SElenium parse động

SDD: làm 3 phần, biến ERD thành class diagram, sequence diagram.

Thuật toán và user interface để bản cuối cùng bản file nộp

1/ <Member > Recommend



**Figure 1: <Member > Recommend**

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| --- | --- | --- | --- |
| **USE CASE** | | | |
| **Use Case No.** | 001 | **Use Case Version** | 1.0 |
| **Use Case Name** | Recommend | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Member.   **Summary:**   * This use case allows member to recommend product.   **Goal:**   * New recommendation will be inserted into the database.   **Triggers:**   * Member wants to recommend product for the system. * To recommend, Member must do the following steps:   + From “Không tìm thấy” page:   Member fills data to textboxes in “Nguồn gốc” tab or textboxes in “Cấu hình” tab.  Click “Gửi” button to finish.  **Preconditions:**   * User has logged in system as member role. * Product is not found when member search.   **Post Conditions:**   * **Success**: Recommended product’s detail was sent successfully. Show successful message. * **Fail:** Database connection is not available. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Member selected “Nguồn gốc” radio button.  [Alterative1] | Interface appears, include:   * “Email” textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$, required. * “Tên laptop” textbox, min length: 6, max length: 30, required. * “Đường dẫn” textbox, min length: 6, max length: 300, regular expression: (http|ftp|https):\/\/[\w\-\_]+(\.[\w\-\_]+)+([\w\-\.,@?^=%&amp;:/~\+#]\*[\w\-\@?^=%&amp;/~\+#])?   ,required.   * “Mô tả” textbox, min length: 0, max length: 200. * “Gửi” Button | | 2 | Member fills data to textboxes.  Member clicks “Gửi” Button. | Show success message: “Thao tác thành công!”  Return “Trang chủ” page.  [Exception 1,2,3,5] |   **Alternative Scenario:**  [Alterative1]   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Member selected “Cấu hình” radio button. | Interface appears, include:   * “Email” textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$, required. * “Tên laptop” textbox, min length: 6, max length: 30, required. * “Hình ảnh” textbox, min length: 6, max length: 300, required. , regular expression: (http|ftp|https):\/\/[\w\-\_]+(\.[\w\-\_]+)+([\w\-\.,@?^=%&amp;:/~\+#]\*[\w\-\@?^=%&amp;/~\+#])? , required. * “Vi xử lý” textbox, min length: 3, max length: 30, required. * “Bộ nhớ” textbox: 3, max length: 30, required. * “Màn hình” textbox, min length: 3, max length: 30, required * “Ổ cứng” textbox, min length: 3, max length: 30, required * “Gửi” Button. | | 2 | Member fills data to text boxes.  Member clicks “Gửi” Button. | Show success message: “Thao tác thành công!”  Return “Trang chủ” page.  [Exception 1,2,3,4,5,6] |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Missing information. | Show error message: “Bạn đã điền thiếu thông tin vui lòng nhập đủ thông tin ở ô có dấu \* ” | | 2 | Invalid “Email”. | Show error message: “Email không hợp lệ. Vui lòng thử lại!” | | 3 | “Mô Tả” not in range [0, 200]. | Show error message: “Mô Tả không được quá 200 ký tự. Vui lòng thử lại!” | | 4 | TênLaptop/ Cpu/Ram/Display/  HDD is not in range [3, 30]. | Show error message: “Thông tin phải từ 3 tới 30 ký tự. Vui lòng thử lại!” | | 5 | Invalid “Đường dẫn”. | Show error message: “Đường dẫn không hợp lệ. Vui lòng thử lại!” | | 6 | Invalid “Hình ảnh”. | Show error message: “Đường dẫn hình ảnh không hợp lệ. Vui lòng thử lại!” |   **Relationships:** Search.  **Business Rules:**  System will check duplicate between recommended product’s detail in database by “Tên Laptop”  - If system detect duplicated product, system will count times for recommending the product.  + If the time of recommendation is greater than 5, the system will send the request to staff for parsing.  - Else recommendation will be saved recommended product into database | | | |

