**MINISTRY OF EDUCATION AND TRAINING**

**FPT UNIVERSITY**

Capstone Project Document

**Building a web-based application that manages activities of the maid service**

|  |  |
| --- | --- |
| **Group 6** | |
| **Group member** | Bùi Tiến Tuân - Leader - SE60824  Mạnh Quang Tuyến - Member - SE60890  Trương Hải Đăng - Member - SE60841 (Droped out)  Nguyễn Tấn Công - Member - SE60920 |
| **Supervisor** | Mr. Nguyễn Trọng Tài |
| **Ext. Supervisor** | N/A |
| **Capstone Project code** | MS-Website |

- Ho Chi Minh City, December 2014-

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# Table of Contents

[Table of Contents 4](#_Toc405794113)

[List of Figures 5](#_Toc405794114)

[Definitions, Acronyms, and Abbreviations 6](#_Toc405794115)

[1 Introduction 7](#_Toc405794116)

[1.1 Project Information 7](#_Toc405794117)

[1.2 Introduction 7](#_Toc405794118)

[1.3 Current Existence Method 7](#_Toc405794119)

[1.4 System Overview 7](#_Toc405794120)

[1.5 Role and Responsibility 7](#_Toc405794121)

[2 Software Project Management Plan 8](#_Toc405794122)

[2.1 Problem Definition 8](#_Toc405794123)

[2.1.1 Name of this Capstone Project 8](#_Toc405794124)

[2.1.2 Problem Abstract 8](#_Toc405794125)

[2.1.3 Project Overview 8](#_Toc405794126)

[2.2 Project organization 9](#_Toc405794127)

[2.2.1 Software Process Model 9](#_Toc405794128)

[3 Software Requirement Specification 10](#_Toc405794129)

[3.1 System Requirement Specification 10](#_Toc405794130)

[3.1.1 Functional Requirement 10](#_Toc405794131)

[3.2 Entity Relationship Diagram 33](#_Toc405794132)

[3.2.1 Diagram 33](#_Toc405794133)

[4 Software Design Description 34](#_Toc405794134)

[4.1 System Architectural Design 34](#_Toc405794135)

[4.2 Component Diagram 34](#_Toc405794136)

[4.3 Detailed Description of Components 35](#_Toc405794137)

[4.3.1 Class Diagram 35](#_Toc405794138)

[4.3.2 Sequence Diagram 36](#_Toc405794139)

[4.5 Database Design 41](#_Toc405794140)

[4.5.1 Physical Database Design 41](#_Toc405794141)

# List of Figures

[Figure 1: Waterfall model 9](#_Toc405794142)

[Figure 2: System Overview Use Case 11](#_Toc405794143)

[Figure 5: <Authenticated user > Search 12](#_Toc405794144)

[Figure 6: < Authenticated user >Advance Search 13](#_Toc405794145)

[Figure 7: <Authenticated user> Search by Skill 14](#_Toc405794146)

[Figure 9: <Webmaster> Add Staff 15](#_Toc405794147)

[Figure 10: <System> Suggest JobRequest 17](#_Toc405794148)

[Figure 13: <Customer> View JobRequest 19](#_Toc405794149)

[Figure 14: <Customer> Apply JobRequest 19](#_Toc405794150)

[Figure 18: <Staff, Maid Mediator> Manage Maid 21](#_Toc405794151)

[Figure 19: <Staff, Maid Mediator> Add Maid 21](#_Toc405794152)

[Figure 20: <Staff, MaidMediator> Post JobRequest 23](#_Toc405794153)

[Figure 21: <Staff> Manage JobRequest and Recruitment 25](#_Toc405794154)

[Figure 22: <Staff> Active JobRequest 25](#_Toc405794155)

[Figure 26: <Webmaster> Manage JobRequest Price 27](#_Toc405794156)

[Figure 27: <Webmaster> Manage JobRequest Price 28](#_Toc405794157)

[Figure 28: <Webmaster> Manage JobRequest Price 30](#_Toc405794158)

[Figure 29: Entity Relationship Diagram 33](#_Toc405794159)

[Figure 30: MVC Pattern 34](#_Toc405794160)

[Figure 31: Component Diagram 34](#_Toc405794161)

[Figure 32: Class Diagram 35](#_Toc405794162)

[Figure 34: <All User> Search 36](#_Toc405794163)

[Figure 35: <Customer> Apply Job Request 37](#_Toc405794164)

[Figure 37: <Customer> Extend Recruitment 38](#_Toc405794165)

[Figure 38: <Customer> Post Recruitment 38](#_Toc405794166)

[Figure 40: <Customer> Rate Job Request 39](#_Toc405794167)

[Figure 41: <Customer> Rate Job Request 39](#_Toc405794168)

[Figure 42: <Staff> Mark Approved Job Request 40](#_Toc405794169)

[Figure 45: <Staff, Maid Mediator> Post Job Request 40](#_Toc405794170)

[Figure 46: Physcial Database Diagram 41](#_Toc405794171)

# Definitions, Acronyms, and Abbreviations

|  |  |  |
| --- | --- | --- |
| **No.** | **Abbreviation & Acronym** | **Definition** |
| 1 | MS | Maid Service |
| 2 | OS | Operation System |
| 3 | Admin | Administrator |
| 4 | HTTP | Hyper Text Transfer Protocol |

# Introduction

## Project Information

* **Project name:** Maid Services
* **Project Code:** MS-Website
* **Product Type:** Web-based Application
* **Start Date:** September 9, 2014
* **End Date:** December 20, 2014

## Introduction

The main goal of MS Website is to help users to easily find suitable person for taking care of household chores as well as help maids to quickly find a suitable job.

## Current Existence Method

Currently, most of job centers are supplying maid service with many functions such as posting maid’s information, maid searching by criteria (expected salary, age, experiences …) but the customers can’t post their private requests and give rating, comment about the maid that they have recruited. Moreover, maid’s information is not detailed and complete. The system can’t match and suggest the maid to the customer, negotiation and signing the contract are time-consuming.

## System Overview

The system has two main targets:

* **Customer:** busy with works and want to find people who can take care of houseworks for them. Customer can post a recruitment with demanded skills and the system will automatically match that recruitment with suitable job requests. Customer can choose one of them to apply.
* **Maid:** has experience in doing houseworks and want to find a job but doesn’t have knownledge about IT. They can come to talk directly with staff to post a job request or ask a person with knownledge about IT to become a mediator. The mediator can post new job request but still has to pay staff directly to active the posted job request.

