zalo

**CAPSTONE PROJECT REGISTER**

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

(\*) Profession: <Software Engineer> Specialty: <ES> <IS>

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

1. Register information for supervisor (if have)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Full name** | **Phone** | **E-Mail** | **Title** |
| Supervisor 1 | Lâm Hữu Khánh Phương | 0915353001 | phuonglhk@fe.edu.vn |  |
| Supervisor 2 (if have) |  |  |  |  |

2. Register information for students (if have)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Full name** | **Student code** | **Phone** | **E-mail** | **Role in Group** |
| Student 1 | Nguyễn Hoài Phương | SE150997 | 0797575794 | phuongnhse150997@fpt.edu.vn | Leader |
| Student 2 | Đào Đức Thành | SE151068 | 0369998759 | thanhddse151068@fpt.edu.vn | Member |
| Student 3 | Nguyễn Huỳnh Phi | SE150972 | 0966324244 | phinhse150972@fpt.edu.vn | Member |
| Student 4 | Phạm Quốc Thịnh | SE151077 | 0867660719 | thinhpqse151077@fpt.edu.vn | Member |

3. Register content of Capstone Project

(\*) 3.1. Capstone Project name

- English: BeanFast - Breakfast ordering and delivery system for students in primary school from nearby cloud kitchen

- Vietnamese: BeanFast - Hệ thống đặt đồ ăn sáng và giao hàng cho học sinh tiểu học từ nhà bếp gần trường

- Abbreviation: BF

- **Problem Statement:**

Every morning of the week in areas of the city, most primary school students are taken to school by transport by their parents and only a few go to school alone. Preparing to take children to school in just a short period of time each morning will be quite difficult, typically because students wake up late and only have enough time for personal hygiene and changing uniforms and bring school bags to class.

Therefore, letting students have breakfast at home is quite a challenge for parents because the possibility of being late to class is very high. Many parents choose to give their children money every time they take them to school and then let them buy whatever they want to eat. Problems that can occur are that children can eat at street vendors or buy food from fast food carts in front of the school gate and parents are completely unaware of whether those foods are suitable for the child whether or not, whether it is nutritious or not, or whether it provides enough energy for the child to participate in learning activities or not.

Furthermore, many children do not use that money to eat breakfast, but on the contrary, they will fast to save money to buy other things such as cakes, candy, toys, etc. Therefore, the nutritional issue of breakfast sending children to primary school is not guaranteed and out of control.

**- Solution Statement:**

Parents can manage their children's breakfast to be nutritious, safe, suitable for their physical condition and health, and can rest assured that their children will not skip meals, thereby taking better care of their child's health.

The BeanFast application will help by:

1. Cloud Kitchen lists each school's daily menu so parents can order food for their children in advance.
2. Parents or students use the mobile application to order food and choose a pickup location near the school gate.
3. The ordered dishes will be prepared in the kitchen and delivered to the stations.
4. At the station, customers will receive their order.

(\*) 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 modeling system.
* The documents include User Requirements, Software Requirement Specification, Architecture Design, Detail Design, System Implementation and Testing Document, Installation Guide, User Manual (optional), source code (Github), and deployable software packages (Azure).
* Basic Features
  + Administration Responsibilities:
    - Manage accounts
    - Manage dashboard
  + Kitchen Manager Responsibilities:
    - Register an account and login
    - Manage menus
    - Manage orders
    - Manage places
    - Manage vouchers
    - Manage promotional information
  + Customer Responsibilities:
    - Register an account and login
    - Recharge the app to receive green beans by using several online payment methods
    - Use green beans to order for the kids
    - Get vouchers and promotional information
    - Get red beans when you use green beans to payment orders or play mini games
    - Use red beans to exchange a product or gift
  + Station Responsibilities:
    - Register an account and login
    - View delivery schedule
    - Record whether orders have been delivered or not
    - Let customers use red beans to redeem gifts by scanning the code on the card
  + System features:
    - Automatically schedule deliveries for stations
    - Censoring customer account registration applications
    - Recommend and display incoming vouchers to specified students

1. Program:

* RESTful API for System
* Web Admin for Administration – Flutter
* Web Manager for Kitchen Manager – Flutter
* Mobile application (BeanFast) for Parents/Student – Flutter
* Mobile application for Station – Flutter
* Client-Server Model

1. Proposed Tasks for Students

* Task package 1: Design ERD and Database
* Task package 2: Develop a server for the system (RESTful API)
* Task package 3: Develop a web application for admin
* Task package 4: Develop a web application for kitchen manager
* Task package 5: Develop a mobile for students and parents
* Task package 6: Develop a mobile for station
* Task package 7: Host database and server
* Task package 8: Develop a payment module to integrate with payment gateways such as Momo or ZaloPay
* Task package 9: Prepare all required documents, including system analysis and design, test plan, installation manual, and user manual
* Each work group may have multiple students participating, but there should be one member responsible for the main responsibility of each task.

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

All students are required to understand the reference documents thoroughly and may need to explain to the viva committee

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

Lâm Hữu Khánh Phương Nguyễn Hoài Phương