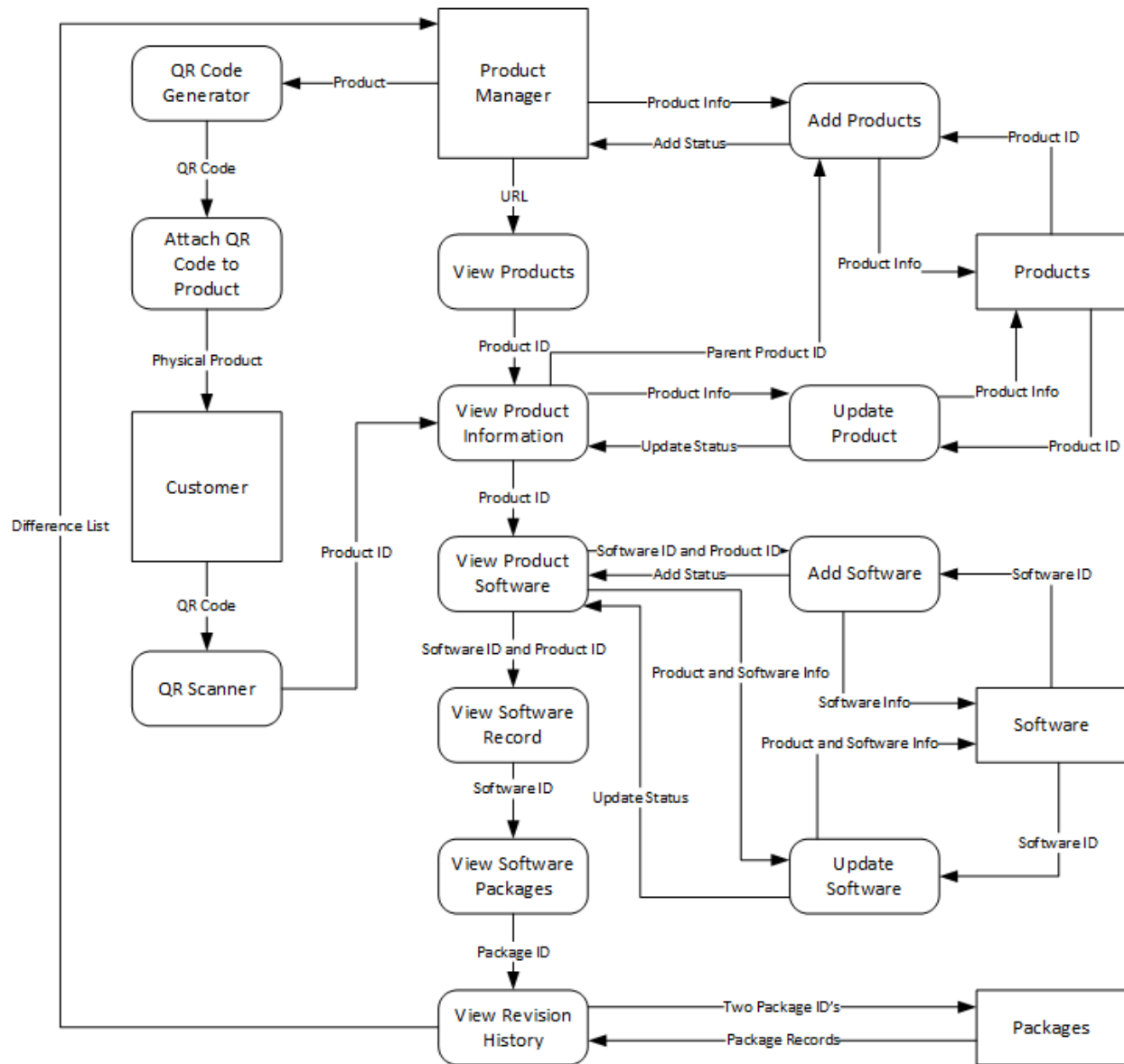


Product History Utility Data Flow Diagram



Data Decomposition

Entities

1. Product Manager
 - a. The product manager is the person creating the SPDX documents. They will be the primary user of the PHU system, as they will be using the system to produce documents from the software for use by both the company and their customers.
2. Customer

- a. The customer is the person who purchases a product that requires some notice file or documentation on the software used in the product they bought. They will have an indirect link with the system, only being able to view documents already produced by the product manager.

Processes

1. QR Scanner

a. Description

- i. The QR code scanner is an external system that directs a customer to the view product page.

2. Attach QR Code to Product

a. Description

- i. This process is an external system that gets the QR code to the customer, so they can access the view product page.

3. QR Code Generation

a. Description

- i. Generates QR code to be attached to the product. This code will link back to the View Product information process.

b. Input

- i. Complete URL to page with documentation (string).

c. Process

- i. <http://phpqrcode.sourceforge.net/>

d. Output

- i. Generated QR code.