## Role and Responsibility

|  |  |  |
| --- | --- | --- |
| **Role and Responsibilities** | **Full name** | **E-mail** |
| Instructor | Nguyễn Trọng Tài | taint@fpt.edu.vn |
| Leader | Bùi Tiến Tuân | tuanbtse60824@fpt.edu.vn |
| Member | Mạnh Quang Tuyến | tuyenmqse60890@fpt.edu.vn |
| Member | Trương Hải Đăng (drop out) | dangthse60841@fpt.edu.vn |
| Member | Nguyễn Tấn Công | congntse60920@fpt.edu.vn |

# Software Project Management Plan

## Problem Definition

### Name of this Capstone Project

* The system is for maid and the people who are searching for maid.
* The language is Vietnamese.
* The end product includes: the website and documents involved with the system.

### Problem Abstract

Nowadays, the demand of playing sports for relaxing after work, studying...more and more decrease especially playing badminton sports. Moreover, there are not many websites supporting for badminton players, badminton court owners and badminton trainers to rent courts, manage courts, manage badminton classes…

This website system is developed and focus on target users are badminton sport fans who want to rent badminton courts for playing; bosses of badminton courts who want to provide for sport fan renting court services; badminton trainers who want to apply teaching jobs; trainees who want to join to badminton course to improve their abilities

### Project Overview

#### The Current System

There are have many website about work such as http://timviec.com, timviecnhanh.com, vietnamworks.com …. But they have some problem:

* **Advantages:** Provider many information about works in Vietnam.
* **Disadvantages:**
  + There is so much information.
  + There is no centralized information about Maid.

#### The Proposed System

Our site focuses on those who are busy with their works so they need to find maids to help them with household chores and the maids who are searching for jobs. Maids can quickly find job for themselves and it also makes it easy for people who are in need of finding maids to choose and recruit. With small amount of money, the website can connect those two together. The maids are people who don’t have much knowledge about IT, so our purpose is to create a website with ease of use and simple.

There are three main users whom the website interacts with including:

* **Maid representation:** Because of the lack of knowledge in IT, they can ask someone has knowledge to become their representation and register for them. Manage requested job, Search jobs, Apply job, View maid statistic.
* **Customer:** Manage recruitment, View customer statistic, Comment, Search maids, Rating, Apply maid.
* **Staff:** Can help maid to register and post info in place of them. Manage post time, Confirm request, Manage fee.

#### Boundaries of the System

* The system is for maid and the people who are searching for maid.
* The language is Vietnamese.
* The end product includes: the website and documents involved with the system.

#### Development Environment

##### Hardware requirements

**For Server**

|  |  |  |
| --- | --- | --- |
| Windows | Minimum Requirements | Recommended |
| Internet Connection | 512Kbs | 1Mbs |
| Operating System | Window 7 | Window 8 |
| Computer Processor | Intel® Core 2 Duo | Intel® Core(TM) i5 CPU , M 460 @ 2.53GHz |
| Computer Memory | 2GB RAM | 3GB or more |

##### Software requirements

* Microsoft Windows 7: Operating System.
* SQL Server 2008 R2: used for managing the database for system.
* StarUML 5.0: designing models and diagrams tools.
* Visual Studio 2012: used to implement website and web service.
* Google Code & TortoiseSVN: used for source control.

## Project organization

### Software Process Model

With the schedule of weekly reports for every stage, the software will be developed by using waterfall model it is very simple and require minimal resource for implementation. With waterfall model, developing process will include six main phases:

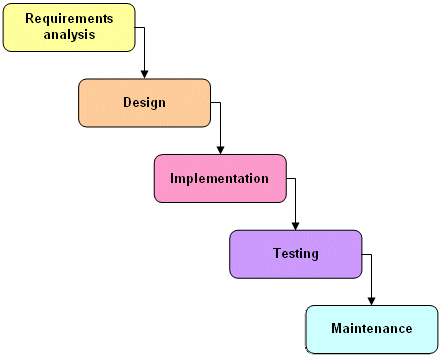


Figure 1: Waterfall model

* **Requirement analysis and software definition**: The first phase is also the most important phase of the process which may cause great effect to other phases. This phase includes gathering as much as possible requirements from customer, or other information source like World Wide Web, and producing a most detail and accurate software definition.
* **System design**: This phase is fundamental for implementation phase. Based on customer’s requirements to create logical modules, and definite their inter relations. Using algorithm and diagram to describe implementation of those modules.
* **Implementation**: This phase consists of actually constructing the product as per the design specification(s) developed in the previous step. Typically, this step is performed by a development team consisting of programmers, interface designers and other specialists, using tools such as compilers, debuggers, interpreters and media editors.
* Testing:
  + **System implementation and Unit testing**: Developing software modules follow detail designs, and doing unit testing for each module.
  + **Integration and System testing**: Testing output, performance in modules integrating process, and retests all functions of whole system.
  + **User acceptance testing**: A proper execution of all the preceding stages ensures an application as per the provided requirements and most importantly, it ensures a satisfied client.
* **System deployment and maintenance**: After testing completely, the software is handle over client, developing team will respond for maintenance of the system.

