

**Quotation Management System**

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# Introduction

## Background

Nowadays, the Internet is increasingly developing, the amount of people using the Internet grow rapidly, people’s life becomes more modern, complex, the need for going shopping also rises. Everyone wants to look for the good products and services with cheapest prices when going shopping. The most limitation in shopping process is that the consumers must go to each store to look for which products and services they need, then decide whether to buy or not depend on the prices. Besides that, the consumers can make a phone call to the store to ask for the prices. This process really wastes times, efforts, and money.

Understanding this circumstance, Quotations Management System is created to bring the best products with the competitive prices to consumers without going anywhere or making a phone call. The consumers just sit at home, or in office, browse the Internet, make a request on our website, and they will get what they want.

## Project objective

The purpose of Quotations Management System is to create a new system that connect buyer and supplier, eliminate the hassles when using traditional method such as phone contact or direct meeting.

The system will help the consumers to buy products with reasonable prices by providing the consumers with the list including the famous suppliers.

Quotations Management System allows the users to login with their credential to request for quotations, evaluate it and accept the appropriate quote, then they can order or create a contract base on that quote.

It also provide functions to allow many companies, suppliers to register the account for their own company on our website to bring their products to a wider range of customers. Suppliers can store their product catalogue on our site to utilize functions like product suggestion, revenue report and sale prediction… It also allows sale manager to manage the staff, dispatches customer’s request to them.

Website owner can manage supplier subscription fees, as well as view system wide reports.

## Scope definition

The main scope of the Quotations Management System is to provide an efficient and easy-to-use web-based application that simplify the process of B2B supply chain.

It manages requests, quotes, users, allocates suitable roles for each kind of users. It also has functions for calculating service fees, and viewing report for summarizing at the end of month.

The system should work with any kind of supplier including service providers as well as product suppliers. The system should provide to supplier ability to create their own product template or use system wide product template for their products/services.

## Main project success criteria

The system must meet all written specifications, be thoroughly tested and completed on time.

## Approach

Develop a web-based system to improve the ability to run on any internet-connected computer, so target a wide range of customer without worrying about hardware or software requirement as well as money spend on upgrading current system.

## Group function

There are 4 main functions in the system:

* **Quotes request and response management:** buyer can create a quote request and send it to suppliers of their choice. Suppliers receive the request and create a quote to response to buyer. The system can help supplier in this stage by suggesting some product that may satisfy buyer conditions.
* **Catalog management**: provide functions for company administrator to manage their product catalog.
* **User management**: provide website administrator functions to manage supplier’s account, and provide supplier’s manager function to manage their staffs.
* **Financial management**: reporting and relate function to help website administrator, supplier’s manager to manage subscription fee and revenue related problems.

## Project program and management

The Quotation Management System (QMS Project a Capstone project of FPT University in 2013, and be divided in to 3 main phrases, takes place from May 2013 to August 2013.

The sponsor of the project is Mr. Nguyễn Trọng Tài.

QMS will be performed as a formal software engineering project from the start of the project. Every document will be created as of the need of the project and request from users and sponsors following the templates of FPT University.

# Software Project Management Plan

## Problem Definition

### Name of this Capstone Project

**Project full name:** Quotation Management System

**Project code:** QMS

**Vietnamese name:** Hệ thống quản lý báo giá sản phẩm

### Problem Abstract

Nowadays, the Internet is increasingly developing, the amount of people using the Internet grow rapidly, people’s life becomes more modern, complex, the need for going shopping also rises. Everyone wants to look for the good products and services with cheapest prices when going shopping. The most limitation in shopping process is that the consumers must go to each store to look for which products and services they need, then decide whether to buy or not depend on the prices. Besides that, the consumers can make a phone call to the store to ask for the prices. This process really wastes times, efforts, and money.

Understanding this circumstance, Quotations Management System is created to bring the best products with the competitive prices to consumers without going anywhere or making a phone call. The consumers just sit at home, or in office, browse the Internet, make a request on our website, and they will get what they want.

### Project Overview

#### The Current System

There are no similar system in Vietnam. The traditional way to get a quotation in Vietnam is by phone call, email or direct meeting. Company need to find and contact each supplier to get a quotation. This introduces some limitations:

* Company need to find suppliers themselves. There are no central place to get a list of supplier, therefore it’s hard to find good supplier.
* After finding suppliers, company need to contact supplier by phone, email or direct meeting. This way they may not get a competitive price because suppliers are not competing with other suppliers.

#### The Proposed System

The purpose of Quotations Management System is to create a new system that connect buyer and supplier, eliminate the hassles when using traditional method such as phone contact or direct meeting.

The system will help the consumers to buy products with reasonable prices by providing the consumers with the list including the famous suppliers.

Quotations Management System allows the users to login with their credential to request for quotations, evaluate it and accept the appropriate quote, then they can order or create a contract base on that quote.

It also provide functions to allow many companies, suppliers to register the account for their own company on our website to bring their products to a wider range of customers. Suppliers can store their product catalogue on our site to utilize functions like product suggestion, revenue report and sale prediction… It also allows sale manager to manage the staff, dispatches customer’s request to them.

#### Boundaries of the System

The main scope of the Quotations Management System is to provide an efficient and easy-to-use web-based application that simplify the process of B2B supply chain.

It manages requests, quotes, users, allocates suitable roles for each kind of users. It also has functions for calculating service fees, and viewing report for summarizing at the end of month.

The system should work with any kind of supplier including service providers as well as product suppliers. The system should provide to supplier ability to create their own product template or use system wide product template for their products/services.

#### Development Environment

Below are list of hardware and software requirement for development environment

##### Hardware requirement

A computer with hardware that capable of running Windows XP or later operating system plus 1GB of RAM for addition software.

The recommend hardware configuration is a multicore system, 4GB RAM running Windows 7.

##### Software requirement

* Operating System: Windows XP Professional SP3 or later. Windows 7 recommended.

## Project organization

### Software Process Model

With the schedule of weekly reports for every stage, the software will be developed by using waterfall model which is very simple and require minimal resources for implementation. With waterfall model, developing process will include five 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 requirements from customer, or from other source like the Internet, and producing the 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.
    - 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.
    - System deployment and maintenance: After testing completely, the software is handle over client, developing team will respond for maintenance of the system.