**Table 1: <Member > Recommend**

2/ <Member>Rating



**Figure 2: <Member>Rating**

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| **USE CASE** | | | |
| **Use Case No.** | 002 | **Use Case Version** | 1.0 |
| **Use Case Name** | Rating | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Member.   **Summary:**   * This use case allows member to rate the product.   **Goal:**   * Rating product.   **Triggers:**   * Member wants to rate the product in system. * For rating product, member must do the following steps:   + View product detail.   + Click rating icon.   **Preconditions:**   * User must log in the system with member role. * View product detail.   **Post Conditions:**   * **Success**: Rating information will be updated in database. * **Fail:** Database connection is not available. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | From the “Trang chủ”page.  Member clicks “Tên” product or “Hình ảnh” product in list product to view product detail. | Navigate to “Chi Tiết” page which contains:   * Product detail, product weight. * Rating icon. | | 2 | Click “Rating” icon. | Show popup message: “Bạn có chắc chắn với kết quả đánh giá của mình?”   * “Xác Nhận” button. * “Hủy Bỏ” button.   [Exceptions1,2] | | 1 | Click “Xác Nhận” button.  [Alternative1] | New rating will be updated to the database. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Hủy Bỏ” button | Return to “Chi Tiết” page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Database connection is not available. | Show error message: “Không thể đánh giá sản phẩm! Vui lòng thử lại sau.” |   **Relationships:** N/A  **Business Rules:**  Member can rate only 1 time for a product. The Rating help system load bester rating product on home page. | | | |

**Table 2: <Member>Rating**

4, <Admin> Create Account



Figure 4: <Admin> Create Account

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| **USE CASE – SB003** | | | |
| **Use Case No.** | 004 | **Use Case Version** | 1.0 |
| **Use Case Name** | Create account | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This use case allows admin to create new account in the system.   **Goal:**   * New account will be added to the system.   **Triggers:**   * Admin wants to create new account. * From the sidebar:   + Choose “Quản lý tài khoản” menu.   + Choose “Tạo tại khoản mới” button.   **Preconditions:**   * User must login the system with admin role.   **Post Conditions:**   * **Success:** New account will be added to the database. * **Fail:** Show error message on the current page.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item “Quản lý tài khoản”. | Navigate to “Quản lý tài khoản” page which contains:   * “Tìm Kiếm” textbox * “Tìm Kiếm” button. * “Tạo tài khoản mới” button. * A table with 7 columns:   + STT.   + Tài Khoản.   + Mật khẩu.   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox)   + Sửa. (Button) * ID: label, hiddened. * Tài Khoản: label. * Mật khẩu: label. * Địa chỉ Email: label. * Vai trò: drop down list, disabled. * Kích hoạt: checkbox, disabled. * “Sửa”: button. | | 2 | Admin clicks “ Tạo tài khoản mới” button. | Navigate to “Tạo tài khoản mới” page which contains:   * Tên tài khoản: textbox, min length: 6, max length: 30, required. * Mật khẩu: textbox, min length: 6, max length: 30, required. * Địa chỉ Email: textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$, required. * Vai trò: drop down list, “user" default. * “Tạo tài khoản”: button. * “Xóa Trắng” : button. | | 3 | Admin fills data to the form. |  | | 4 | Admin clicks “Tạo tài khoản” button.  [Alternative 1] | Insert new account to the database and redirect to “Quản lý tài khoản” page.  [Exception 1, 2, 3,4] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Admin clicks “Xóa Trắng” button”. | Clear all input data. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | “Tên Tài Khoản”is not in range [6-30]. | Show error message: “Độ dài tên tài khoản phải từ 6-30 ký tự!” | | 2 | “Mật Khẩu” is not in range  [6-30]. | Show error message: “Độ dài mật khẩu phải từ 6-30 ký tự!” | | 3 | “Tên Tài Khoản” has already existed. | Show error message: “Trùng tên đăng nhập! Vui lòng chọn tên khác!” | | 4 | Invalid format “Email”. | Show error message: “Email không đúng định dạng.!” |   **Relationships:** N/A  **Business Rules:**   * Each created account must be in active state when insert to database. | | | |