# Software Requirement Specification

## System Requirement Specification

### Functional Requirement

#### System Overview Use Case

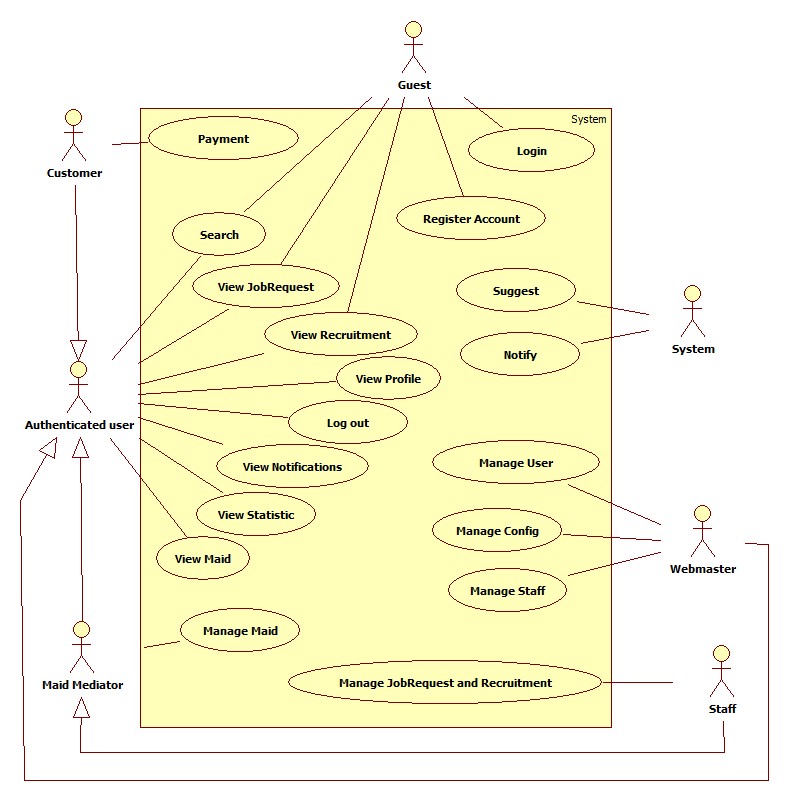


Figure 2: System Overview Use Case

#### List of Use Case

##### <Authenticated user > Search



Figure 3: <Authenticated user > Search

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Search | | | |
| **Author** | CongNT | | | |
| **Date** | 21/09/2014 | **Priority** | High | |
| **Actor:** Guest, Customer, Maid Mediator, Staff, Webmaster.  **Summary:** This use case allow guest can search information on the website  **Goal:** Guest can search information by search job  **Trigger:** Fill in “Tìm kiếm” textbox, then click on “Tìm kiếm” button  **Pre-conditions:**   * Page is loaded successfully * The search page will shown   **Post conditions:**   * Success: Search successfully, the system will shown search result * Failure: N/A   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Fill in “Tìm kiếm” text box 2. Click on “Tìm kiếm” button | 1. System redirect to search page for guest and show search results |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Relationships:**  **Business Rules:** All of role can search but search results are different in some roles:   * If user is a guest, search results are jobrequests and recruitments. * If user is a staff, customer or webmaster, search results are jobrequests and recruitments. * If user is a maid mediator, search results are jobrequests. | | | | |

##### C:\Users\USER\Desktop\AdvanceSearch.jpg< Authenticated user >Advance Search

Figure 4: < Authenticated user >Advance Search

###### C:\Users\USER\Desktop\SearchbySkill.jpg<Authenticated user> Search by Skill

Figure 5: <Authenticated user> Search by Skill

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC005 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Search by skill | | | |
| **Author** | CongNT | | | |
| **Date** | 21/09/2014 | **Priority** | High | |
| **Actor:** Guest, Customer, Maid Mediator, Staff, Webmaster.  **Summary:** This use case allow guest can search information by skill  **Goal:** Guest can search information by search skill  **Trigger:** Click on skill radio button on website  **Pre-conditions:**   * Page is loaded successfully * The search page will shown   **Post conditions:**   * Success: Search successfully, the system will shown search result * Failure: N/A   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Fill in “Tìm kiếm” text box 2. Click on “Tìm kiếm” button 3. Click on skill radio button of skill | 1. System redirect to search page 2. Show the result suitable for each button |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Relationships:** Search by skill is generated with AdvancedSearch and AdvancedSearch is extended to Search  **Business Rules:** All of role can search but search results are different in some roles:   * If user is a guest, search results are jobrequests and recruitments. * If user is a staff or webmaster, search results are jobrequests and recruitments. * If user is a maid mediator, search results are recruitment. * If user is a customer, search results are jobrequests. | | | | |

##### <Webmaster> Add Staff

Figure 6: <Webmaster> Add Staff 

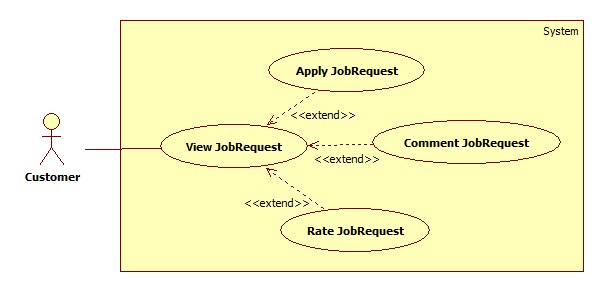
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC014 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Add staff | | | |
| **Author** | TuanBT | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** Webmaster  **Summary:** Webmaster add a user role Staff. A new staff only have username and password.  **Goal:** Make a new user directive.  **Trigger:**Webmater click on “Thêm nhân viên”  **Pre-conditions:**   * User must login with Admin role. * Register page will be shown   **Post conditions:**   * Success: Reload this page * Failure: Show message error   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Webmaster click “Thêm nhân viên” at his profile page.  3. Webmaster fill and click “Thêm nhân viên” button. | 2. The page show 3 input username, password, re-password.  4. Page is reload.  [Exception 1] [Exception 2] |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | [Exception 1]  1. Input “Tên đăng ký” is missing  [Exception 2]  1. Input “Mật khẩu” is missing or password not match with input “Nhập lại mật khẩu” | 2. Show error “Vui lòng nhập tên đăng nhập”  2. Show error “Mật khẩu không trùng khớp” |   **Relationships:** Add staff is generalization of manage staff  **Business Rules:**   * Only Web master can add staff. * After adding staff, new record is added to Staff table in database. | | | | |

##### <System> Suggest JobRequest

Figure 7: <System> Suggest JobRequest 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC021 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Suggest JobRequest | | | |
| **Author** | TuanBT | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** System  **Summary:** system automatically suggest JobRequest for customer when they post a recruitment on MS-Website.  **Goal:**  The use case will help MS-Website suggest JobRequest for customer when they post a recruitment.  **Trigger:**   * Click [Đăng yêu cầu tuyển việc] button. * Fill all data. * Click [Đăng yêu cầu] button.   **Pre-conditions:**   * Post an invalid recruitment.   **Post conditions:**   * Success: Suggested JobRequests list will appear. * Failure: Nothing is displayed at suggesting field.   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. User click on the [Đăng yêu cầu tuyển việc] button. | 1. Show suggested JobRequests list.   [Exception 1] |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Ation | System Response | | 1. System fail to load data | 1. Show suggested JobRequests list |   **Relationships:** N/A  **Business Rules:**   * The algorithms runs on only Recruitments with “Waiting” status and isActive is true to suggest suitable Job Requests. * Only 10 Job Requests in the same group with the Recruitment having “Waiting” status and isActive is true in database will be suggested. * Recommended list shows up 10 Job Requests and arranges them in order of pertinence (descending by distance to the center point of that group). | | | | |