### Roles and Responsibilities

|  |  |  |
| --- | --- | --- |
| Name | Role | Responsibilities |
| Nguyễn Trọng Tài | Supervisor | * Specify project requirement * Give advice on business and technical problem * Control project development process |
| Phan Văn Bình | Team Leader | * Manage project plan and progress * Support team members * Build up team member morale |
| Dao Quoc Toan | Team Member | Developing, testing, customer support |
| Thân Trọng Phi | Team Member | Developing, testing, customer support |
| Nguyễn Trung Thuận | Team Member | Developing, testing, customer support |

### Tools and Techniques

#### Tools used in project

* Database server: MySQL Server 5.6
* Database modeling: MySQL Workbench
* Web server: Tomcat 7, Glassfish 3.1.2
* IDE: Netbeans IDE 7.3
* Source control management: hosted on BitBucket Git private repository
* UML modeling: StarUML and Microsoft Visio
* Others: We use Microsoft SkyDrive combine with Microsoft Office 2013 to store document for better collaborating between team members.

#### Technical skill required

* Master tools mentioned in the previous section.
* Programming language: Java, JavaScript, SQL
* Technique: HTML, CSS, AJAX, XML
* Other: Hibernate ORM framework, Java EE Web

## Project management plan

### Tasks

|  |  |
| --- | --- |
| Researching | |
| Description | * System research: discuss with supervisor on important aspects of the system being built. Evaluate the feasibility to implement it on time. * Technology research: study technologies being used in the project: EJB, Hibernate, SpringMVC, Kendo UI, and Data mining in SQL Server… |
| Deliverables | * Project Introduction Report * Training document for the above technologies. |
| Resources Needed | 7 man-day |
| Dependencies and Constraints | Depend on raw requirements from customer |
| Risks | Project may not be feasible for developing because of strange requirements or lack of technologies |
| Planning | |
| Description | * Define project organization: software process, role and responsibility as well as technology being used. * Define project management plan with task list. |
| Deliverables | Project Management Plan document |
| Resources Needed | 8 man-day |
| Dependencies and Constraints | * Depend on project introduction report. * Scheduled tasks must be within 15 weeks. |
| Risks | * Planned task may not balance, making pressure on member to keep up with schedule * Team may not be able to keep works in schedule due to lack of understanding about project requirement or technology. * The schedule may need to change due to changes in later phases. |
| Create Software Requirement Specification document | |
| Description | * Gathering requirement from customer. * Create all necessary document to describe requirement |
| Deliverables | Software Requirement Specification (SRS) Document |
| Resources Needed | 36 man-day |
| Dependencies and Constraints | * Depend on customer requirement * Must follow template from FPT University |
| Risks | * Difficulty to understand requirement * Misunderstanding requirement may lead to failure in later phase * Output document may not in correct template |
| Design Database model | |
| Description | Create database model |
| Deliverables | * Database model diagram in 3 form:   + Conceptual   + Logical   + Physical * Database script |
| Resources Needed | 4 man-day |
| Dependencies and Constraints | * Finish creating SRS document * The database model need to satisfy both space and performance constraints |
| Risks | * The SRS document may not describe system attribute correctly, which lead to wrong database design * The database model may need to change in the future |
| Design User Interface | |
| Description | * Design all pages in the system |
| Deliverables | Website prototype including:   * HTML pages * CSS, JavaScript files |
| Resources Needed | 8 man-day |
| Dependencies and Constraints | * Finish creating SRS document * User interface must be friendly, easy to use and easy for developer to implement |
| Risks | * User interface may not satisfy constrains specified |
| Creating Software Design Description | |
| Description | * Design system architecture * Describe system components |
| Deliverables | Software Design Description document |
| Resources Needed | 50 man-day |
| Dependencies and Constraints | * Finish creating SRS document * SDD document must follow template of FPT University |
| Risks | * SRS document may not good enough that lead to misunderstanding of requirements * Design document may not good enough which lead to problems in later phases such as lack of details, hard to implement or maintenance |
| System implementation and Unit testing | |
| Description | Implement system as describe in above document and create test unit to ensure coding quality |
| Deliverables | * Source code * Javadocs * Issue management document |
| Resources Needed | 90 man-day |
| Dependencies and Constraints | * Depend on project plan and SDD document * Must follow schedule in project plan * Deliverable source code must follow project coding convention * All issues need to be logged for monitoring |
| Risks | * Resource may failed to keep their task in schedule * Due to lack of experience in unit testing, this task may need longer time than expected * Lack of technology skill may lead to longer training time |
| Integration and System Testing | |
| Description | Integrate system component and execute system testing to ensure the system satisfy requirements |
| Deliverables | * Test case document * Issue management document * System source code and deployable software |
| Resources Needed | 20 man-day |
| Dependencies and Constraints | Coding and unit testing must be finished |
| Risks | * May failed to integrate system component * Final system may not meet user requirement |
| Develop User Manual | |
| Description | Create user manual document to describe how to deploy, configure and operate the system |
| Deliverables | User manual document |
| Resources Needed | 20 man-day |
| Dependencies and Constraints | * Depend on SDD document and deployable software * Resource must understand workflow of system and describe in a meaningful way to user |
| Risks | Resource may misunderstand system workflow which lead to incorrect direction when describe system workflow |

### Task Sheet: Assignments and Timetable

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task name | Duration | Start date | End date | | Resource |
| Researching | 3 days | 13/05/2013 | 15/05/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| Planning | 2 days | 16/05/2013 | 17/05/2013 | BinhPV | |
| Create Software Requirement Specification document | 9 days | 20/05/201 | 30/05/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| Design Database model | 1 day | 31/05/2013 | 31/05/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| Design User Interface | 4 days | 03/06/2013 | 06/06/2013 | BinhPV, ToanDQ | |
| Creating Software Design Description | 12 days | 07/06/2013 | 24/06/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| System implementation and Unit testing | 22 days | 25/06/2013 | 24/07/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| Integration and System Testing | 5 days | 25/07/2013 | 31/07/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |
| Develop User Manual | 5 days | 03/08/2013 | 07/08/2013 | BinhPV, ToanDQ, PhiTT, ThuanNT | |