Table 4: <Admin> Create Account

5, <Admin> Update Account



Figure 5: <Admin> Update Account

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| **USE CASE – SB004** | | | |
| **Use Case No.** | 006 | **Use Case Version** | 1.0 |
| **Use Case Name** | Update account | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This use case allows admin to update information for user accounts.   **Goal:**   * New information will be updated to the database.   **Triggers:**   * Admin wants to change some information.   **Preconditions:**   * User must log in system with admin role.   **Post Conditions:**   * **Success:** New information will be updated to the database. * **Fail:** Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item “Quản lý tài khoản”. | Navigate to “Quản lý tài khoản” page which contains:   * “Tìm Kiếm” textbox * “Tìm Kiếm” button. * “Tạo tài khoản mới” button. * A table with 7 columns:   + STT.   + Tài Khoản.   + Mật khẩu.   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox)   + Sửa. (Button) * ID: label, hiddened. * Tài Khoản: label. * Mật khẩu: label. * Địa chỉ Email: label. * Vai trò: drop down list, disabled. * Kích hoạt: checkbox, disabled. * “Sửa”: button. | | 2 | Click “Sửa” button. | Navigate to “Cập nhập tài khoản” page, which contains:   * Tên Tài Khoản: textbox, disabled. * Mật khẩu: textbox, min length: 6, max length: 30. * Địa Chỉ Email: textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$. * Vai trò: drop down list, “user" default. * Kích hoạt: checkbox. * “Lưu”: button. | | 3 | Admin updates “Mật Khẩu”,”Email”,”Vai trò”. |  | | 4 | Click “Lưu” button. | Show popup message “Bạn có chắc chắn với sự thay đổi này không?”.   * “Xác Nhận” button. * “Hủy bỏ” button. | | 5 | Click “Xác Nhận” button.  [Alternative1] | New information will be updated to the database.  Return “Quản lý tài khoản” page.  [Exception1,2,3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “Hủy Bỏ” button. | Return back current page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | “Mật khẩu” is not in range  [6,30]. | Show error message: “Độ dài mật khẩu phải từ 6-30 ký tự!” | | 2 | Invalid email format. | Show error message: “Địa Chỉ Email phải đúng định dạng!” | | 3 | Can’t update information in database. | Show error message: “Không thể cập nhập thông tin tài khoản xin hãy thử lại sau” |   **Relationships:** N/A  **Business Rules:**   * Can’t edit “Tên Tài khoản”. | | | |

Table 5: <Admin> Update Account

##### 6,<Admin> Activate Account



##### Figure 6: <Admin> Activate Account

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| **USE CASE – SB005** | | | |
| **Use Case No.** | 007 | **Use Case Version** | 1.0 |
| **Use Case Name** | Activate Account | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This user case allows admin to activate a user account.   **Goal:**   * Deactivated accounts will be activated.   **Triggers:**   * Admin wants to activate an account in order to login into the system.   **Preconditions:**   * User must log in the system with admin role.   **Post Conditions:**   * **Success:** The selected account will be activated. * **Fail:** Database connection is not available. Show error message   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item “Quản lý tài khoản”. | Navigate to “Quản lý tài khoản” page which contains:   * “Tìm Kiếm” textbox * “Tìm Kiếm” button. * “Tạo tài khoản mới” button. * A table with 7 columns:   + STT.   + Tài Khoản.   + Mật khẩu.   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox)   + Sửa. (Button) * ID: label, hiddened. * Tài Khoản: label. * Mật khẩu: label. * Địa chỉ Email: label. * Vai trò: drop down list, disabled. * Kích hoạt: checkbox, disabled.   “Sửa”: button. | | 2 | Click “Sửa” button. | Navigate to “Cập nhập tài khoản” page, which contains:   * Tên Tài Khoản: textbox, disabled. * Mật khẩu: textbox, min length: 6, max length: 30. * Địa Chỉ Email: textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$. * Vai trò: drop down list, “user" default. * Kích hoạt: checkbox. * “Lưu”: button. | | 3 | Admin check “Kích hoạt” checkbox. |  | | 4 | Click “Lưu” button. | New status will be updated to the database.  Exceptions[1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot activate the account due to database connection. | Show error message: “Không thể kích hoạt! Vui lòng thử lại sau.” |   **Relationships:** N/A  **Business Rules:**   * Admins can’t activate/deactivate account of themselves or other admins. | | | |

