1/ <Member > Recommend



**Figure 1: <Member > Recommend**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE** | | | |
| **Use Case No.** | 001 | **Use Case Version** |  |
| **Use Case Name** | Recommend | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Member.   **Summary:**   * This use case allows member recommend.   **Goal:**   * Help staff parse new product by product info.   **Triggers:**   * Member want recommend product information in the system. * To recommend, Member must do the following steps:   + From “NotFound” page:   Enter textbox in “Nguồn gốc” tab or textbox in “Cấu hình” tab.  Click button “Gửi” to finish.  **Preconditions:**   * User has logged in system as member role. * Keyword search is not exists.   **Post Conditions:**   * **Success**: Show successful message. * **Fail:** N/A   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Member selected “Nguồn gốc” radio.  [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” textbox, min length: 0, 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, required. * “Gửi” Button | | 2 | Member click “Gửi” Button. | Show success message: “Thao tác thành công!”  Return “Trang chủ” page.  [Exception 1,2,3,5] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Member selected “Cấu hình” radio. | 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” textbox, min length: 0, max length: 30, required. * “Tên laptop” textbox, min length: 6, max length: 30, required. * “Cpu” textbox, min length: 2, max length: 30, required. * “Ram” textbox, : 2, max length: 30, required. * “Display” textbox, min length: 2, max length: 30, required * “HDD” textbox, min length: 2, max length: 30, required * “Gửi” Button. | | 2 | Member click “Gửi” Button. | Show success message: “Thao tác thành công!”  Return “Trang chủ” page.  [Exception 1,2,3,4] |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Added missing information. | Show error message: “Bạn đã điền thiếu thông tin vui lòng nhập đủ thông tin ở ô có dấu \* ” | | 2 | Input invalid “Email”. | Show error message: “Email không hợp lệ. Vui lòng thử lại!” | | 3 | Input invalid Tên/Mô Tả in range [0,30]. | Show error message: “Thông tin không hợp lệ. Vui lòng thử lại!” | | 4 | Input invalid TênLaptop/ Cpu/ Ram/Display/HDD in range [2,30]. | Show error message: “Thông tin không hợp lệ. Vui lòng thử lại!” | | 5 | Input invalid “Đường dẫn”. | Show error message: “Đường dẫn không hợp lệ. Vui lòng thử lại!” |   **Relationships:** Search.  **Business Rules:** If have 10 the “Tên Laptop” is same. System will be send to staff to parse. | | | |

**Table 1: <Member > Recommend**

2/ <Member>Rating



**Figure 2: <Member>Rating**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE** | | | |
| **Use Case No.** |  | **Use Case Version** |  |
| **Use Case Name** | Rating | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Member.   **Summary:**   * This use case allows Member to Rating for product   **Goal:**   * Rating product.   **Triggers:**   * Member wants to rating for product in system. * To Rating product, staff 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 icon will be change. * **Fail:** Rating icon not change.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Tên” product. | Navigate to “Chi tiết” page which contains:   * Product detail. * Rating icon. | | 2 | Click “Rating” icon. | * Rating icon changed. |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | |  |  |  |   **Relationships:** N/A  **Business Rules:** Help system suggest product same weight. | | | |

**Table 2: <Member>Rating**

3/<Member,Guest> Compare



**Figure 3: <Member,Guest> Compare**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| **Use Case No.** |  | **Use Case Version** |  |
| **Use Case Name** | Compare | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Member. * Guest.   **Summary:**   * This use case allows guest/member to compare product.   **Goal:**   * Function will be show and compare products.   **Triggers:**   * Guest/Member want compare product.   To compare product Guest/Member must do the following steps:  Click “Giỏ Hàng” in home page.  **Preconditions:** Search Product , AddToCart  **Post Conditions:**   * **Success**: Know better product in cart and see suggest product. * **Fail:** N/A   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Giỏ Hàng” icon. | Navigate to “Compare” page which contains:   * Show detail and weight product the basket on a row . * Notify user product bester. * Below show list product same weight bester product but less expensive or more rating.   [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Giỏ Hàng” icon. | Show error message: “Giỏ hàng dưới 2 sản phẩm vui lòng thêm sản phẩm để so sánh.” |   **Relationships:** AddToCart.  **Business Rules:** System base on products weight aftert that system give advice why you should be choice . | | | |