### All Meeting Minute

## Coding Convention

Please refer to Java coding convention from:

<http://www.oracle.com/technetwork/java/javase/documentation/codeconvtoc-136057.html>

# Software Requirements Specifications

## User Requirement Specification

Table 1: Actor in the system.

|  |  |  |
| --- | --- | --- |
| Actor | Abbreviation | Description |
| Guest | GU | Guest is the role of a user when they are not logged in to the system. |
| User | US | User is the general role includes other roles listed below. |
| Website Administrator | WA | Administrator of the whole system. Manages supplier’s account, subscription fees and perform system-wide operations. |
| Buyer | BU | User registered as this role to have ability to create request to suppliers. |
| Manager | MG | Manager of supplier. This role is the top-level role in a supplier and manages other roles. |
| Company Administrator | CA | Company administrator manages company’s product catalog. |
| Staff | ST | Staff receive request assigned from a manager and create a quote for that request. |

### Buyer requirements

* Buyer can create a quotation request and send it to specified suppliers or supplier in a chosen category.
* Buyer can view request history.
* Buyer can evaluate each product in a quote, include accept/reject and leave comment on each product.
* Buyer can leave comment for a quote, and accept it as need.

### Company Staff requirements

* Company staff receives request assigned from Company Manager and create a quote for that request.
* When create a quote, staff can manually choose products from catalog, or system will suggest suitable products, if possible.
* When buyer accept a quote, relevant staff will receive notification and can create a contract base on that quote.

### Company Manager requirements

* Company Manager can manage staff account of their company, includes create staff account, delete or update staff account.
* When a request from buyer send to supplier, manager is the person receive that request and dispatch it to an appropriate staff.
* Manager can view report on company revenue, prediction on future revenue.

### Company Administrator requirements

* Company Administrator is the catalog manager, therefore they should be able to manage product, category and template.
* Manage product includes add new product, modify/delete existing product and import product from existing catalog (optional).
* Manage category includes add/edit/delete category.
* Manage template includes create a new template and submit it to global template store so other suppliers can reuse them. This help staff use suggestion feature, which only work when supplier use the same attribute set as buyer used when describing their request.
* When manage templates, company administrator can edit it to suit their needs, including disable (not completely remove) unneeded attributes or add new attribute to an existing template.

### Website Administrator requirements

* Website administrator is the highest role in the system.
* They can manage supplier’s account, include activate pending approval accounts,
* They can view system-wide report, like subscription going to expire, revenue report of the whole website.

## System Requirement Specification (Specific Requirements)

### External Interface Requirements

#### User Interfaces

User can interact with the system and other users through the user interface. Below are screens available for users:

|  |  |
| --- | --- |
| Screen | Description |
| Register | Allow guest to register as either a buyer or a supplier |
| Login | Allow guest to login to the system |
| View request | Allow buyer to view their request |
| Create request | Allow Buyer to create a new request |
| Request detail | Allow Buyer to view details of a request, and evaluate quotes for that request |
| View request list | Allow Manager to view request sent to their company, and assign these request to staffs |
| Add Staff | Allow manager to add new staff |
| Edit Staff information | Allow manager to edit information of a staff |
| Company Report | Allow manager to view report of their company |
| View assigned request | Allow staff to view request assigned by their manager |
| View request detail | Allow staff to view detail of a request |
| Create quote | Allow staff to create a quote to response to a request |
| Edit quote | Allow staff to update quote information to satisfy buyer requirements |
| Award contract | Allow staff to create a contract base on a quote |
| View Catalogue | Allow company administrator to view all product in their catalogue |
| Add new product | Allow company administrator to add a product into their catalogue |
| Edit product | Allow company administrator to edit product information |
| View all category | Allow company administrator to view all category in the catalogue |
| Add category | Allow company administrator to add a new category |
| Edit category | Allow company administrator to edit category information |
| View all template | Allow company administrator to view all template they used or created |
| Add new template | Allow company administrator to create a new template |
| Edit template | Allow company administrator to edit a template |
| Dashboard | The homepage for website administrator to view general information of the system |
| Supplier Management | Allow website administrator to view supplier account, includes activate/deactivate supplier account |
| System report | Allow website administrator to view system report, and print them if need |