##### <Customer> View JobRequest

Figure 8: <Customer> View JobRequest 

###### <Customer> Apply JobRequest

Figure 9: <Customer> Apply JobRequest 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC024 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Apply JobRequest | | | |
| **Author** | TuanBT | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** Customer  **Summary:** Customer use a them Recruitment have status “Waiting” to Apply a JobRequest have status “Waiting” too.  **Goal:**  Apply JobRequest.  **Trigger:** Click button “Thuê"  **Pre-conditions:**   * User must login with Customer role   **Post conditions:**   * Success: Reload page. Name of Customer show at status line. * Failure: Show error “Thuê thất bại”   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Customer click a JobRequest have status “Waiting”, then click “Thuê” button.  3. Choose a Recruitment from list Radio button. Then click “Đồng ý” button | 2. Show modal “Xin chọn một đơn tuyển việc”.  4. Show status “Đã được thuê”.  [Exception1] |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | |  |  |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | [Exception 1]  1. Customer click “Chấp nhận” from modal. | 2. Show error “Công việc đã được thuê bởi khách hàng khác” |   **Relationships:** Apply JobRequest is extend of View JobRequest  **Business Rules:**   * Only Job Request with “Waiting” status and isActive is True can be applied. * Only Recruitment with “Waiting” status and isActive is True can apply a Job Request. * When applying a random Job Request, customer must choose one of his/her posted Recruitments with “Waiting” status and isActive is true to apply. * After applying, the status of applied Job Request and chosen Recruitment change to “Applied” in database. System sends SMS and Notifications to revelant people. | | | | |

##### <Staff, Maid Mediator> Manage Maid

Figure 10: <Staff, Maid Mediator> Manage Maid

###### <Staff, Maid Mediator> Add Maid

Figure 11: <Staff, Maid Mediator> Add Maid

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC035 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Add maid | | | |
| **Author** | TuyenMQ | | | |
| **Date** | 21/09/2014 | **Priority** | High | |
| **Actor:** Staff, Maid Mediator  **Summary:** This use case allow maid mediator or staff to add maid for management.  **Goal:** Maid mediator orstaff can add maid  **Trigger:** User clicks button “Thêm người giúp việc” at the top of maids list in profile page  **Pre-conditions:**   * Page is loaded successfully * User login as maid mediator or staff successful   **Post conditions:**   * Success: Add maid successfully, new maid is added to database * Failure: Show error message   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Login as a maid mediator or staff 2. Click name link 3. Click “Thêm người giúp việc” button 4. Fill all the fields 5. Click “Hoàn tất thêm người giúp việc” button | 1. System redirects to home page 2. System redirects to personal profile page 3. System redirects to add maid page with following fields:  * Họ và tên [MaidName: textbox] * Kinh nghiệm [Experience: dropdownlist] * Số điện thoại [Phone: textbox] * Ngày sinh [BirthDate: textbox] * Giới tính [Gender: dropdownlist] * Biết tiếng [LanguageEnglish: checkbox, LanguageChina: checkbox, LanguageJapanese: checkbox, LanguageKorean: checkbox] * Nguyên quán [Hometown: dropdownlist] * Đang sống tại [Address: dropdownlist] * Kết hôn [Married: dropdownlist] * Giới thiệu bản thân [Description: textbox] * “Hoàn tất thêm người giúp việc” button.   [Exception 1]   1. System redirects to personal profile page |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | [Exception 1]   1. “Họ và tên” is empty 2. “Số điện thoại” is empty or not a numberic value 3. “Ngày sinh” is empty | 1. Show message “Vui lòng nhập tên người giúp việc” 2. Show message “Vui lòng nhập số” 3. Show message “Vui lòng chọn ngày sinh” |   **Relationships:** Is a generalization of Manage Maid  **Business Rules:**   * Only Staff and Maid Mediator can add maid to manage. * After adding, new record is created in Maid table in database. | | | | |

##### <Staff, MaidMediator> Post JobRequest

Figure 12: <Staff, MaidMediator> Post JobRequest

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC043 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Post JobRequest | | | |
| **Author** | TuyenMQ | | | |
| **Date** | 21/09/2014 | **Priority** | High | |
| **Actor:** Staff, Maid Mediator  **Summary:** This use case allow staff or maid mediator to post job request  **Goal:** Staff or maid mediator can post job request  **Trigger:** User clicks “Đăng yêu cầu tìm việc” link in personal profile page  **Pre-conditions:**   * Page is loaded successfully * User login as staff or maid mediator successful   **Post conditions:**   * Success: Post job request successfully, new job request and skill reference are added to database * Failure: Show error message   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Login as a staff or maid mediator 2. Click the name link 3. Click “Đăng yêu cầu công việc” link 4. Fill all the fields 5. Click “Đăng yêu cầu” button | 1. System redirects to homepage 2. System redirects to personal profile page 3. System redirect post jobrequest page with following fields:  * Đăng cho [MaidName: textbox] * Tiêu đề [Title: dropdownlist] * Các kỹ năng [SkillRefId: textbox] * Thời hạn đăng [PostTime: textbox] * “Đăng yêu cầu” button   [Exception 1]   1. System redirects to new job request’s detail page |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | [Exception 1]   1. “Đăng cho” is empty 2. “Tiêu đề” is empty 3. “Các kỹ năng” is empty | 1. Show message “Vui lòng chọn người giúp việc” 2. Show message “Vui lòng nhập tiêu đề” 3. Show message “Vui lòng chọn kĩ năng” |   **Relationships:** Is an extension of View Profile  **Business Rules:**   * Only Staff or Maid Mediator can post Job Request. * User must choose a maid who is under his/her management to post the Job Request for. * After posting, new record is created in Job Request table and SkillReference table in database, the Job Request has “Waiting” status and isActive is false. * If the Job Request is posted by Maid Mediator, the Maid Mediator or Maid must pay to Staff directly in order for Staff to activate it. After that, the Job Request’s isActive changes to True in database. | | | | |

##### <Staff> Manage JobRequest and Recruitment

Figure 13: <Staff> Manage JobRequest and Recruitment 

###### <Staff> Active JobRequest

Figure 14: <Staff> Active JobRequest 

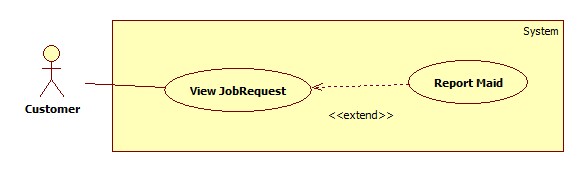
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC044 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Active JobRequest | | | |
| **Author** | CongNT | | | |
| **Date** | 21/09/2014 | **Priority** | High | |
| **Actor:** Staff  **Summary:** This use case allow staff to active job request to public it on website  **Goal:** Staff can allow job request to public on website  **Trigger:** User choose a job request then click “Chấp nhận” button  **Pre-conditions:**   * Page is loaded successfully * User login as staff successful   **Post conditions:**   * Success: Login successfully, the job request will be allowed to public on website * Failure:   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Login as a staff 2. Choose a job request, click “Kích hoạt” button 3. Click “Chấp nhận” button. | 1. System redirect to list of job request 2. System show a “Xác nhận kích hoạt” pop up. 3. Change IsActive(false) to IsActive(true) and save change to database |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. System fail to load data | 1. Show message “Hệ thống đang bảo trì” |   **Relationships:** Active JobRequest is extended to ManageJobRequest and Manage JobRequest is generated to Manage JobRequest and Recruitment.  **Business Rules:** User login as a staff. | | | | |

