

**CAPSTONE PROJECT REGISTER**

**Class**: **Duration time**: from ..…….../20…. To ..….…./20…..

**(\*) Profession:** <Software Engineer> **Specialty**: <ES> Hộp Văn bản <IS> Hộp Văn bản <JS> Hộp Văn bản

**(\*) Kinds of person make registers:**  Lecturer Hộp Văn bản Students

**1. Register information for supervisor (if have)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Fullname | Phone | **E-Mail** | **Title** |
| Supervisor |  |  |  | Mr. |
| Supervisor |  |  |  | Mr. |

**2. Register information for students (if have)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Full name** | **Student code** | **Phone** | **E-mail** | **Role in Group** |
|  |  |  |  |  | Leader |
|  |  |  |  |  | Member |
|  |  |  |  |  | Member |
|  |  |  |  |  | Member |

**3. Register content of Capstone Project**

**(\*) 3.1. Capstone Project name:**

* English: Food Pickup Cabinet for FPTU Campus
* Vietnamese: Tủ đặt và giao thực phẩm thông minh tại FPTU
* Abbreviation: FPC

1. **Context:**

The number of FPT University students have been increasing these years. As a result, many students have to stay at the campus during lunch time to continue their slots in the afternoon. Most of them choose to order food and drinks from outside using online apps such as GrabFood, BAEMIN or Now.

The problem is during the peak hours (lunch time from 11h - 13h), the number of orders from students become huge and it creates distractions for students if the driver calls them when they are being in a lesson.

Therefore, there is a demand to keep those ordered items inside storage for a short time so that students can pre-order and take the items at their expected time frame, and cut down the waiting time of the Delivery man.

1. **Proposed Solutions**

* Provide a Tablet attached on each Cabinet for ordering food and beverages
* Food are delivered to each box inside cabinet.
* Student can open/close boxes by his QR Code
* Have an algorithm to assign orders to each box based on time, location of students.
* Enable to track statuses of each Cabinet
* **Functional requirement**
* **Cabinet Mobile App**
* Users can use student card or QR Code or User app to verify user before to make orders at Cabinet app.
* Users can track their order status by using order code on Cabinet App
* Users can see the Box map of each cabinet and can choose available box for their orders.
* Users can open the box using the appropriate verification methods.
* Users can make payments using Momo Payment Platform.
* Users can watch their order history.
* **Admin Web System**
* Admin can login to the system by account.
* Admin can check the status of all Cabinet.
* Admin can check the status of each Box in a Cabinet.
* Admin can manage all the Account in the system: Student account, Restaurant account, Courier account.
* Admin can activate or deactivate a Cabinet or a Box in a Cabinet.
* Admin can watch the Student/ Staff order history.
* Admin can see the reports of the system based on traffic of Order, Payment, User.
* **User App:**
* User app for manage student wallet
* User can view order history on this app
* User can use app to open the box in cabinet
* App doesn’t have “Make order” function.
* **Non-functional requirement:**
* The time to open a box of a cabinet is less than 2 seconds
* Cabinet app use tablet design styles.

(\*) 3.2. Main proposal content (including result and product)

1. **Theory and practice (document):**

* Students should apply the software development process and UML 2.0 in the modelling system.
* The documents include User Requirement, Software Requirement Specification, Architecture Design, Detail Design, System Implementation, and Testing Document, Installation Guide, sources code, and deployable software packages.
* Server-side technologies:
* Server: .NET, Windows Azure…
* Database Design: SQL Server.
* Client-side technologies:
* Web Client: HTML5, CSS3, Javascript, ReactJS.
* Mobile App: Flutter.

1. **Products:**

* Mobile App for Restaurant (Simulation)
* Mobile App for FPT University’s students and staff.
* Web API for System.
* Web Admin for Admin.

1. **Proposed Tasks:**

* Task package 1: Develop the Web application of the System for Admin.
* Task package 2: Develop a Cabinet app
* Task package 3: Develop a mobile app for Student (Android or IOS).
* Task package 4: Build – Deploy and Test the system.
* Task package 5: Prepare all the required documents: System analysis and Design, Test plan, Installation manual, User manual.

4. Other comments (propose all relative things if have).

|  |  |
| --- | --- |
| **Supervisor (If have)**  *(Sign and full name)* | HCM, date …… ………. /20 …  **On behalf of Registers**  *(Sign and full name)* |