**Table 3:<Member,Guest> Compare**

4, <Admin> Create User



Figure 4: <Admin> Create User

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB003** | | | |
| **Use Case No.** | 005 | **Use Case Version** | 1.0 |
| **Use Case Name** | Create user | | |
| **Author** | Tran Tan Len | | |
| **Date** | 28/05/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This user case allows admin to create new user account for the system.   **Goal:**   * New user account will be added to the system.   **Triggers:**   * Admin wants to create new user account. * Navigate to “Quản lý tài khoản” and enter user info in “Mới” row on table click “Lưu” button.   **Preconditions:**   * User must log in the system with admin role.   **Post Conditions:**   * **Success:** New user account will be added to the database. * **Fail:** Nothing is added to the database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Admin clicks “Quản lý tài khoản” link. | Navigate to “ManagerAccount” page which table “Mới” row contains:   * Username: textbox, min length: 6, max length: 30, required. * Name: textbox, min length: 6, max length: 30, required. * Password: textbox, min length: 6, max length: 20, required. * Role: drop down list, required. * IsActive: checkbox. * Save: button. | | 2 | Admin fills data to the row. |  | | 3 | Admin clicks “Lưu” button. [Exception 1, 2, 3, 4] | Insert new user account to the database and redirect to “Quản lý tài khoản” page. |   **Alternative Scenario:**N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Length of username is not in range. | Show error message: “Độ dài username phải từ 6-30 ký tự!” | | 2 | Length of password is not in range. | Show error message: “Độ dài password phải từ 6-20 ký tự!” | | 3 | Role is not specified. | Show error message: “Phải phân quyền cho user!” | | 4 | Username’s existed already. | Show error message: “Trùng tên đăng nhập! Vui lòng chọn tên khác!” |   **Relationships:** Manage user  **Business Rules:**   * Each created account must be in active state when insert to database. | | | |

Table 4: <Admin> Create User

5, <Admin> Update User



Figure 5: <Admin> Update User

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB004** | | | |
| **Use Case No.** | 006 | **Use Case Version** | 1.0 |
| **Use Case Name** | Update user | | |
| **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 of members or staffs.   **Preconditions:**   * User must log in system with admin role.   **Post Conditions:**   * **Success:** New information will be updated to the database. * **Fail:** Nothing is updated.   **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 and “Tìm Kiếm” button. * A table with 4 columns:   + ID.   + Tài Khoản.   + Mật khẩu.   + Tên   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox) * “Lưu”: button. | | 2 | Enter “Tìm Kiếm” textbox and Click “Tìm Kiếm” button. | Navigate to “Thông tin tài khoản” page, which contains:   * Tài Khoản: textbox, min length: 6, max length: 30, disabled. * Password: textbox, min length: 6, max length: 20, required. * 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. * Role: drop down list, required. * “Cập nhập”: button. | | 3 | Admin updates information. |  | | 4 | Click “Cập nhật” button. | New information will be updated to the database. |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Length of password is not in range. | Show error message: “Độ dài password phải từ 6-20 ký tự!” | | 2 | Role is not specified. | Show error message: “Phải phân quyền cho user!” | | 3 | Invalid email format. | Show error message: “Email phải đúng định dạng!” |   **Relationships:** Manage User  **Business Rules:**   * Editing username is forbidden. | | | |

Table 5: <Admin> Update User

##### 6,<Admin> Activate User



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

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB005** | | | |
| **Use Case No.** | 007 | **Use Case Version** | 1.0 |
| **Use Case Name** | Activate User | | |
| **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 again.   **Triggers:**   * Admin wants to activate an account so that it can be used to log in the system again.   **Preconditions:**   * User must log in the system with admin role.   **Post Conditions:**   * **Success:** The selected account will be activated. * **Fail:** No account is activated.   **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 and “Tìm Kiếm” button. * A table with 4 columns:   + ID.   + Tài Khoản.   + Mật khẩu.   + Tên   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox) * “Lưu”: button. | | 2 | Check the checkbox in “Kích hoạt” cell of a deactivated account. | Selected account is activated again. [Exception 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 User  **Business Rules:**   * Admins can’t activate/deactivate account of themselves or other admins. | | | |