#### Hardware Interfaces

* N/A

#### Software Interfaces

* N/A

#### Communications Protocol

* N/A

### System Features

#### Guest

##### Register



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | GU002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Register | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 21/05/2013 | **Priority** | High | |
| **Actor:** Guest  **Summary:** This use case describes how to create new account.  **Goal:** Create account for buyer and customer.  **Triggers***:* When Guest click on link “**Tạo tài khoản mới**” link.  **Preconditions:** N/A  **Post-Conditions:**   * Success: Guest can register an account successfully. System will transfer to user Login page. * Fail: System will transfer to error page or still at current page.   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Unauthenticated user access the system. 2. Click on “**Tạo tài khoản mới**” link. | System Response:   1. Show “**Đăng nhập**” page. 2. Show popup “**Hình thức tạo tài khoản**”. |   **Alternative Scenario 1:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Select “**Tài khoản khách hàng**” and click “**Tiếp tục**” button. 2. Enter information into all field and click on “**Tạo tài khoản**” button. | 1. Show “**Tạo tài khoản khách hàng**” page with:  * Họ: textbox (min length 2, max length 6) * Tên: textbox (min length 2, max length 6) * Tên người dùng: textbox (min length 6, max length 20) * Mật khẩu: textbox (min length 6, max length 20) * Nhập lại mật khẩu: textbox (matching with “Mật khẩu”) * Điện thoại: textbox (max length 11) * Email: textbox (regular expression ^[\_a-z0-9-]+(\.[\_a-z0-9-]+)[\*@[a-z0-9-]+(\.[a-z0-9-]+)\*(\.[a-z]{2,4})$))](mailto:*@[a-z0-9-]+(\.%5ba-z0-9-%5d+)*(\.%5ba-z%5d%7b2,4%7d)$))) * Địa chỉ: Số nhà (textbox min length 10, max length 50), Thành phố (dropdown list 64 city/province of Vietnam) * Công ty: textbox (min length 10, max length 100) * Captcha: captcha control, includes:   + Captcha: image  + Captcha confirm: textbox   * Tạo tài khoản: button * Hủy: button  1. Show message “**Tạo tài khoản thành công**” and redirect to “**Buyer**” homepage. [Exception 1,2,3,4,5,6,7,8,9,10,11,12] |   **Alternative Scenario 2:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Check on “**Tạo** t**ài khoản nhà cung cấp**” and click “**Tiếp tục**” button. | 1. Show “**Tạo tài khoản người bán**” page with:  * Tên công ty: textbox (min length 10, max length 100) * Tên tài khoản: textbox (min length 6, max length 20) * Mật khẩu: textbox (min length 6, max length 20) * Nhập lại mật khẩu: textbox (matching with “Mật khẩu”) * Điện thoại: textbox (max length 11) * Email: textbox (regular exception ^[\_a-z0-9-]+(\.[\_a-z0-9-]+)[\*@[a-z0-9-]+(\.[a-z0-9-]+)\*(\.[a-z]{2,4})$))](mailto:*@[a-z0-9-]+(\.%5ba-z0-9-%5d+)*(\.%5ba-z%5d%7b2,4%7d)$))) * Địa chỉ: Số nhà (textbox min length 1, max length 40), Thành phố (dropdown list 64 city/province of Vietnam) * Thời hạn: dropdown list (require) * Hình thức thanh toán: radio button (require) * Captcha: captcha control, includes:   + Captcha: image  + Captcha confirm: textbox   * Tiếp tục: button * Hủy: button |   **Alternative Scenario 2.1:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Chooses “**Trực tiếp**” in “**Hình thức thanh toán**” radio button and click on “Tiếp tục” button. | 1. Redirect to “**Đăng ký thành công**” page.   [Exception: 13,14,15,16,17,18,19,20,21,22,  23] |   **Alternative Scenario 2.2:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Chooses “**Qua ngân hàng**” in “**Hình thức thanh toán**” radio button and click on “**tiếp tục**” button.      1. User clicks on any bank, and clicks on “**Tiếp tục**” button. | 1. Show list of banks supported. 2. Redirect to checkout page of the selected bank. |   **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Họ**” length is not in range [2, 6]. Display error message “**Họ phải từ 2 đến 6 kí tự**” | | 2 | “**Tên**” length is not in range [2, 6]. Display error message “**Tên phải từ 2 đến 6 kí tự**” | | 3 | “**Tên người dùng**” has exist in database. Display error message “**Tên người dùng đã tồn tại**” | | 4 | “**Tên người dùng**” length is not in range [6, 20]. Display error message “**Tên người dùng phải từ 6 đến 20 kí tự**” | | 5 | “**Mật khẩu**” length is not in range [6, 20]. Display error message “**Mật khẩu phải từ 6 đến 20 kí tự**” | | 6 | “**Nhập lại mật khẩu**” different with “Mật khẩu”. Display error message “**Mật khẩu không khớp**” | | 7 | “**Điện thoại**” is incorrect. Display error message “**Số điện thoại không đúng**” | | 8 | “**Email**” is invalid. Display error message “**Email không hợp lệ**” | | 9 | “**Số nhà**” length is not in range [10, 50]. Display error message “**Số nhà phải từ 10 đến 50 kí tự**” | | 10 | “**Thành phố**” has not selected. Display error message “**Vui lòng chọn thành phố**” | | 11 | “**Công ty**” length is not in range [10, 100]. Display error message “**Tên công ty phải từ 10 đến 100 kí tự**” | | 12 | “**Captcha**” is invalid. Display error message ”**Mã xác thực không đúng**” | | 13 | “**Tên công ty**” length is not in range [10, 100]. Display error message “**Tên công ty phải từ 10 đến 100 kí tự**” | | 14 | “**Tên tài khoản**” has exist in database. Display error message “**Tài khoản này đã tồn tại**” | | 15 | “**Tên tài khoản**” length is not in range [6, 20]. Display error message “**Tên tài khoản phải từ 6 đến 20 kí tự**” | | 16 | “**Mật khẩu**” length is not in range [6, 20]. Display error message “**Mật khẩu phải từ 6 đến 12 kí tự**” | | 17 | “**Nhập lại mật khẩu**” is different with “**Mật khẩu**”. Display error message “**Nhập lại mật khẩu sai**” | | 18 | “**Điện thoại**” is incorrect. Display error message “**Số điện thoại không đúng**” | | 19 | “**Email**” is invalid. Display error message “**Email không hợp lệ**” | | 20 | “**Số nhà**” length is not in range [10, 50]. Display error message “**Số nhà phải từ 10 đến 50 kí tự**” | | 21 | “**Thành phố**” has not selected. Display error message “**Hãy chọn thành phố**” | | 22 | “**Thời hạn**” is not selected. Display error message “**Hãy chọn thời hạn bạn muốn đăng kí**” | | 23 | “**Hình thức thanh toán**” is not selected. Display error message “**Hãy chon hình thức thanh toán**” | | 24 | “**Captcha**” is invalid. Display error message ”**Mã xác thực không đúng**” |   .  **Relationships:** N/A  **Business Rules:**   * User must enter data to all required fields and solve all input errors before submitting. * Each account is distinguished from other by username, also applied to email address. | | | | |

##### Login



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | GU001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Login | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 21/05/2013 | **Priority** | High | |
| **Actor:** Guest  **Summary:** This use case describes how to login into system.  **Goal:** Guest will be able to login to the system as a specific role.  **Triggers***:* When guest navigates to any page in the system.  **Preconditions:** N/A  **Post-Conditions:** A session must be created.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Unauthenticated user access the system. 2. Filled up all fields and click on “**Đăng nhập**” button. | System Response:   1. Show “**Đăng nhập**” page with:  * “Tên tài khoản” textbox * “Mật khẩu” password textbox * “Đăng nhập” button  1. Show “**Home Page**” for each role user login. [Exception 1,2] | |  |  |   **Alternative Scenario :** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Tên tài khoản**” or “**Mật khẩu**” is incorrect, the system will show error message: “**Sai tên hoặc mật khẩu, vui lòng kiểm tra lại!**” | | 2 | “**Tên tài khoản**” or “**Mật khẩu**” is empty, the system will show error message: “**Vui lòng điền tên hoặc mật khẩu!**” |   **Relationships:** N/A  **Business Rules:**   * User must enter correct credential to login to the system. | | | | |

