



**BUBT**  
*Committed to Academic Excellence*

**BANGLADESH UNIVERSITY OF  
BUSINESS AND TECHNOLOGY**

## Assignment-1

Course Code: CSE 327

Course Title: Software Engineering

Submitted to:

Name: Rabeya Basri

Lecturer

Dept. of CSE

at Bangladesh University of  
Business and Technology.

Submitted by:

Name: Syeda Nowshin Ibnat

ID: 17183103020

Intake: 39

Section: 01

Program: B.Sc. in CSE

Date of Submission: 29/01/2021

## 1) Title of the paper:

Development of Online Food Ordering System for University Students to Maintain Healthy Eating Habits [1].

## 2) System development methodology:

Kanban was selected as the Software Development Methodology for this system. Instead of “customers”, this system refers to the target user groups which consist of university students, restaurant operator, and system admin to collect requirements and feedback. Kanban is a framework that focused on visual effect to implement Agile that identify what to construct, when to construct and how much to construct.

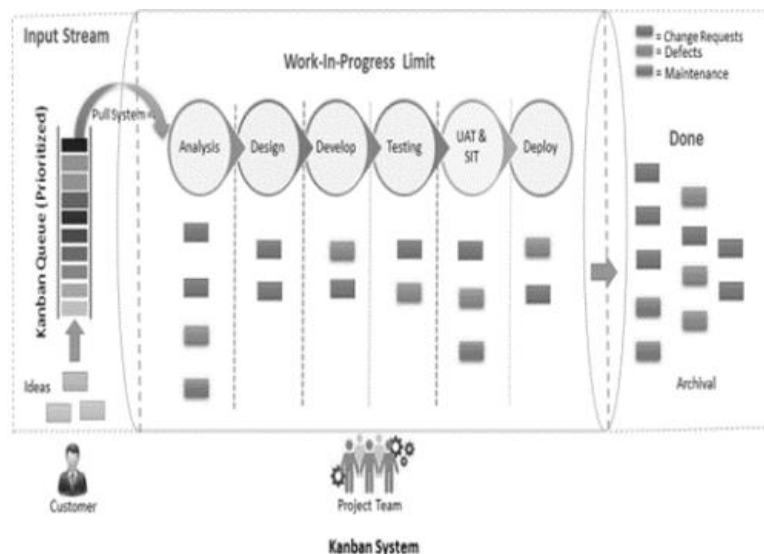


Figure 3: General overview of Kanban methodology (Vikash, 2015)

## Materials and Methods:

To develop the online food ordering system, the system needs to encompass 3 applications consisting the following components:

- Web Application for Restaurant Operator
- Android Application for University Student
- Web Application for System Admin

## **Tools and Technology:**

- **Choice of Programming Language:** Java, JSF (Java Server Faces).  
JSF is designed to leverage existing standard user interface and web concepts flexibly without restricted by a protocol, specific markup language, or client device (Oracle, 2018).
- **Choice of Interactive Development Environment (IDE):** NetBeans, Android Studio.
- **Choice of Database Management System:** MySQL
- **Choice of Operating System:** Android OS together with any internet browsers on desktop or mobile devices.

## **3) Outcome:**

For testing the system, Unit Testing, User Acceptance Testing, and Integration Testing are executed with rewarding outcome. More than 200 test cases are tested on this system and resulted in more than 200 'As expected result'. In functionality wise, it is an excellent result. There are a lot of space for improvement in terms of the system UI as both System Admin and Restaurant Operator have given negative feedback about it. Other than that, useful suggestions were given by all three users and those simple ones are implemented by the developer. The proposed system achieved the objectives, which are allowing the students to order their meal via online mobile application, and provide ingredient and nutritional information of all the menus for the students. This helps to reduce the reason for students to skip a meal or eat something that is not nutritious enough as a main meal and help them to avoid consuming ingredients that they are allergic to.

## **4) Drawbacks:**

The Model-View-Controller (MVC) framework which will benefit the developer. Although this system has achieved a commendable satisfactory level from the user, the developer and users have discovered a few limitations in this system.

- i. From the aspect of System Admins, they can only generate the receipt for the latest top up transaction made. This limits the System Admin from keeping track on the top-up transactions and generate a receipt for the past top-up transactions.
- ii. From the aspect of Customers, the "Your order is ready!" notification can be seen in the application's Home Page.

- iii. Besides, in the case where the order consists of foods from multiple restaurants, the notification will be triggered if all the restaurant has done processing the foods in that order.

#### **5) Further scopes for the existing system:**

- i. Based on the user's feedbacks, one of the greatest future enhancement for the system will be the reporting feature.
- ii. Report such as Top Up Transaction History will be one of the reports the developer intended to develop in the future.
- iii. Other than that, an Activity Log will be included in the future enhancement.
- iv. Monthly Sales Report and Best Seller Report will be considered in the future enhancement plan as well as it can help the Restaurant Operators to calculate their revenue and make decisions on their menu.
- v. Furthermore, the next major enhancement will be focused on the Customer's mobile application.
- vi. Android Push Notification will be implemented so that the customer doesn't need to keep checking on the application's Home Page or My Pending Orders Page.
- vii. Moreover, a stronger and more professional menu suggestion algorithm will be implemented in the future so that the menu suggested to the customers based on their health condition will be more accurate and specific.
- viii. Lastly, the future enhancement that needs to be implemented in the entire system is UI improvement as the current UI is just around the satisfactory level.

#### **Reference**

- [1] D. D. Tan Sin Wei, "Development of Online Food Ordering System for University Students to Maintain Healthy Eating Habits," *Journal of Applied Technology and Innovation*, vol. 2, no. 1, 2018.