Table 6: <Admin> Activate User

7, <Admin>Deactivate User



Figure 7: <Admin> Deactivate User

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB006** | | | |
| **Use Case No.** | 008 | **Use Case Version** | 1.0 |
| **Use Case Name** | Deactivate User | | |
| **Author** | Tran Tan Len | | |
| **Date** | 16/02/2014 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This user case allows admin to deactivate an account.   **Goal:**   * An active account will be deactivated.   **Triggers:**   * In our system, when we do not want a user to login, we deactivate his/her account. That account can be activated later.   **Preconditions:**   * User must log in the system with admin role.   **Post Conditions:**   * **Success:** The selected account will be deactivated. * **Fail:** No account is deactivated.   **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 and “Tìm Kiếm” button. * A table with 4 columns:   + ID.   + Tài Khoản.   + Mật khẩu.   + Tên   + Email   + Vai trò (Dropdownlist)   + Kích Hoạt (Checkbox) * “Lưu”: button. | | 2 | Uncheck the checkbox in “Trạng thái” cell of an active account. | The selected account will be deactivated.  [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot deactivate 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 User

8<Staff> Import Excel



Use Case Specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB08** | | | |
| **Use Case No.** | SB013 | **Use Case Version** | 1 |
| **Use Case Name** | Import File | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to show data from excel files.   **Goal:**   * Product classification in excel file.   **Triggers:**   * Staff wants to show products in excel file. * 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**: Products will be showed. * **Fail:** Show 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:   * “Chọn file” button. * “Tải lên” button. | | 2 | From “Nhập từ excel” page, staff clicks “Chọn file” button, then clicks “Mở”. | System will get file path and show 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 thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.  [Exception 1, 2, 3, 4, 5] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Xóa” button | The row contain the button will be deleted. | | 2 | Click on “Hủy” button to cancel. | No product is added. System will return back to “Nhập từ excel” page. | | 3 | Click on “Lưu” button to finish. | Save products to database |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Product input is wrong format | Display error message: “File không đúng định dạng”. | | 2 | “Tên” is not in range [5, 100]. | Display error message: “Tên sản phẩm phải từ 5 đến 100 ký tự”. | | 3 | “Trọng số” is not in range [5, 100]. | Display error message: “Trọng số phải từ 1 đến 300”. | | 4 | “Loại ”is not in range [1, 10000]. | Display error message: “Loại” phải từ 1 đến 5 ký tự”. | | 5 | File has more than 5 errors | Display number of error rows. |   **Relationships:** Manage Product.  **Business Rules:**   * Valid file format :      * Format file is excel (.xlsx/.xls) * File has less than 5 errors. * File has more than 5 errors. Display list error rows. | | | |

Table 17: <Staff> Import File

Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE –** | | | |
| **Use Case No.** | = | **Use Case Version** | 1.0 |
| **Use Case Name** | Save error products | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to update product information.   **Goal:**   * New information will be updated to selected product.   **Triggers:**   * Staff wants to update product information. * To update an error product, staff must do the following steps:   + Edit product information.   + Choose the file, click “Lưu” button.   **Preconditions:**   * User must log in the system with staff role.   **Post Conditions:**   * **Success**:   +Error product will be moved to duplicate products list or correct products list. Then show success message.  + New information will be updated to selected product.   * **Fail:** Nothing is updated. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Refer to use case SB013 | File is uploaded to server, then redirect back to “Nhập từ excel” page, contains:  \* “Danh sách thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.  [Exception 1, 2, 3] | | 2 | Click “Sản phẩm lỗi” in menu tab. | Redirect to Error products list Page, include table product ,for each row:   * + “STT” : label   + “Tên sản phẩm”: 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. | | 3 | Edit product information. Then click “Lưu” button | Product information will be updated.  The system will be compared this product name with products in duplicate products list and correct products list. Then move this product to duplicate products list or correct products list. [Exception 1, 2, 3] |   **Alternative Scenario:** N/A  **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 [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:**  - Compare products by product name with algorithms:  + Create a function *pairs(s)* which returns a list of adjacent character pairs of string *s*.  +Then, we use below formula to calculate matching percent. | | | |

