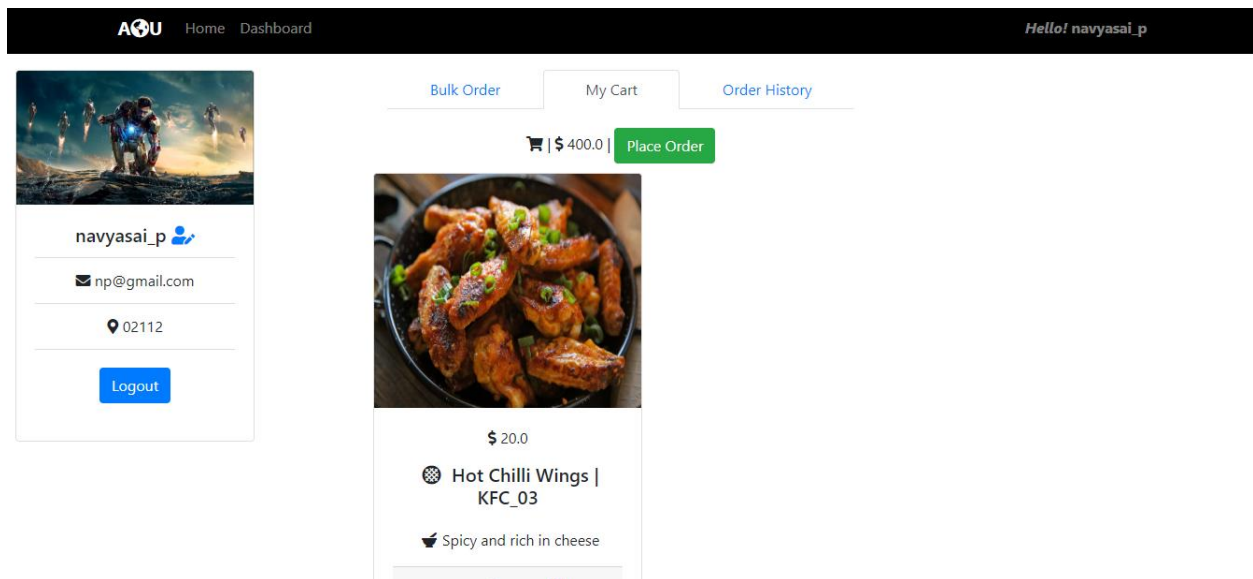
offerExpiry (*)

Save Offer

Bulk Order Request Page for User



My Cart View for User



Product Form View for Vendor

AOU
Home
Dashboard

Product Form

\$ 0.0

No file chosen

View Products Form for Vendor

AOU
Home
Dashboard
Hello! KFC_03

KFC_03

kfc@hotmail.com

02112

Restaurant

Logout

Add Products

View Products

My Orders

\$ 20.0

Hot Chilli Wings

Spicy and rich in cheese

\$ 14.0

Paneer

jghghgh

Image Unavailable

\$ 10.0

chilli onions

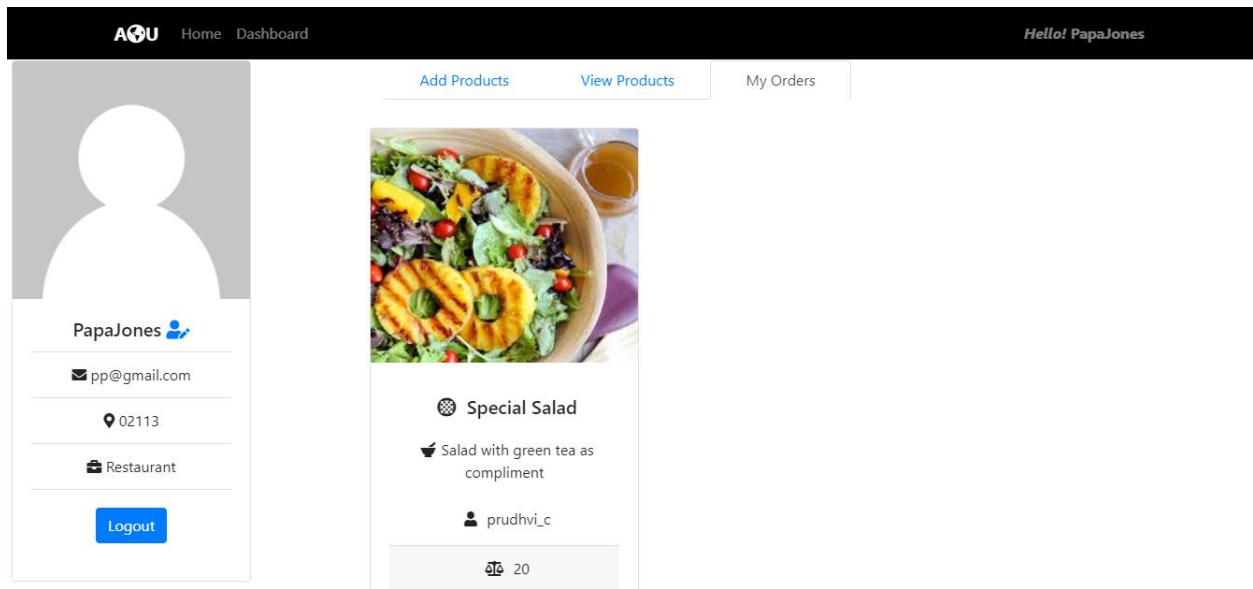
spl dish

NUID - 001356731

12

Version 1.0

Vendor Orders which are in processing state



3.6 Technologies

Components	Technologies Considered	Inclusion
Server Side	J2EE	Yes
Client Side	HTML5, CSS3, JS	Yes
Database	MySQL	Yes
Frameworks	Spring MVC, Hibernate, Spring Security, Bootstrap	Yes
Build Automation	MAVEN	Yes
Version Control	GIT	Yes
JS Frameworks	jQuery, Wow, Font-awesome, Material	Yes
IDE	Spring Tool Suite 3	Yes