Table 6: <Admin> Activate Account

7, <Admin>Deactivate Account



Figure 7: <Admin> Deactivate User

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| **USE CASE – SB006** | | | |
| **Use Case No.** | 008 | **Use Case Version** | 1.0 |
| **Use Case Name** | Deactivate Account | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This user case allows admin to deactivate an account.   **Goal:**   * An active account will be deactivated.   **Triggers:**   * Admin don’t want the user to login in system. * Admin will deactivate an account.   **Preconditions:**   * User must log in the system with admin role.   **Post Conditions:**   * **Success:** The selected account will be deactivated. * **Fail:** Database connection is not available. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click menu item “Quản lý tài khoản”. | Navigate to “Quản lý tài khoản” page which contains:   * “Tìm Kiếm” textbox * “Tìm Kiếm” button. * “Tạo tài khoản mới” button. * A table with 7 columns:   + STT.   + Tài Khoản.   + Mật khẩu.   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox)   + Sửa. (Button) * ID: label, hiddened. * Tài Khoản: label. * Mật khẩu: label. * Địa chỉ Email: label. * Vai trò: drop down list, disabled. * Kích hoạt: checkbox, disabled.   “Sửa”: button. | | 2 | Click “Sửa” button. | Navigate to “Cập nhập tài khoản” page, which contains:   * Tên Tài Khoản: textbox, disabled. * Mật khẩu: textbox, min length: 6, max length: 30. * Địa Chỉ Email: textbox, min length: 0, max length: 100, regular expression: ^[a-zA-Z0-9.!#$%&'\*+/=?^\_`{|}~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)\*$. * Vai trò: drop down list, “user" default. * Kích hoạt: checkbox. * “Lưu”: button. | | 3 | Admin uncheck “Kích hoạt” checkbox. |  | | 4 | Click “Lưu” button. | New status will be updated to the database.  Exceptions[1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot activate the account due to database connection. | Show error message: “Không thể kích hoạt! Vui lòng thử lại sau.” |   **Relationships:** Manage Account  **Business Rules:**   * Admins can’t activate/deactivate account of themselves or other admins. | | | |

Table 7: <Admin> Deactivate Account

8<Staff> Import file



Use Case Specification

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| **USE CASE – SB08** | | | |
| **Use Case No.** | 008 | **Use Case Version** | 1.0 |
| **Use Case Name** | Import file | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff upload excel file to server.   **Goal:**   * File will be uploaded to server.   **Triggers:**   * To import a file, staff must do the following steps:   + Click “Nhập từ excel” menu.   + Choose the file, click “Tải lên” button.   **Preconditions:**   * User must log in the system with staff role.   **Post Conditions:**   * **Success**: File will be uploaded to server. * **Fail:** File input is wrong format or file has more than 5 errors. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | From the staff’s page, staff clicks “Nhập từ Excel” link. | Show “Nhập từ excel” page with 2 buttons:   * “Browse” button. * “Tải lên” button. | | 2 | From “Nhập từ excel” page, staff clicks “Browse” button, then clicks “Mở”. | System will get file path and show excel name on text box. | | 3 | Staff clicks “Tải lên” button. | File is uploaded to server, then redirect back to “Nhập từ excel” page, contains:  \* “Danh sách thành phần cấu hình” tab:   * A 5-columns table show detail of product in excel file. Column header includes:   + “STT” label.   + “Tên” label.   + “Trọng số” label.   + “Loại” label.   + “Xóa” button * “Lưu” button. * “Hủy” button.   \* “Thành phần cấu hình lỗi” tab.  \* “Thành phần cấu hình trùng” tab.  [Exception 1, 2] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | File input is wrong format. | Display error message: “File không đúng định dạng”. | | 2 | File size not range [0- 2] Mb. | Display error message: Kích thước file không được vượt quá 2Mb”. |   **Relationships:** N/A  **Business Rules:**   * Format file is excel (.xlsx/.xls) * Max length of file is 2Mb. * Valid file format : | | | |

Table 17: <Staff> Import File

Import file-🡪 parse excel thành 3 list: lỗi trùng đúng 🡪 xử lý tách gộp 🡪 lưu xuống database, logfile 2 usecase riêng biệt.