##### <Webmaster> Manage JobRequest Price

Figure 15: <Webmaster> Manage JobRequest Price

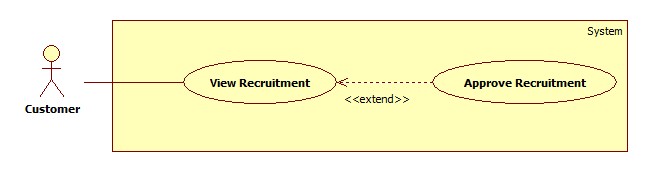
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC053 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Manage JobRequest Price | | | |
| **Author** | TuanBT | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** Webmaster  **Summary:** Change price when a new JobRequest post to MS-Website.  **Goal:**  Change value.  **Trigger:** Webmaster click “Quản lý cấu hình”  **Pre-conditions:**   * User must login with Admin role * Manage config page will be shown   **Post conditions:**   * Success: Reload page and change value. * Failure: Show error.   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Webmaster click “Quản lý cấu hình” menu, then fill input “Giá mới” | 2. Show notification “Cập nhập đơn giá cho yêu cầu công việc thành công.”  [Exception 1] |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | |  |  |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | | [Exception 1]  1. Fill input not a digit. | 2. Show error “Phải nhập số nguyên!” |   **Relationships:** Manage JobRequest Price is extend of Manage config.  **Business Rules:** Webmaster must enter a integer number. | | | | |

##### <Customer>Report Maid

Figure 16: <Webmaster> Manage JobRequest Price

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC055 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Report Maid | | | |
| **Author** | TuyenMQ | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** Customer  **Summary:** Report bad maid  **Goal:**  Report bad maid  **Trigger:** Customer click “Báo xấu” button  **Pre-conditions:**   * User must login with customer role * Manage config page will be shown   **Post conditions:**   * Success: Reload page and change value. * Failure: Show error.   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Login as a customer 2. Click name link 3. Click a job request in tab “Hoàn thành” 4. Click “Báo xấu” button | 1. System redirect home page 2. System redirect job request details page 3. System show pop ups confirm then redirects to job request page |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1.Click “Báo xấu” button  3.Click outside pop up | 2.Show pops up  4.Close pop up |   **Exceptions:**   |  |  | | --- | --- | | Actor Action | System Response | |  |  |   **Relationships:** Report Maid is extended to View Job Request  **Business Rules:**   * Only Customer can report a maid. * Customer can only report a maid on a Job Request with “Approved” status and that Job Request must be applied by that customer before. * After reporting, the reported maid’s name will be colored red in any page of the web site. * The reportDate in Maid table in database is updated with the current date. * After one week from that day, the report is cancelled, the reportDate is set to null and the maid name’s color is set to default. | | | | |

##### <Customer>Approve Recruitment

Figure 17: <Webmaster> Manage JobRequest Price

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | UC056 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Approve Recruitment | | | |
| **Author** | TuyenMQ | | | |
| **Date** | 24/09/2014 | **Priority** | High | |
| **Actor:** Customer  **Summary:** Approve recruitment  **Goal:**  Approve recruitment  **Trigger:** Customer click “Hoàn tất” button  **Pre-conditions:**   * User must login with customer role * Manage config page will be shown   **Post conditions:**   * Success: Reload page and change value. * Failure: Show error.   **Main Success Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1. Login as a customer 2. Click name link 3. Click a recruitment in tab “Đã nhận” 4. Click “Hoàn tất” button 5. Click “Chấp nhận” button | 1. System redirect home page 2. System redirect recruitment details page 3. Show pop up confirm 4. System redirect recruitment details page |   **Alternative Scenario:**   |  |  | | --- | --- | | Actor Action | System Response | | 1.Click “Báo xấu”  3.Click outside pop up | 2.Show pops up  4.Close pop up |   **Exceptions:fgh**   |  |  | | --- | --- | | Actor Action | System Response | | N/A | N/A |   **Relationships:** Report Maid is extended to View Job Request  **Business Rules:**   * Customer can only mark “Approve” his/her own Recruitments with “Applied” status. * The status of Recruitment changes to “Approve” in Recruitment table and isSaleOff is set to True in Customer table in database. * After approving a recruitment, the cost of next posting or extending a Recruitment is lowered by 10% (Only 1 time). After that, the value of isSaleOff is set to False again. | | | | |

## Entity Relationship Diagram

### Diagram

Figure 18: Entity Relationship Diagram

# 

# Software Design Description

## System Architectural Design

In MVC pattern, the functions of model, view, and controller are defined as in following figure.

