Mandatory Assignment 2

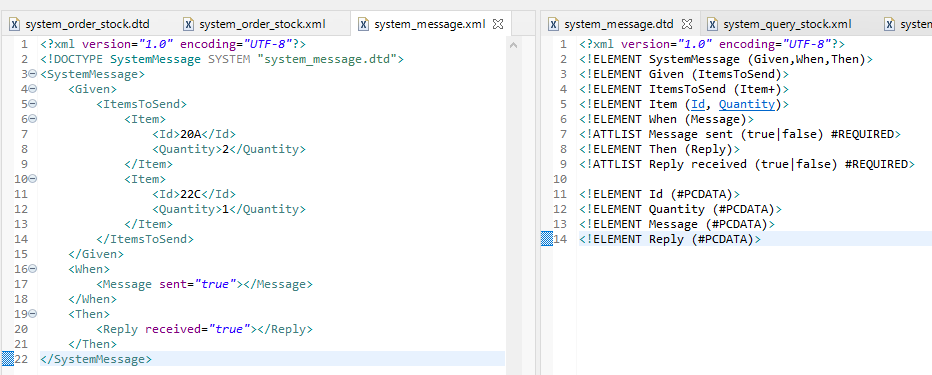
User Driven Acceptance Testing

General XML Structure

As the XML will serve users to write Acceptance Tests, the layout ideally reflects the following widely accepted format for Acceptance Tests – Given, When, Then:

* Given: A set of initial circumstances or state.
* When: An event happens.
* Then: The expected result.

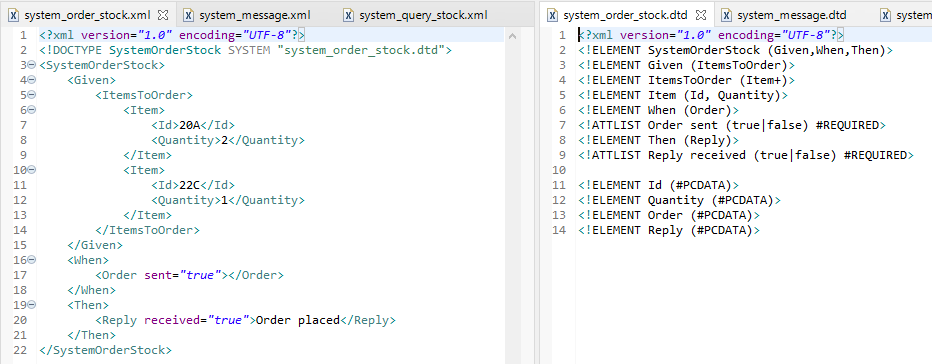
System 1 – Message for sending materials



Applying the aforementioned format and translating it to the XML file we arrive at the following structure where the contents withing the *<Given>* element are the materials that need to be sent. The *<ItemsToSend>* element encapsulates these individual materials which in turn are represented in the *<Item>* elements with the necessary data.

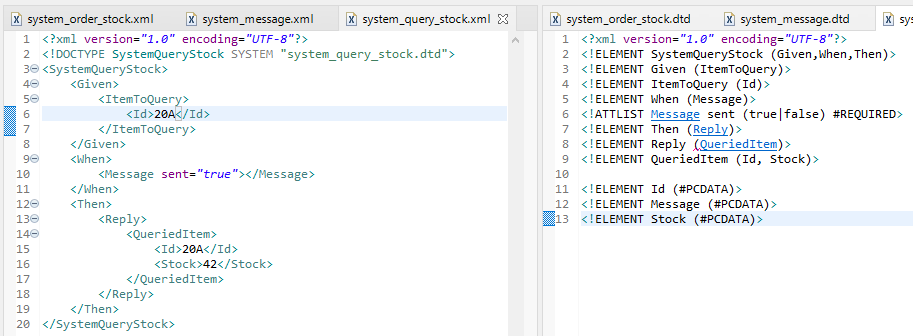
Once the structure was done the Document Type Definition (DTD) was defined to restrict the elements and attributes that can be present in the XML file, and then linked.

System 2 – Order stock

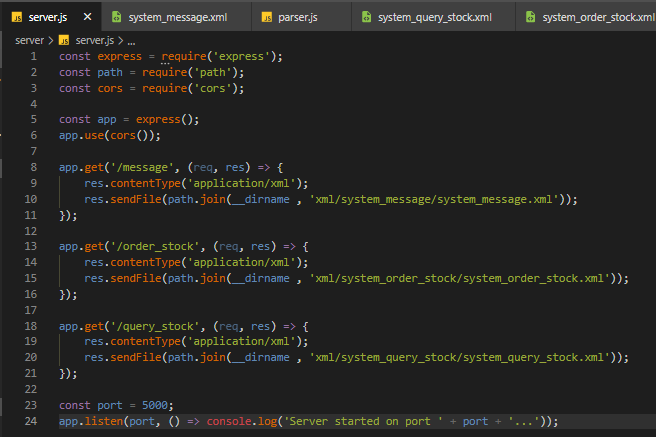


This XML and definition file are almost identical as the last with the exception of the *<ItemsToSend>* element which was renamed to *<ItemsToOrder>*.

System 3 – Query stock



For this system the structure was changed to include *<ItemToQuery>* which takes data to identify the stock and the expected result in the *<Then>* element comes in the form of a reply from the Depot in the *<Reply>* element which includes the queried item and the information about it.

Parser

The XML files and their “.dtd” counterparts are hosted on a local Node.JS server which the client, running JavaScript, then fetches from one of three defined endpoints.

For this reason, some NPM packages were installed such as the Express framework and CORS.

When the XML file is fetched, the frontend takes care of extracting the data and writing to the DOM, the result of the parsing can then be viewed by opening the *index.html* file in the browser.