##### Logout



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | US001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Logout | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** User  **Summary:** This use case describes how user signs out of the system.  **Goal:** Sign out of the system.  **Triggers***:* When User clicks on “**Đăng xuất**” link.  **Preconditions:** User must login with a specific role.  **Post-Conditions:** User signs out of the system successfully (i.e. session must be cleared.)  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Clicks on “**Đăng xuất**” link. | System Response:   1. Clear session, then redirect to “**Đăng nhập**” page. |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

#### Buyer

##### View All Requests



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View All Requests | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 27/05/2013 | **Priority** | High | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer views their requests.  **Goal:** Buyer can view requests.  **Triggers***:* When Buyer logins as **“Buyer”**.  **Preconditions:** User must login as **“Buyer”**.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as **“Buyer”**. | System Response:   1. List all user’s requests on the homepage. |   **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Create Request



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Create Request | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 21/05/2013 | **Priority** | High | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer create a request.  **Goal:** Allow Buyer to create a request.  **Triggers***:* When Buyer clicks on the **“Tạo yêu cầu”** button.  **Preconditions:** User must login as “Buyer” (i.e. a session has been created).  **Post-Conditions:** Request information will be stored.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login and clicks on **“Tạo Yêu Cầu”**. 2. [Alternative Scenario 1,2] | System Response:   1. Popup **“Tạo Yêu Cầu”** form. | | 1. Click **“Tiếp theo”** to move on the next step. [Alternative Scenario 3] |  | |  | 1. Show **“Xem lại yêu cầu”** screen. | | 1. Click on **“Hoàn Tất”** button. [Alternative Scenario 3] | 1. The request will be created and stored into database. |   **Alternative Scenario 1:**   |  |  | | --- | --- | | Actors action:   1. Choose **“Yêu cầu nhanh”** (Main Scenario, step 3). | System Response:   1. **“Tạo Yêu Cầu”** form will be replaced by **“Yêu cầu nhanh”** form. | | 1. Fill up **“Tên sản phẩm”** text box and **“Chi tiết”** text area. [Exception 1] |  |   **Alternative Scenario 2:**   |  |  | | --- | --- | | Actors action:   1. Choose **“Yêu cầu chi tiết”** (Main Scenario, step 3). | System Response:   1. **“Tạo Yêu Cầu”** form will be replaced by **“Yêu cầu chi tiết”** form. | | 1. Enter necessary information. |  |   **Alternative Scenario 3:**   |  |  | | --- | --- | | Actors action:   1. Click on **“Hủy”** button(Main Scenario, step 4 or step 6). | System Response:   1. Cancel all of process and return to homepage. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **No.** | **Actor Action** | **System Response** | | 1 | Leave **“Tên sản phẩm”** textbox in **“Yêu cầu nhanh”** form empty. | Show error message “Bạn phải nhập vào thông tin này.” |   **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### View Request Detail



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Request | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 23/05/2013 | **Priority** | Normal | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer views their own request.  **Goal:** Buyer can view their request in case it has reply or their simply just want to review it.  **Triggers***:* When Buyer wants to view their request.  **Preconditions:** User must login as “Buyer”.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as **“Buyer”**. 2. Click on request that they want to view. | System Response:   1. List all user’s requests on the homepage. [Exception 1] 2. Redirect to **“Chi tiết báo giá”** page. Depending on which request was chosen, quotes and detail information will be shown up. |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Evaluate Quote



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Evaluate Quote | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer evaluates quotes from suppliers.  **Goal:** Buyer can choose which supplier is suitable for them.  **Triggers*:*** When Buyer wants to evaluate detail their quote.  **Preconditions:** User is staying at **“Chi tiết báo giá”** page.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on arrow icon on the left of each quote. 2. Depend on each quote detail, they can decide which one is suitable for them. | System Response:   1. That quote will be expanded then product’s price will be showed up and also button to confirm. [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** BU003  **Business Rules:** N/A | | | | |

##### Accept Quote



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU005 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Accept Quote | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer accepts quote from suppliers.  **Goal:** Buyer can choose which supplier is suitable for them.  **Triggers*:*** When Buyer wants to accept quotation from supplier.  **Preconditions:** User is staying at **“Chi tiết báo giá”** page.  **Post-Conditions:**   * A notification will be sent to supplier who own accepted quote. * All of pending quote will be closed.   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on arrow icon on the left of a quote. | System Response:   1. That quote will be expanded with product’s details with buttons to accept each product and button **“Đồng ý”** to accept the quote. | | 1. Click on tick icon to confirm. 2. Click on **“Đồng ý”** to accept that quote. | 1. Send that response to supplier and reject other quotes. |   **Alternative Scenario 1:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Click on tick icon to confirm and **“Phản hồi”** buttonto give feedback for each product to supplier. (Main Scenario, Step 3) 2. Click on **“Đồng ý”** to accept that quote. | 1. Save each feedback for each product and show it on the screen. 2. Send that response to supplier and reject other quotes. |   **Alternative Scenario 2:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Click on tick icon to confirm. (Main Scenario, Step 3) 2. Click on **“Đồng ý”** to accept that quote and **“Phản hồi”** to give a feedback for each quote to supplier. | 1. Send that response to supplier (including feedback of request) and reject other quotes. |   **Exceptions:** N/A  **Relationships:** BU003  **Business Rules:** N/A | | | | |

##### Request’s Notification



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | BU006 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Request’s notification | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Buyer  **Summary:** This use case describes how Buyer receives notification from system about their request.  **Goal:** When the request was replied, Buyer will be alerted.  **Triggers*:*** When the request was replied by any supplier.  **Preconditions:** The request was replied.  **Post-Conditions:** Notification will be sent to Buyer.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action: | System Response:   1. The system will send a notification to alert Buyer when any their own request was replied. |   **Alternative Scenario :** N/A  **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