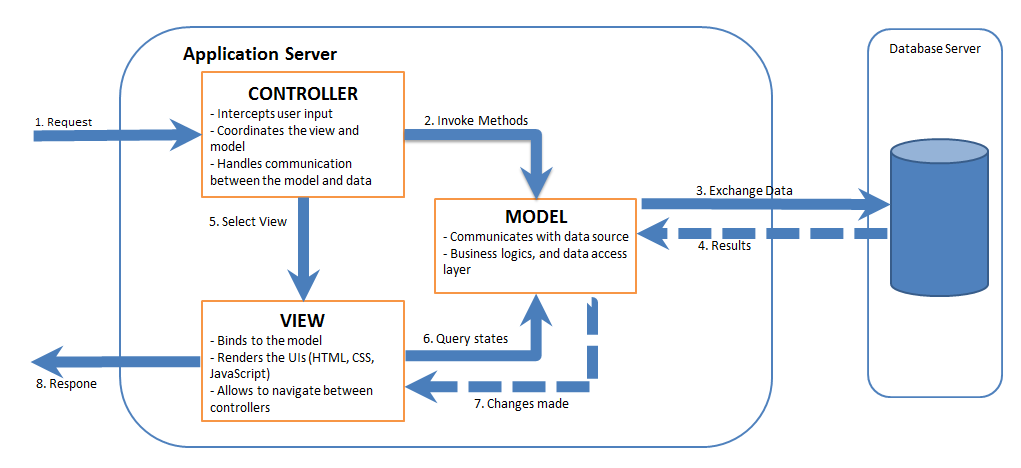


Figure 19: MVC Pattern

## Component Diagram

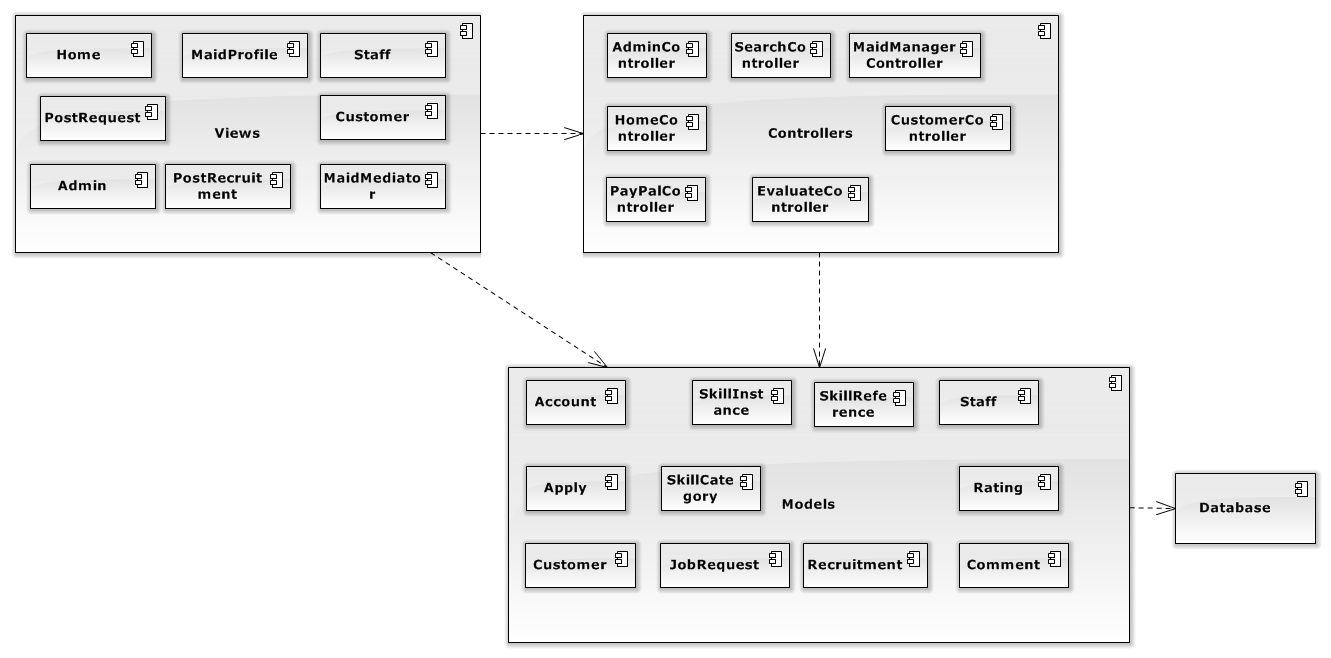


Figure 20: Component Diagram

## Detailed Description of Components

### Class Diagram

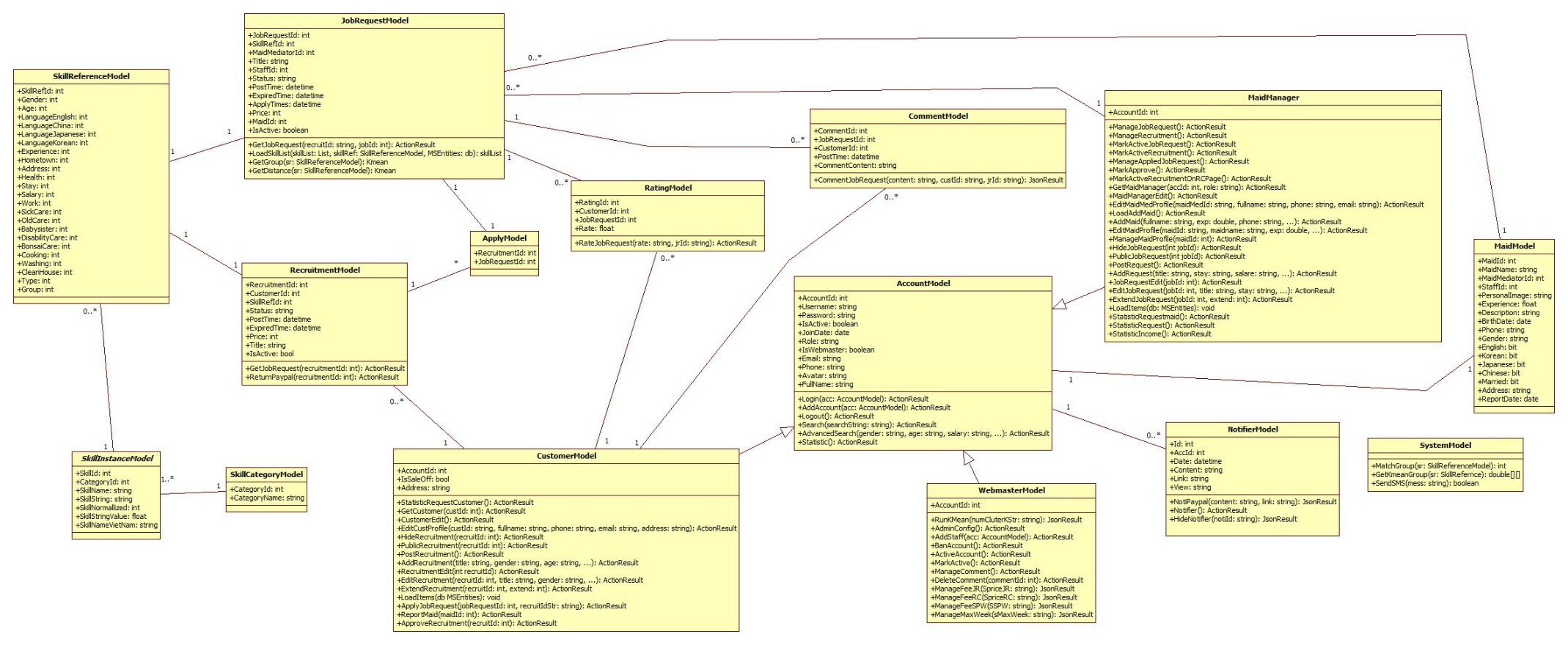


Figure 21: Class Diagram

### Sequence Diagram

#### All User Sequence Diagram

##### <All User> Search

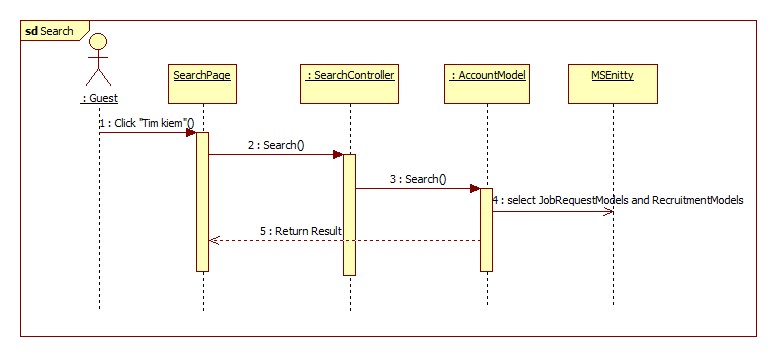


Figure 22: <All User> Search

#### Customer Sequence Diagram

##### <Customer> Apply Job Request

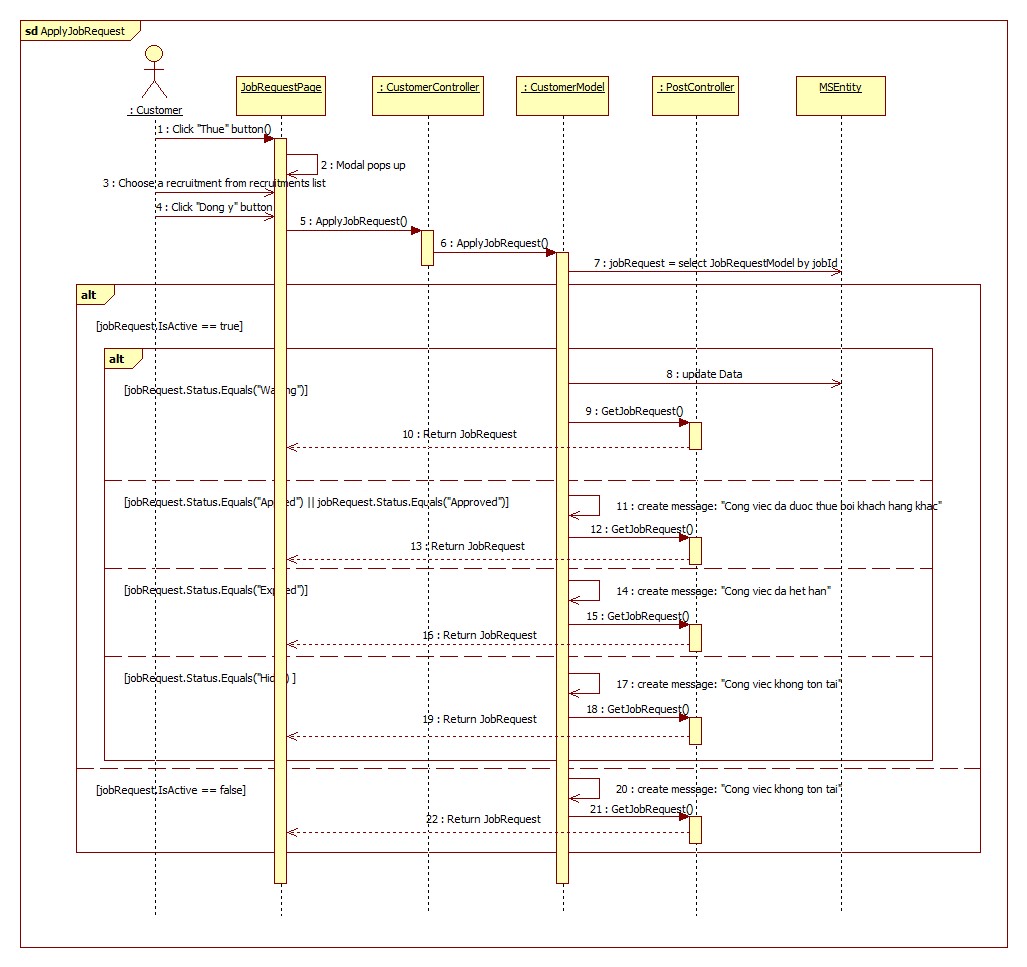


