SIT773 Software Requirements Analysis and Modelling

Pass Task 6.2: Identifying datatypes, input methods, and validation

Overview

This week, you have learnt about different datatypes, input methods, verification and validation approaches.

Different types of validation checks can be applied to identify and correct errors of input data before they are entered into the system. Common validation checks are sequence check, data type check, existence check, valid class check, combination check and referential integrity check.

Combination checks are performed on two or more input fields to ensure that they are consistent (e.g satisfying any business rule) when considered together. Valid class check are used for data items that must have certain values for classes. Sequence checks are used when the data must be in some predetermined sequence. Existence check is used for mandatory data items. This check would not allow user to save the input data until he or she enters a suitable value. Data type check tests to ensure that an input data item fits the required data type.

In *task 5.3* you have prepared a wireframe for the shopping cart view of the internet ordering system from the *Leckie's Choice* (LC) case study.

The shopping cart form requires various input data which need to be selected or typed by the user such as:

- Product item
- Brand of item
- The quantity of the item

In the purchase process of LC's system, customers who are not account customers cannot order a quantity of more than 5 for an item that is on promotion; quantities of more than 5 on promotional products are reserved for account holders only (customers such as contractors etc).

In addition to this, customer also need to provide personal and financial details such as name, contact number, credit card number etc. in order to complete the online purchase process.

In this task, you are required:

- To identify different data types and provide relevant examples from the LC's case study
- To identify different types of data validation checks required for online purchase process from the shopping cart form

Submission Details

Submit the following files to OnTrack:

A brief report that explains:

- The datatypes with examples from the LC's case study.
- The types of data validation check from the shopping cart form.

Instructions

1. Review articles from Weeks 5 and 6 as they are specifically related to representing data.

2. Read LC case study as per tasks *1.1*, *1.2*, *5.1*, *5.2*, and *5.3*.

3. Identify different data types and provide relevant examples from the LC's case study

4. Identify different types of data validation checks required for input data for online purchase process from the shopping cart form

5. Describe name of data and type of data for the LC's case study

6. Describe type of data validation check required for input items from the shopping cart form. You should include brief explanation on the selected data validation check methods (i.e., why it is important) and reasonable ranges for numeric data (i.e., a minimum and a maximum value for each range), possible sets of values for nominal/class data and other valid values.

7. Submit your report to OnTrack.