

**Capstone Project Report**

**Report 1 – Project Introduction**

– Hanoi, October 2022 –

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# I. Record of Changes

|  |  |  |  |
| --- | --- | --- | --- |
| Date | A\* M, D | In charge | Change Description |
| 07/10/2022 | A | ThongPQ | Overview; Product Background; Business Opportunity; Product Vision |
| 07/10/2022 | M | GiangNT | Overview; Product Background; Business Opportunity; Product Vision |
| 08/10/2022 | A | GiangNT | Major Features; Limitations & Exclusions |
| 08/10/2022 | A | ThongPQ | Existing Systems |
| 08/10/2022 | M | GiangNT | Existing Systems |
| 08/10/2022 | A | GiangNT | Major Features Diagram |
| 05/11/2022 | M | HuyenBN | Business Opportunity |
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\*A - Added M - Modified D - Deleted

# II. Project Introduction

## 1. Overview

### 1.1 Project Information

* Project name: FU House Finder
* Project code: FHF
* Group name: SWP490-G1
* Software type: Web App

### 1.2 Project Team

|  |  |  |  |
| --- | --- | --- | --- |
| **Full Name** | **Role** | **Email** | **Mobile** |
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## 2. Product Background

Currently, the following major problems remain:

* The input data to the inn's website is currently not computerized to the smallest management unit, each room, to be included in the system. Therefore, the amount of high-quality data in existing web pages is not much.
* The current website searches for low-quality results for users because the status of the inn has not been updated to reflect reality. Due to the fact that the status of the room changes quite often and the host only puts general information on the Facebook group created by the admissions office, so it is difficult to find in large quantities to provide information for students to enroll with a large number of rooms to rent to students.

The student affairs department has a list of the names of the innkeepers who have been confirmed by the admissions office that the innkeeper exists in fact, the correct address and there may be a number of rooms in the area around FPT Hoa Lac University including 5 communes: Binh Yen, Thach Hoa, Tan Commune, Shareholders, Ha Bang save as excel file. The student affairs department also created 1 Facebook group for hostel owners to post and read about the rooms. With Facebook groups and a list of hostel owners, it still partially meets the rental information needs of a large number of old and new current students.

The problem situation is:

* The data of the motel rooms is not specific, the inn owner only posts general to the FB group as "Room for rent, xxx square meters, price, address, contact number ....". So, when enrolling new students, thousands of students want to find a hostel in 1 short time like when enrolling at the beginning of the year, the admissions office could not answer for thousands of students, parents' status of the large number of available rooms for rent around the campus area.
* The number of individual rooms for each student, the current way of doing it on the FB group meets but the large number of new students cannot rent a dormitory but having to outsource, the Facebook group method is not effective.

How to refresh:

* Digitize all accurate data to each room of all residents who have rooms for rent around Hoa Lac area. The smallest management unit is each room.

## 3. Existing Systems

### 3.1 FPT Can Tho

* Descriptions of the system: Helping students at FPT University Can Tho find accommodation
* Link: <https://dorm.fptucantho.vn/>
* System actors: guest, user, admin
* Features: Search for accommodation in Can Tho
* Pros:
  + There is a lot of information about the inn posted
  + Show full information about the accommodation people want to post
* Cons:
  + Pagination is still very weak
  + Difficult to attract users because the interface is not beautiful

### 3.2 Nhatot System

* Descriptions of the system: Helping people find accommodation
* Link: <https://www.nhatot.com/thue-phong-tro>
* System actors: guest, user, admin
* Features: Search for accommodation in Vietnam
* Pros:
  + Various hostels in many provinces
* Cons:
  + There are many ads inserted in eye-catching places that make it difficult for users to find the information they want to search

### 3.3 BatDongSan System

* Descriptions of the system: Helping people find accommodation
* Link: <https://batdongsan.com.vn/cho-thue-nha-tro-phong-tro-bac-tu-liem/gia-tu-1-trieu-den-3-trieu-dt-duoi-30m2>
* System actors: guest, user, admin
* Features: Search for accommodation in Vietnam
* Pros:
  + GUI is good
* Cons:
  + Can't show which rooms are available at the inn

### 3.4 Blog

* Descriptions of the system: Helping readers know how to convince customers
* Link: <https://timescityminhkhai.com/bi-quyet-luon-luon-lap-day-phong-trong.html>
* System actors: guest, user, admin

## 4. Business Opportunity

The number of students who enters FPT University is increasing dramatically. But the number of houses for students to rent does not satisfy the demand. Therefore, the students struggle today because they cannot find an appropriate room to rent. We will improve the experience of not also students but also landlords. We will develop a useful system which the landlords could visit and update the status of their rental rooms in an easy way to reflect the reality. The regularly update of rooms could help students know which houses having available room for them to rent. Consequently, this system will help the landlords from making more money. Solving this problem will be good for our school because if the landlords find this is a useful system, they are willing to pay for it. Moreover, the reputation of our school could increase so that it could atract more and more students’ attention and build the belief of students’ parents.