4. View Products

a. Description

- i. Web page that lists all of the products available to look at.

b. Input

- i. URL

c. Process

- i. Query the database for current product list.
- ii. Information displayed on PHP based webpage.

d. Output

- i. Web page displaying list of current Products.

e. Example

- i. <http://54.218.86.78/SPDX/index.php>

f. Screenshots

- i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/ViewProducts.jpg>

5. View Product Information

a. Description

- i. Web page that gives detailed information regarding a specific product record.

- b. Input
 - i. Product Id : Unique identifier for each specific product.
 - c. Process
 - i. Query the database for current product information.
 - ii. Information displayed on PHP based webpage.
 - d. Output
 - i. Web page displaying information on specific Product record.
 - e. Example
 - i. http://54.218.86.78/SPDX/view_product.php?product_id=3
 - f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/ViewProductInfo.jpg>
6. Add Products
- a. Description
 - i. Web page that allows product managers to add new products to the system.
 - b. Input
 - i. Product info: information about the product such as name, type, and description.
 - ii. Parent Product Id: optional parameter used to create child products.
 - c. Process
 - i. Input product information to form
 - ii. Submit Form
 - d. Output
 - i. Status of form submission, either success or failure.
 - e. Example
 - i. http://54.218.86.78/SPDX/add_product.php
 - ii. http://54.218.86.78/SPDX/view_child_products.php?product_id=3
 - f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/AddProduct.jpg>
 - ii. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/AddChildProduct.jpg>
7. Update Product
- a. Description
 - i. Web page that allows product managers to update product details.
 - b. Input
 - i. Product Info, such as description, name, and type.
 - c. Process
 - i. Input updated product information to form.
 - ii. Submit form to database to update record.
 - d. Output

- i. Status of form submission, either success or failure.
 - e. Example
 - i. This feature is not currently included in the system mock up. It will be implemented by March 24th.
- 8. View Product Software
 - a. Description
 - i. Web page that displays list of software associated to a specific product.
 - b. Input
 - i. Product Id: Unique identifier for a product record.
 - c. Process
 - i. Query database for software associated to the product id.
 - ii. Display results of query to web page.
 - d. Output
 - i. List of software that is on the product.
 - e. Example
 - i. http://54.218.86.78/SPDX/view_product_software.php?product_id=3
 - f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/ViewProductSoftware.jpg>
- 9. Add Software
 - a. Description
 - i. Web page that allows product managers to add software to a product.
 - b. Input
 - i. Software Info: software Name, base package, and software description.
 - ii. Product Id: unique identifier for a product record.
 - c. Process
 - i. Input software info into form.
 - ii. Submit form to database.
 - d. Output
 - i. Status of add, either success or failure.
 - e. Example
 - i. http://54.218.86.78/SPDX/add_software.php?product_id=3
 - f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/AddSoftware.jpg>
- 10. Update Software
 - a. Description
 - i. Web page that allows product managers to update software details, such as name and description.

- b. Input
 - i. Product Id: unique identifier for product record.
 - ii. Software Info: updated details of software record.
- c. Process
 - i. Input software info into form.
 - ii. Submit form to database.
- d. Output
 - i. Status of update, either success or failure.
- e. Example
 - i. This feature is not currently included in the system mock up. It will be implemented by March 24th.

11. View Software Record

- a. Description
 - i. Web page that will show detailed software information about a specific software record.
- b. Input
 - i. Software Id: unique identifier for software record.
 - ii. Product Id: unique identifier for product record.
- c. Process
 - i. Query database for software information.
 - ii. Information displayed on PHP based webpage.
- d. Output
 - i. Web page displaying information on specific Product record.
- e. Example
 - i. http://54.218.86.78/SPDX/view_software.php?software_id=16&product_id=3
- f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/ViewSoftwareInfo.jpg>

12. View Software Packages

- a. Description
 - i. Web page that displays list of packages associated with a specific piece of software.
- b. Input
 - i. Software Id: unique identifier for software record.
- c. Process
 - i. Query database for software associated to the software id.
 - ii. Display results of query to web page.
- d. Output
 - i. List of packages that are associates with the software.
- e. Example
 - i. http://54.218.86.78/SPDX/view_packages.php?software_id=16&product_id=3

- f. Screenshots
 - i. <https://github.com/zwmcfarland/ProductHistoryUtility/blob/master/Documentation/Screenshots/ViewPackages.jpg>

13. View Revision History

- a. Description
 - i. Web page that will show information created from the comparison between two packages of the same software.
- b. Input
 - i. Two Package Ids: unique identifier for package record.
- c. Process
 - i. Query database for package information.
 - ii. Check software for SHA1 listing for each package Id.
 - iii. If the SHA1 listings for each package are different, check SHA1 listings for files inside package.
 - iv. Information displayed on PHP based webpage.
- d. Output
 - i. Web page displaying difference list between specified Package records.

Data Stores:

- 1. Products
 - a. Description
 - i. Contains all of the detailed product information such as product names, descriptions, and types.
- 2. Software
 - a. Description
 - i. Contains all of the detailed software information such as software names, and descriptions.
- 3. Packages
 - a. Description
 - i. Contains all of the package revisions and information about them.