Figure 23: <Customer> Apply Job Request

##### <Customer> Extend Recruitment

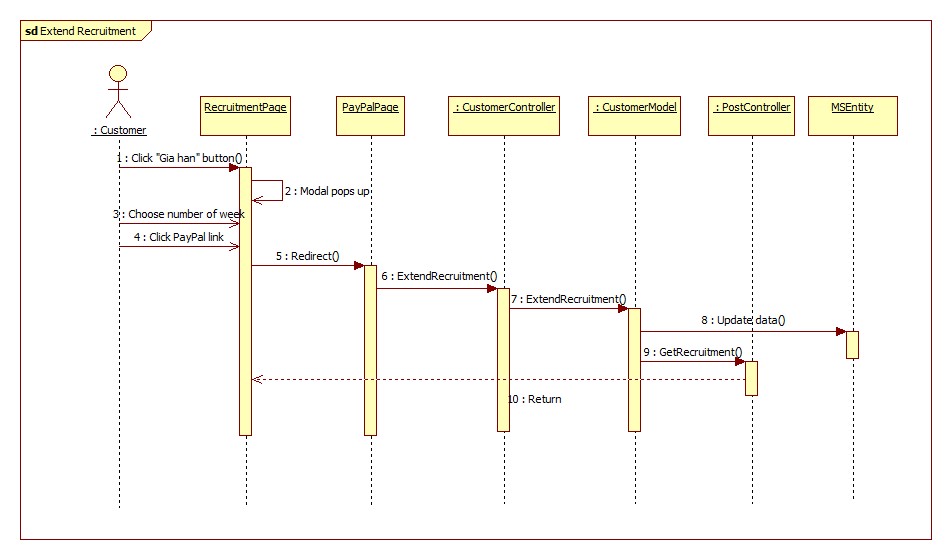


Figure 24: <Customer> Extend Recruitment

##### <Customer> Post Recruitment

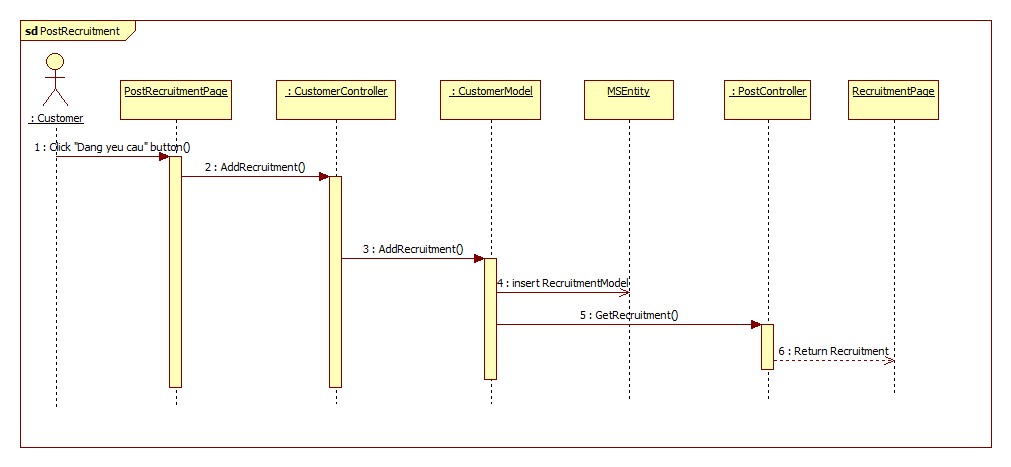


Figure 25: <Customer> Post Recruitment

##### <Customer> Report Maid

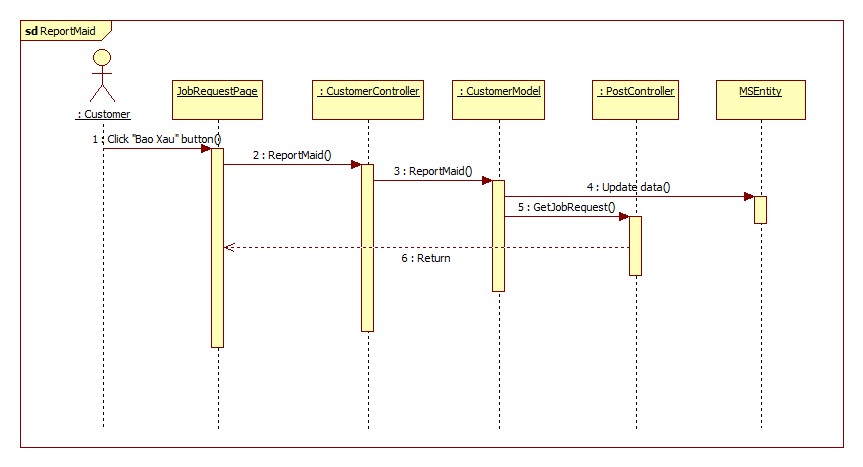


Figure 26: <Customer> Rate Job Request

##### <Customer> Approve Recruitment

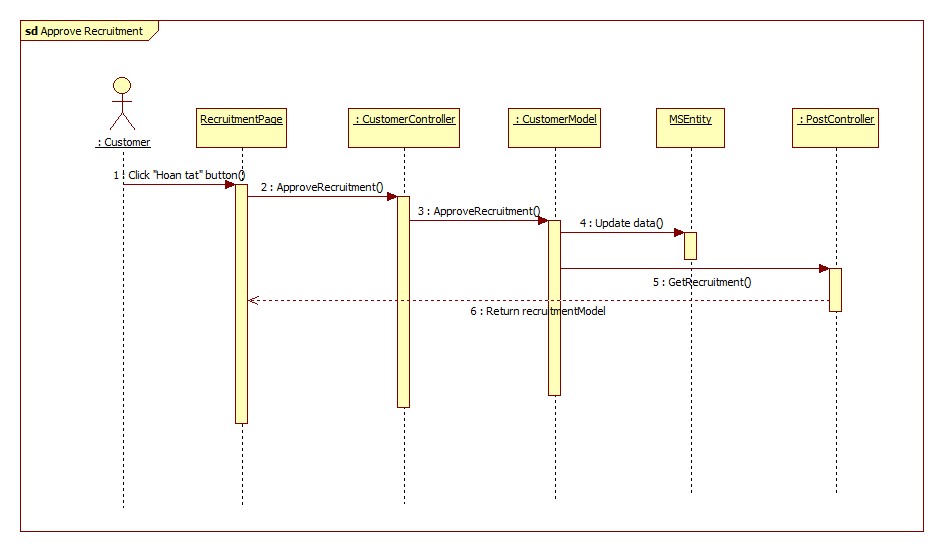