9, <system> Process data

Use case specification

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| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | 009 | **Use Case Version** | 1.0 |
| **Use Case Name** | Process data | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * System.   **Summary:**   * System can parse data automatically from file and divide data into three lists.   **Goal:**   * Divide data into three lists and show.   **Triggers:**   * System get data from excel file and process.   **Preconditions:**   * Import file is successful.   **Post Conditions:**   * **Success**: Show three list include: * Error product list show on “Danh sách thành phần cấu hình lỗi” tab. * Duplicate product list show on “Danh sách thành phần cấu hình trùng” tab. * Correct product list show on “Danh sách thành phần cấu hình đúng” * **Fail:** File has more than 5 errors. Show error and require staff check file again.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | The system checks the newly upload file on server.  The system processes data from file and divide data to three lists. | * System will be showed correct product list on table with 4 columns in “Danh sách thành phần cấu hình đúng” tab:   + “STT”: label.   + “Tên thành phần”: label.   + “Trọng số”: label.   + “Loại”: label.   + “Xóa” button. * System will be showed error product list on table with 4 columns in “Danh sách thành phần cấu hình lỗi” tab:   + “STT” : label   + “Tên thành phần”: textbox (min length: 5 max length: 100, required).   + “Trọng số”: textbox (min length: 1 max length: 100, required).   + “Loại”: textbox (min length: 1 max length: 5, required).   + “Lưu” button. * System will be showed duplicate product lists on tables with 4 columns in “Danh sách thành phần cấu hình trùng” tab: * “Gộp tất cả” button. * “Tách tất cả” button. * “Lưu file” button.   + “Chọn” checkbox.   + “Tên”: textbox (min length: 5 max length: 100, required).   + “Trọng số”: textbox (min length: 1 max length: 100, required).   + “Loại”: textbox (min length: 1 max length: 5, required).   + “Chọn tên chính” radio button.   + “Gộp” button.   + “Tách” button.   [Exception1,2,3,4] |   **Alternative Scenario:** N/A.  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | “Tên” is not in range [5, 100]. | Display error message: “Tên thành phần phải từ 5 đến 100 ký tự”. | | 2 | “Trọng số” is not in range [1, 300]. | Display error message: “Trọng số phải từ 1 đến 300”. | | 3 | “Loại ”is not in range [1, 5]. | Display error message: “Loại” phải từ 1 đến 5 ký tự”. | | 4 | File has more than 5 errors | Display number of error rows. |   **Relationships:** Login, Import File.  **Business Rules:**   * If system detects more than 5 errors, System will show error. * Else system will show three list include: * System will check and move error products to error products list and show that on “Thành phần cấu hình lỗi” tab. * Error products in excel:   C:\Users\hiepkhach\Desktop\error.png   * System detect by compare product name algorithms and after that move duplicate products to duplicate products list and show that on “Thành phần cấu hình trùng” tab. * Duplicate products in excel:   C:\Users\hiepkhach\Desktop\Duplicate.png   * System will show correct product list on “Thành phần cấu hình đúng” tab. | | | |