#### Staff

##### View List Request Assign



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | ST001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View list of assigned request | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 23/05/2013 | **Priority** | High | |
| **Actor:** Staff  **Summary:** This use case describes how staff views all request assigned by manager.  **Goal:** Seller can manage all assigned request.  **Triggers***:* When Staff login into system.  **Preconditions:** N/A  **Post-Conditions:**   * Success: Show “**Danh sách yêu cầu được giao**” page * Fail: System will be transfer to error page or error message   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. User logins as “**Staff**”. | System Response:   1. Show “**Danh sách yêu cầu được giao**” page. [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | When cannot connect to database, the system will show error message “Fail to connect to database. Please try again! ” |   **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### View Request Detail

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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | ST002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Request Detail | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 23/05/2013 | **Priority** | High | |
| **Actor:** Staff  **Summary:** This use case describes how staff view request detail.  **Goal:** Staff will be able to view request detail.  **Triggers***:* When Staff click on a request.  **Preconditions:** Finish case ST001.  **Post-Conditions:**   * Success: Show “**Chi tiết yêu cầu**” page * Fail: System will be transfer to error page or error message   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on a request. | System Response: | |  | 1. Show “**Chi tiết yêu cầu**” page. | |  |  |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | When cannot connect to database, the system will show error message “Fail to connect to database. Please try again! ” |   **Relationships:** ST001  **Business Rules:** N/A | | | | |

##### Create Quote



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | ST003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Request Detail | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 23/05/2013 | **Priority** | High | |
| **Actor:** Staff  **Summary:** This use case describes how staff creates quote for customer.  **Goal:** Support to create quote for customer.  **Triggers***:* When Staff click on “**Báo giá**” button.  **Preconditions:** Finish case ST002  **Post-Conditions:**   * Success: A quote is created and stored. * Fail: System show message error   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Báo giá**” button. | System Response: | |  | 1. Show “**Tạo báo giá**” page including the product for category of this request. | | 1. Click on “**Thêm**” button of each product want to choose. 2. Enter required data and click on “**Tiếp tục**” button. 3. Click on “**Hoàn tất**” button. | 1. Show popup “**Giá và số lượng**” with validation:  * Số lượng: textbox (integer) * Giá: textbox (double)  1. Close the popup. 2. Redirect to page “**Chi tiết báo giá**”. [Exception 1,2,3] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Số lượng**” is invalid. Display error message “**Số lượng phải là số nguyên**” | | 2 | “**Giá**” is invalid. Display error message “**Định dạng giá chưa đúng**” | | 3 | When cannot connect to database, the system will show error message “Fail to connect to database. Please try again! |   **Relationships:** ST002  **Business Rules:** N/A | | | | |

##### Award Contract

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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | ST004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Award Contract | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 23/05/2013 | **Priority** | High | |
| **Actor:** Staff  **Summary:** This use case describes how staff create a contract from existing quote.  **Goal:** A new contract will be created.  **Triggers***:* When staff click on “**Tạo hợp đồng**” button to changes the quote into the contract.  **Preconditions:** Finish case ST002 and staff have a new request including quote.  **Post-Conditions:**   * Success: Show “**Tạo hợp đồng**” page * Fail: System response error message   **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. User logins as “**Staff**”. 2. Click on a request. | System Response:   1. Show “**Danh sách yêu cầu được giao**” page. | |  | 1. Show “**Chi tiết yêu cầu**” page. | | 1. Click on “**Tạo hợp đồng**” button. | 1. Show “**Tạo hợp đồng**” page.   [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | When cannot connect to database, the system will show error message “Fail to connect to database. Please try again! |   **Relationships:** ST002  **Business Rules:** N/A | | | | |

#### Manager

##### Assign Request



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | MG001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Assign request | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 23/05/2013 | **Priority** | High | |
| **Actor:** Manager  **Summary:** This use case describes how manager assigns requests to staffs.  **Goal:** Assign the request for each staff.  **Triggers***:* When manager sees all requests.  **Preconditions:** User must login as “**Manager**”.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. User logins as “**Manager**”. 2. Click on “**Gán**” button. | System Response:   1. Show “**Danh sách yêu cầu**” page. | |  | 1. Show pop-up “**Danh sách nhân viên**” form. | | 1. Choose a staff in list. 2. Click on “**Hoàn Tất**” button. | 1. Show “**Danh sách yêu cầu**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   * When database connection has problem, the system will ask user for trying again.   **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Delete Staff



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | MG003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Delete Staff | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 25/05/2013 | **Priority** | High | |
| **Actor:** Manager  **Summary:** This use case describes how to delete staffs.  **Goal:** Delete staff.  **Triggers***:* When manager want to delete staff.  **Preconditions:** User must login as role “**Manager**”, finish use case MG002.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action: | System Response: | |  |  | | 1. Choose “**Xóa**” button. 2. Click on “**Chắc chắn**” button. | 1. Show a message “**Bạn có chắc chắn muốn xóa không**”. 2. Redirect to “**Quản lý nhân viên**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   * When database connection has problem, the system will ask user for trying again.   **Relationships:** MG002 (Use case No.)  **Business Rules:** N/A | | | | |

##### Add New Staff



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | MG004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Add New Staff | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 25/05/2013 | **Priority** | Normal | |
| **Actor:** Manager  **Summary:** This use case describes how to add new staffs.  **Goal:** Add new staff.  **Triggers***:* When manager want to add new staff.  **Preconditions:** User must login as “**Manager**”, finish use case MG002.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action: | System Response: | | 1. Choose “**Thêm**” button. 2. Filled up all field in form. 3. If any field not validate, filled up again. If all field is validate, click on “**Hoàn Tất**” button. 4. Click “**Trở về**” button. | 1. Popup “**Thêm nhân viên**” form will show. 2. Check validation for each field. 3. Show “**Thêm nhân viên thành công**” popup. 4. Show “**Quản lý nhân viên**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   * When database connection has problem, the system will ask user for trying again.   **Relationships:** MG002 (Use case No.)  **Business Rules:** N/A | | | | |