Figure 27: <Customer> Rate Job Request

#### Staff Sequence Diagram

##### <Staff> Mark Approved Job Request

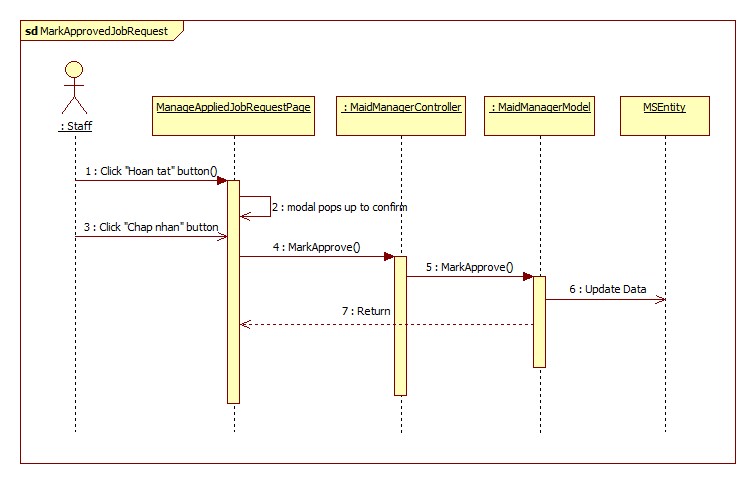


Figure 28: <Staff> Mark Approved Job Request

#### Staff, Maid Mediator Sequence Diagram

##### <Staff, Maid Mediator> Post Job Request

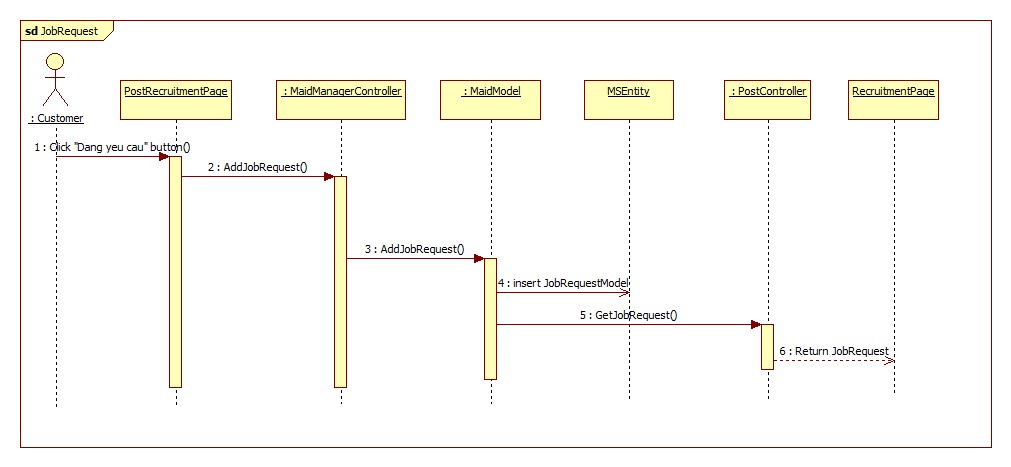


Figure 29: <Staff, Maid Mediator> Post Job Request

## 

## Database Design

### Physical Database Design

Figure 30: Physcial Database Diagram