Table 18: <Staff> Save error products

Use Case Specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB015** | | | |
| **Use Case No.** | SB015 | **Use Case Version** | 1.0 |
| **Use Case Name** | Process duplicate products | | |
| **Author** | Tran Tan Len | | |
| **Date** | 1/06/2014 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to join or divide products.   **Goal:**   * Duplicate products will be joined or divided.   **Triggers:**   * Staff wants to join or divide products. * 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.   **Post Conditions:**   * **Success**: Products will be moved to correct products list. * **Fail:** Nothing is changed. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Refer to use case SB013 | File is uploaded to server, then redirect back to “Nhập từ excel” page, contains:  \* “Danh sách thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.  [Exception 1, 2, 3, 4, 5] | | 2 | Click “Sản phẩm trùng” in menu tab. | “Danh sách thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.   * + [Exception 1, 2, 3] | | 3 | Select products by checkbox. Then click “Gộp” button | Selected products will be joined. And move to correct products list.  [Exception 1] | | 4 | Select products by checkbox. Then click “Tách” button | Selected products will be divided. And move to correct products list. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | Step | 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. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | 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 and separated by “;”.  - Merge: make two or more names refer to one product.  - Split: different names mean different products. | | | |

Table 19: <Staff> Process duplicated products

Use case specification

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – SB016** | | | |
| **Use Case No.** | SB016 | **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 to import data from excel files.   **Goal:**   * Create many products from imported files.   **Triggers:**   * Staff wants to create many products by importing excel files. * 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**: Products will be compared with database.   **+** If products not available in database will be added to the database. Show success message.  **+** If products available in database will be moved to duplicate products list.   * **Fail:** Nothing is saved to the database. Show error list.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Refer to use case SB013 | File is uploaded to server, then redirect back to “Nhập từ excel” page, contains:  \* “Danh sách thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.  [Exception 1, 2, 3, 4, 5] | | 2 | Click “Danh sách sản phẩm” 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. * “Lưu” button. * “Hủy” button.   [Exception 1, 2, 3] | | 3 | Staff clicks “Lưu” button to save product. [Alternative 1] | Compare products in correct products list with database by product name.  Duplicate products will be moved to duplicate products list. Else, save products to database. [Exception 4] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click on “Hủy” button to finish. | No product is added. System will return back to “Nhập từ excel” page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Product name is not in range [5, 100]. | Display error message: “Tên sản phẩm phải từ 5 đến 100ký tự”. | | 2 | Market name is not in range [5, 100]. | Display error message: “Tên chợ phải từ 5 đến 100ký tự”. | | 3 | Price is not in range [1, 10000]. | Display error message: “Giá sản phẩm phải từ 1 đến 10000”. | | 4 | Fail to insert to database. | Display error message: “Có lỗi xảy ra. Vui lòng thử lại sau”. |   **Relationships:** Login, Import File.  **Business Rules:**  - Compare products by product name with algorithms:  + Create a function *pairs(s)* which returns a list of adjacent character pairs of string *s*.  +Then, we use below formula to calculate matching percent. | | | |

Table 20: <Staff> Save correct products

Use case specification

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| **USE CASE – SB017** | | | |
| **Use Case No.** | SB017 | **Use Case Version** | 1.0 |
| **Use Case Name** | 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:** Nothing is changed. Show error message.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Refer to usecase SB013 | “Danh sách thông số laptop” 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.   \* “Sản phẩm lỗi” tab.  \* “Sản phẩm trùng” tab.  [Exception 1, 2, 3, 4, 5] | | 2 | 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:**  - Name of product will be recorded by each row of each table and seceded by “;”.  - Compare products by product name with algorithms:  + Create a function *pairs(s)* which returns a list of adjacent character pairs of string *s*.  +Then, we use below formula to calculate matching percent. | | | |

Table 21: <Staff> Log File