Table 18: <Staff>Process products

10, <staff> Process error product

Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | 010 | **Use Case Version** | 1.0 |
| **Use Case Name** | Process error product | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to process error products.   **Goal:**   * Get correct product from error products.   **Triggers:**   * Staff wants to fix product information in error product list.   + To process an error product, staff must do the following steps: * Edit product information. * Click “Lưu” button.   **Preconditions:**   * User must log in the system with staff role. * Parse data from excel successful. Error product list is available.   **Post Conditions:**   * **Success**: * Error product will be fixed and transfer to correct product list or duplication product list. * **Fail:** Fixed product still error. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Recondition error product list available.  Click “Thành phần cấu hình lỗi” tab. | Interface appears, include table with 4 columns:   * + “STT” : label   + “Tên thành phần”: textbox (min length: 5 max length: 100, required).   + “Trọng số”: textbox (min length: 1 max length: 100, required).   + “Loại”: textbox (min length: 1 max length: 5, required).   + “Lưu” button. | | 2 | Edit product information in row. Then click “Lưu” button | Lưu thì ghi dữ liệu đúng vào list đúng.  Product information will be updated.  System transfer correct product to correct product list.  [Alternative1]  [Alternative2]  2 cái alternative: list trùng và list sai |   **Alternative Scenario:**  [Alternative1]   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Edit product information in row. Then click “Lưu” button | The system will be compared this product name with products in duplicate products list and correct products list. System detects duplicate products. Then move duplicate products to duplicate products list. |   [Alternative2]   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Edit product information in row. Then click “Lưu” button | Fixed product still error. Show errors and require staff try again.  [Exception 1, 2, 3] |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | “Tên” is not in range [5, 100]. | Display error message: “Tên thành phần phải từ 5 đến 100 ký tự”. | | 2 | “Trọng số” is not in range [5, 100]. | Display error message: “Trọng số phải từ 1 đến 100”. | | 3 | “Loại ”is not in range [1,5]. | Display error message: “Loại” phải từ 1 đến 5 ký tự”. |   **Relationships:** Login, Import File.  **Business Rules:**  **Nếu bị sai thì yêu cầu staff thử lại.**   * System compare products by product name with compare product name algorithms between fixed product and duplicate product list, correct product list. * If systems detect duplicate products, System will move duplicate products to duplicate products list. * Else system will move correct products to list products. | | | |

Table 18: <Staff>Process error product

11, <staff> Process duplicate product



Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | 011 | **Use Case Version** | 1.0 |
| **Use Case Name** | Process duplicate product | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to process duplicate products.   **Goal:**   * Get correct product from duplicate products.   **Triggers:**   * Staff wants to join or divide products in duplicate products list. * To join products, staff must do the following steps: * Select at least 2 products. * Click “Gộp” button. * To divide products, staff must do the following steps: * Select products by checkbox. * Click “Tách” button.   **Preconditions:**   * User must log in the system with staff role. * Parse data from excel successful. Duplicate product list is available.   **Post Conditions:**   * **Success**:   Duplicate product will be joined or divided and transfer to correct product list.   * **Fail:** Not enough products to join, not yet choose product key name. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Recondition duplicate product list available.  Click “Thành phần cấu hình trùng” tab. | Interface appears:   * “Gộp tất cả” button. * “Tách tất cả” button. * “Lưu file” button. * Tables include duplicate product with 5 columns:   + “Chọn” checkbox.   + “Tên”: textbox (min length: 5 max length: 100, required).   + “Trọng số”: textbox (min length: 1 max length: 100, required).   + “Loại”: textbox (min length: 1 max length: 5, required).   + “Chọn tên chính” radio button.   “Gộp” button.  “Tách” button. | | 2 | Select products by checkbox. Then click “Gộp” button.  [Alternative1,2,3,4] | Selected products will be joined. And move to correct products list.  [Exception 4] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click on “Lưu file” button. | Duplicate products name will be recorded to log file. | | 2 | Click on “Gộp tất cả” button. | All products on each table will be joined. | | 3 | Click on “Tách tất cả” button. | All products on each table will be divided. | | 4 | Select products by checkbox. Then click “Tách” button | Selected products will be divided. And move to correct products list. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 4 | Select at least 2 products | Display error message: “Vui lòng chọn ít nhất 2 sản phẩm”. |   **Relationships:** Login, Import File.  **Business Rules:**   * Products will be joined by product name. * Merge: make two or more names refer to one product. System will be joined products by product name and separated by “;”. Then, system will be move joined products to correct product list. * Split: different names mean different products. System will move both products to correct product list. | | | |