##### Update Staff



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | MG005 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Update Staff | | | |
| **Author** | Than Trong Phi | | | |
| **Date** | 25/05/2013 | **Priority** | Normal | |
| **Actor:** Manager  **Summary:** This use case describes how to update staff information.  **Goal:** Update staff information.  **Triggers***:* When manager want to update staff information.  **Preconditions:** User must login as “**Manager**”, finish use case MG002.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action: | System Response: | |  |  | | 1. Choose “**Sửa**” button. 2. Filled up information in another field can changes. 3. If any field not validate, filled up again. If all field is validate, click on “**Hoàn Tất**” button. 4. Click “**Trở về**” button. | 1. Popup “**Sửa thông tin nhân viên**” form will show. 2. Check validation for each field. 3. Popup “**Sửa thành công**” show. 4. Show “**Quản lý nhân viên**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   * When database connection has problem, the system will ask user for trying again.   **Relationships:** MG002 (Use case No.)  **Business Rules:** N/A | | | | |

##### View Report

#### Company Administrator

##### View Product



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| **USE CASE-1 SPECIFICATION** | | | | |
| **Use-case No.** | CA001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Product | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Company Administrator  **Summary:** This use case describes how company administrator views product page.  **Goal:** View product page.  **Triggers***:* When Company Administrator logins into the system.  **Preconditions:** User logins as “**Company Administrator**” (i.e. a session has been created.)  **Post-Conditions:** Show “**Xem sản phẩm**” page  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as “**Company Administrator**”. | System Response:   1. Show “**Xem sản phẩm**” page.   [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Create Category



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| **USE CASE-2 SPECIFICATION** | | | | |
| **Use-case No.** | CA002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Create Category | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Company Administrator  **Summary:** This use case describes how company administrator creates category.  **Goal:** Create category.  **Triggers***:* When Company Administrator clicks on “**Thêm mới**” button.  **Preconditions:** User must login as “**Company Administrator**”.  **Post-Conditions:** A new category is created.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Thêm mới**” button. 2. Fill up with necessary information. 3. Click on “**Hoàn Tất**” button. | System Response:   1. Show a popup “**Thêm hạng mục**” with following fields:  * Tên: textbox (min length 2, max length 45) * Mẫu: drop down list  1. Check validation for each field.   [Exception 1], [Exception 2].   1. Show a popup “**Thêm thành công!**”, then will be closed. Redirect to “**Quản lý hạng mục**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Tên**” length is not in range [2, 45]. Display error message “**Tên phải từ 2 đến 45 kí tự**” | | 2 | “**Mẫu**” is not selected. Display error message “**Hãy chọn Mẫu tương ứng**”. |   **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Update Category



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| **USE CASE-2 SPECIFICATION** | | | | |
| **Use-case No.** | CA003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Update Category | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Company Administrator  **Summary:** This use case describes how company administrator updates category.  **Goal:** Update category.  **Triggers***:* When Company Administrator clicks on “**Cập nhật**” button.  **Preconditions:** User must login as “**Company Administrator**”.  **Post-Conditions:** A category is updated.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Cập nhật**” button. 2. Fill up with necessary information. 3. Click on “**Hoàn tất**” button. | System Response:   1. Show a popup “**Cập nhật hạng mục**” with:  * Tên: textbox (min length 2, max length 45) * Mẫu: drop down list  1. Check validation for each field.   [Exception 1], [Exception 2]   1. Show “**Cập nhật thành công**” popup, then will be closed. Redirect to “**Quản lý hạng mục**” page. |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Tên**” length is not in range [2, 45]. Display error message “**Tên phải từ 2 đến 45 kí tự**” | | 2 | “**Mẫu**” is not selected. Display error message “**Hãy chọn Mẫu tương ứng**”. |   **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Activate/Deactivate Category



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| **USE CASE-2 SPECIFICATION** | | | | |
| **Use-case No.** | CA004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Activate/Deactivate Category | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Company Administrator  **Summary:** This use case describes how company administrator activates or deactivates category.  **Goal:** Activate/Deactivate Category.  **Triggers***:* When Company Administrator clicks on “**Ẩn**” or “**Hiện**” button.  **Preconditions:** User must login as “**Company Administrator**”.  **Post-Conditions:** A selected category is activated or deactivated.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Ẩn**” button of each category. | System Response:   1. Update status of selected category to inactive. 2. Update text of button to “**Hiện**”. |   **Alternative Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Hiện**” button of each category. | System Response:   1. Update status of selected category to active. 2. Update text of button to “**Ẩn**”. |   **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Add New Template



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| **USE CASE-2 SPECIFICATION** | | | | |
| **Use-case No.** | CA005 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Add New Template | | | |
| **Author** | Nguyen Trung Thuan | | | |
| **Date** | 24/05/2013 | **Priority** | Normal | |
| **Actor:** Company Administrator  **Summary:** This use case describes how company administrator adds new template.  **Goal:** Add new template.  **Triggers***:* When Company Administrator clicks on “**Tạo mẫu mới**” button.  **Preconditions:** User must login as “**Company Administrator**”.  **Post-Conditions:** A new template is created.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on “**Tạo mẫu mới**” button at “**Xem sản phẩm**” page. 2. Click on “Thêm thuộc tính” button. 3. Fill up necessary information in all fields, then clicks on “**Hoàn tất**” button. 4. Click on “**Lưu**” button. | System Response:   1. Redirect to “**Trang mẫu**” page with following fields:  * Tên: textbox (min length 2, max length 45)  1. Show following attributes’ fields:  * Tên: textbox (min length 2, max length 45) * Backend type: drop down list * Frontend type: drop down list  1. Check validation for each field.   [Exception 1], [Exception 2], [Exception 3], [Exception 4].   1. Redirect to “**Xem sản phẩm**” page. |   **Alternative Scenario:**   |  |  | | --- | --- | | Actors action:   1. Fill up necessary information in all fields, then clicks on “**Xóa**” button 2. Fill up necessary information in all fields again, then click on “**Hoàn tất**” button. 3. Click on “**Lưu**” button. | System Response:   1. All attributes’ fields will be cleared. 2. Check validation for each field.   [Exception 1], [Exception 2], [Exception 3], [Exception 4].   1. Redirect to “**Xem sản phẩm**” page. |   **Alternative Scenario:**   |  |  | | --- | --- | | Actors action:   1. Fill up necessary information in all fields again, then click on “**Hoàn tất**” button. 2. Click on “**Hủy**” button. 3. Click on “**Đồng ý**” button. | System Response:   1. Check validation for each field.   [Exception 1], [Exception 2], [Exception 3].   1. Show a dialog “**Có chắc chắn không?**” 2. Redirect to “**Xem sản phẩm**” page. |   **Exceptions:**   |  |  | | --- | --- | | **No.** | **Description** | | 1 | “**Tên**” length is not in range [2, 45]. Display error message “**Tên phải từ 2 đến 45 kí tự**” | | 2 | “**Backend type**” is not selected. Display error message “**Hãy chọn Backend type tương ứng**”. | | 3 | “**Frontend type**” is not selected. Display error message “**Hãy chọn Frontend type tương ứng**”. | |  |  |   **Relationships:** CA001  **Business Rules:** N/A | | | | |

