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**The City University of Hong Kong**

**MSc Electronic Commerce 2022/23**

**Postgraduate Degree**

**Course Code: EC5001**

**Course Name: Introduction to eCommerce**

**Module Lecture: Dr. Kenneth Lee**

**Individual Assignment**

**Assignment Title: XML and DTD Design**

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**Student Name: Law Hong Chun Zachary**

**Date: 1/11/2022**

**XML & DTD Design**

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE Bill[

<!ELEMENT Bill (branch\_id, cso, date, delivery, display, items, ord\_num, payment, region, sub\_total, takeaway, takeaway\_total, time)>

<!ELEMENT branch\_id (#PCDATA)>

<!ELEMENT cso (#PCDATA)>

<!ELEMENT date (#PCDATA)>

<!ELEMENT delivery (#PCDATA)>

<!ELEMENT display (#PCDATA)>

<!ELEMENT items (item+)>

<!ELEMENT item (no\_sause, no\_vegetables, price, product, product\_id, quantity, special, no\_fruit)>

<!ATTLIST item CDATA "true" no\_sause CDATA "false">

<!ATTLIST item CDATA "true" no\_vegetables CDATA "false">

<!ELEMENT price (#PCDATA)>

<!ELEMENT product (#PCDATA)>

<!ELEMENT product\_id (#PCDATA)>

<!ELEMENT quantity (#PCDATA)>

<!ELEMENT special (#PCDATA)>

<!ATTLIST item CDATA "true" no\_fruit CDATA "false">

<!ELEMENT ord\_num (#PCDATA)>

<!ELEMENT payment (amount, balance, card\_id, last\_topup, machine\_id, method, payment\_id)>

<!ELEMENT amount (#PCDATA)>

<!ELEMENT balance (#PCDATA)>

<!ELEMENT card\_id (#PCDATA)>

<!ELEMENT last\_topup (#PCDATA)>

<!ELEMENT machine\_id (#PCDATA)>

<!ELEMENT method (#PCDATA)>

<!ELEMENT payment\_id (#PCDATA)>

<!ELEMENT region (#PCDATA)>

<!ELEMENT sub\_total (#PCDATA)>

<!ELEMENT takeaway (CDATA )>

<!ELEMENT takeaway\_total (#PCDATA)>

<!ELEMENT time (#PCDATA)>

] >

<!--Bill from Mcdonalds ordering a meal-->

<!--Element order been arranged alphabetically-->

<Bill>

<branch\_id>136</branch\_id>

<cso>42</cso>

<!--CSO stands for Contrail Service Orchestration-->

<date>29/10/2022</date>

<delivery>false</delivery>

<!--Boolean for order to be deliver to address-->

<display>screen\_1</display>

<!--Screen group / Counter category to display the order id for-->

<items>

<item>

<no\_sause>false</no\_sause>

<!--Exclude salad sause from hamberger-->

<no\_vegetables>false</no\_vegetables>

<!--Exclude vegetables sause from hamberger-->

<price>41.00</price>

<product>大大啖脆雞巨無霸套餐</product>

<product\_id>ab12</product\_id>

<!--4 digit hex ID for product-->

<quantity>1</quantity>

<special>false</special>

<!--Boolean for special needs for customer-->

</item>

<item>

<no\_sugar>false</no\_sugar>

<product>餐大薯條</product>

<product\_id>cd34</product\_id>

<!--4 digit hex ID for product-->

<quantity>1</quantity>

<special>false</special>

<!--Boolean for special needs for customer-->

</item>

<item>

<product>調味粉</product>

<product\_id>ef56</product\_id>

<!--4 digit hex ID for product-->

<quantity>1</quantity>

<special>美式BBQ蜜糖</special>

<!--Boolean for special needs for customer-->

</item>

<item>

<ice>less</ice>

<no\_fruit>false</no\_fruit>

<product>餐橙汁雜飲</product>

<product\_id>gh78</product\_id>

<!--4 digit hex ID for product-->

<quantity>1</quantity>

<special>false</special>

<!--Boolean for special needs for customer-->

</item>

</items>

<ord\_num>245</ord\_num>

<payment>

<amount>41.00</amount>

<balance>19.90</balance>

<!--Remaining balance inside payment card-->

<card\_id>1234567890</card\_id>

<!--10 digit ID for octopus card id-->

<last\_topup>2022-10-05</last\_topup>

<machine\_id>12345A</machine\_id>

<!--6 digit ID for octopus card receiver machine-->

<method>octopus</method>

<payment\_id>1234</payment\_id>

</payment>

<region>hk</region>

<!--Region/Country this restaurant locate in-->

<sub\_total>41.00</sub\_total>

<takeaway>true</takeaway>

<takeaway\_total>41.00</takeaway\_total>

<time>22:15:47</time>

</Bill>

**Photo of the receipt**

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