Table 18: <Staff>Process duplicates products

12, <staff> save correct products



Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | 012 | **Use Case Version** | 1.0 |
| **Use Case Name** | Save correct products | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff adds products to database by import data from excel files.   **Goal:**   * Create many products from imported files.   **Triggers:**   * Staff wants to save correct products by importing excel files. * To save correct products, staff must do the following steps:   + Click “Danh sách thành phần cấu hình đúng” tab.   + Click “Lưu” button.   **Preconditions:**   * User must log in the system with staff role. * Parse data from excel successful. Correct product list is available.   **Post Conditions:**   * **Success**: Products not available in database will be added to the database. Show success message.   Products available in database will be moved to duplicate products list.   * **Fail:** Show error list and require staff try one more time.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Recondition correct product list available.  Click “Danh sách thành phần cấu hình” in menu tab. | File is uploaded to server, then redirect back to “Nhập từ excel” page, contains:   * A 4-columns table show detail of product in excel file. Column header includes:   + STT” label.   + “Tên ” label.   + “Trọng số” label.   + “Loại” label.   + “Xóa” button. * “Lưu” button. * “Hủy” button.   [Exception 1, 2, 3] | | 2 | Staff clicks “Xóa” button to delete a product. | The product will be deleted in correct product list. | | 3 | Staff clicks “Lưu” button to save product. [Alternative 1] | Correct product will be inserted into database.  [Alternative2]  [Exception 4] |   **Alternative Scenario:**  [Alternative1]   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click on “Hủy” button to finish. | Refresh current page and clear all. |   [Alternative2]   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Staff clicks “Lưu” button to save product. | Compare products in correct products list with database by product name.  Duplicate products will be moved to duplicate products list. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | “Tên” is not in range [5, 100]. | Display error message: “Tên sản phẩm phải từ 5 đến 100 ký tự”. | | 2 | “Trọng số” is not in range [1, 100]. | Display error message: “Trọng số phải từ 1 đến 100”. | | 3 | “Loại ”is not in range [1,5]. | Display error message: “Loại” phải từ 1 đến 5 ký tự”. | | 4 | Fail to insert to database. | Display error message: “Lỗi kết nốt cơ sở dữ liệu vui lòng thử lại”. |   **Relationships:** Login, Import File.  **Business Rules:**   * System will compare correct product list with database by compare string algorithms. * If systems detect duplicate products, System will move duplicate products to duplicate product list. * System will add correct products to database. | | | |

Table 20: <Staff> Save correct products

Lưu logfile lỗi và trùng.

Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | 12 | **Use Case Version** | 1.0 |
| **Use Case Name** | Write log file | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to create log file of duplicate products.   **Goal:**   * Log file will be generated.   **Triggers:**   * Staff wants to create log file of duplicate products. * To create log file, staff must do:   + Click “Lưu file” button.   **Preconditions:**   * User must log in the system with staff role.   **Post Conditions:**   * **Success**: Log file will be generated. Show message. * **Fail:** Show error message and require staff try one more time.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 2 | Recondition duplicate product list available.  Click “Sản phẩm trùng” in menu tab. | Redirect to duplicate products list Page, include:  \* 3 button :   * + “Gộp tất cả”: button.   + “Tách tất cả”: button.   + “Lưu file”: button   \* table duplicate products ,for each row:   * + Checkbox : checkbox   + “STT” label.   + “Tên ” label.   + “Trọng số” label.   + “Loại” label.   + “Gộp”: button.   + “Tách”: button. | | 3 | Click “Lưu file” button | Products in duplicate products list will be compared with database.  Duplicate products name will be recorded to log file. |   **Alternative Scenario:** N/A  **Exceptions:** N/A  **Relationships:** Login, Import File.  **Business Rules:**  - System recorded log file and staff will use them for training the system then.  - Name of product will be recorded by each row of each table and seceded by “;”.  + Log file format:    - System insert link and log time into database. | | | |

Table 21: <Staff> Log File