## 5. Software Product Vision

The capstone team is expected to coordinate with the admissions department and the innkeeper to put the actual data of each room such as text description, photo of 3 each room on google sheet. Then the capstone group will run the excel file import function to put data into the data base in large quantities to serve the search. This works that want to finish into the 20/10/2022.

capstone group system intends to develop with the desire to put into practice with the most basic features by the end of 11/2022 in Hoa Lac. If it is ok, it is expected that the system can be deployed at 5 campuses Hoa Lac, Ho Chi Minh City, Can Tho, Da Nang, Quy Nhon.

## 6. Project Scope & Limitations

### 6.1 Major Features

FE-01: Log in to the system using Google or Facebook

FE-02: View list of available houses in an area around a school campus, search for a house by different criteria

FE-03: View the detail information of a house, view detail information of a room in a house

FE-04: A student can give rates and comments to review a house, or report it if it is violated

FE-05: A landlord can upload information of a house, including many rooms

FE-06: A landlord can view, create, update, delete his houses and each room in a house

FE-07: A landlord can view and update his profile

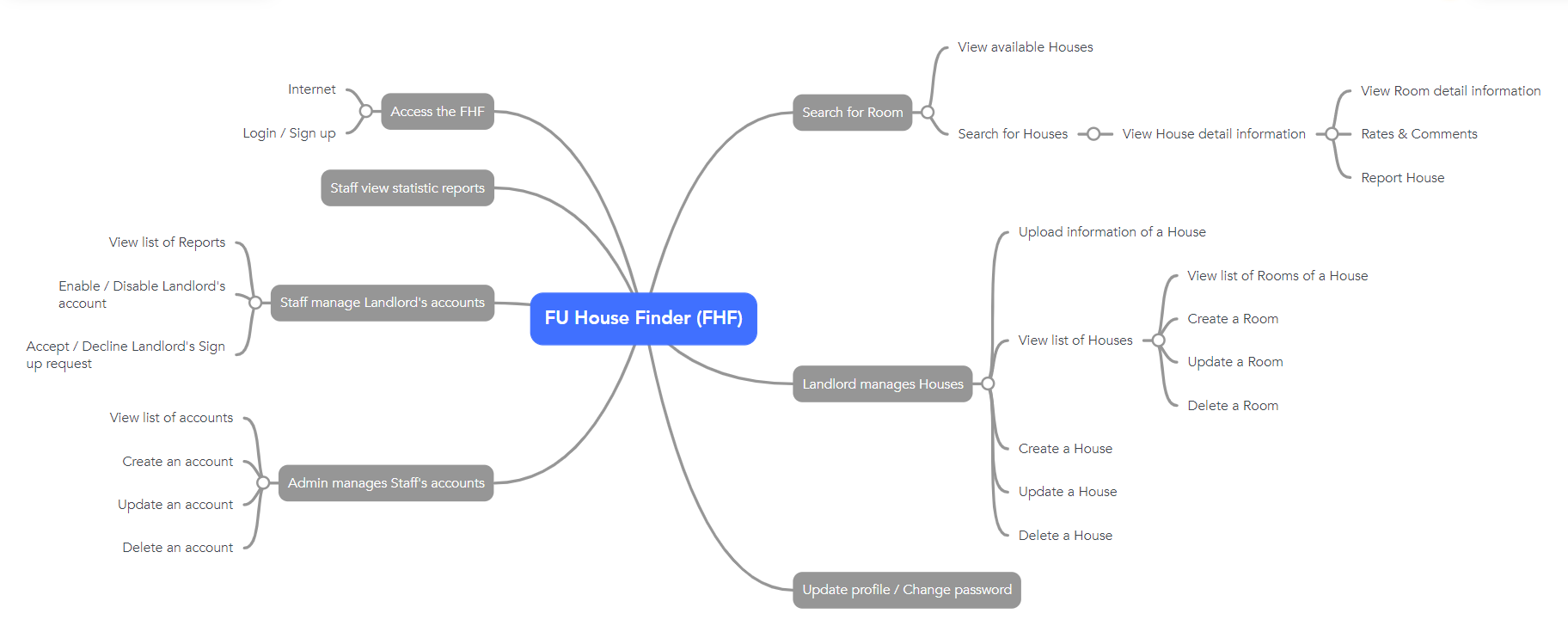
FE-08: A staff can view statistics and accept or decline landlord’s sign up request

FE-09: A staff can view and update his profile

FE-10: A staff can view reports to enable or disable accounts of landlords

FE-11: An admin can view, create, update, delete all staff’s accounts

FE-12: An admin change his password



### 6.2 Limitations & Exclusions

LI-1: Students cannot compare 2 houses or 2 rooms by its information

LI-2: Students cannot interact directly with the landlords via messaging in the system, they will have to make contact through phone or Facebook

LI-3: Students will not have a wish list to add their favorite houses into

LI-4: The system will not have the recommendation functionalities to recommend suitable houses to a student based on his history of views