#### Website Administrator

##### View Dashboard



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | WA001 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Dashboard | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 29/05/2013 | **Priority** | High | |
| **Actor:** Website Administrator  **Summary:** This use case describes how to view dashboard which contains general information of the system: pending approval accounts, accounts will expire soon, general report, etc.  **Goal:** Website Admin can have a general view and easy to handle necessary action.  **Triggers***:* When Website Administrator login as **“Website Administrator”**.  **Preconditions:** User must login as **“Website Administrator”**.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as **“Website Administrator”**. | System Response   1. Redirect to dashboard page. [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### View List Account



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | WA002 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View List Account | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 29/05/2013 | **Priority** | High | |
| **Actor:** Website Administrator  **Summary:** This use case allows admin can review all of company’s accounts  **Goal:** Website Admin can have a general view and easy to handle necessary action.  **Triggers***:* When Website Administrator clicks on **“Nhà phân phối”**.  **Preconditions:** User must login as **“Website Administrator”**.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as **“Website Administrator”**, then click on **“Nhà phân phối”**. | System Response   1. Redirect to **“Quản lí nhà phân phối”** page. 2. All of company’s accounts will be shown. [Exception 1] | | 1. Click on arrow icon on the left of each account. | 1. All of account detail will be shown in expanded area. [Exception 1] | | 1. [Alternative Scenario 1,2] |  |   **Alternative Scenario 1:**   |  |  | | --- | --- | | Actors action:   1. Click on **“Kích hoạt”** button. (Main Scenario, Step 6) | System Response   1. Text of **“Kích hoạt”** button will be changed into **“Deactivate”** and also status in database. From now on, this account will be able to use all of website’s services. |   **Alternative Scenario 2:**   |  |  | | --- | --- | | Actors action:   1. Click on **“Hủy kích hoạt”** button. (Main Scenario, Step 6) | System Response   1. Text of **“Hủy kích hoạt”** button will be changed into **“Kích hoạt”** and also status in database. From now on, this account will be not able to use website’s services. |   **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### View Report



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | WA003 | **Use-case Version** | | 1.0 |
| **Use-case Name** | View Report | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 30/05/2013 | **Priority** | High | |
| **Actor:** Website Administrator  **Summary:** This use case allows admin can view report which present chart about how many company has chosen for each package.  **Goal:** Website Admin can have a general view about the number of supplier (include: number supplier of each package, revenue of each year or month, etc.).  **Triggers***:* When Website Administrator login as **“Website Administrator”**.  **Preconditions:** User must login as **“Website Administrator”**.  **Post-Conditions:** N/A  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Login as **“Website Administrator”**, then clicks on **“Báo cáo”**. | System Response   1. Redirect to “**Báo cáo”** page. 2. Show up a chart which present about number of company of each package. [Exception 1] | | 1. [Alternative Scenario 1,2] |  |   **Alternative Scenario 1:**   |  |  | | --- | --- | | Actors action:   1. Click on **“Theo tháng”** button. (Main Scenario, Step 4) | System Response   1. The chart will be transform into chart for month which present number for each month. |   **Alternative Scenario 2:**   |  |  | | --- | --- | | Actors action:   1. Click on **“Theo năm”** button. (Main Scenario, Step 4) | System Response   1. The chart will be transform into chart for month which present number for last 5 years. |   **Exceptions:** N/A  **Relationships:** N/A  **Business Rules:** N/A | | | | |

##### Print Report



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| **USE CASE SPECIFICATION** | | | | |
| **Use-case No.** | WA004 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Print Report | | | |
| **Author** | Dao Quoc Toan | | | |
| **Date** | 30/05/2013 | **Priority** | High | |
| **Actor:** Website Administrator  **Summary:** This use case allows admin to print report which present chart about how many company has chosen for each package.  **Goal:** Website Admin can have a physical document about the number of supplier (include: number supplier of each package, revenue of each year or month, etc.).  **Triggers***:* When Website Administrator login as **“Website Administrator”**.  **Preconditions:** User is staying at **“Báo cáo”** page.  **Post-Conditions:** A chart will be print.  **Main Success Scenario:**   |  |  | | --- | --- | | Actors action:   1. Click on **“In báo cáo”**. | System Response   1. Print specific chart. [Exception 1] |   **Alternative Scenario :** N/A  **Exceptions:** N/A  **Relationships:** WA003  **Business Rules:** N/A | | | | |

### Software System Attributes

#### Reliability

#### Availability

#### Security

#### Maintainability

#### Portability

#### Performance

#### 

## Entity Relationship Diagram or Data Structures

## C:\Users\BinhPV\Desktop\Diagram 1.png

## Other material (if any)

# Software Design Description (SDD)

## Design Overview

## System Architectural Design

## Component Diagram

## Detailed Description of Components

## Sequence Diagram

## User Interface Design

## Database Design or Data Structures

## Other material (if any)