Assignment : 1
Group Number : 15

DOMAIN : Shopping mall

Report:

Brief description of Our work:

We wrote a XML file for a shopping mall supported by a DTD file which has the rules and information regarding the domain. Shopping mall has a building and a parking area. Other details and attributes are mentioned as well. Parking has vehicles which have a description about vehicles parked. Vehicle owner details , vehicle_registration_number.
Building basically has floors. Each floor has certain sections.Shopping section, restaurants, gaming section,washroom.
Shopping section has shops for different categories like electronics , clothing jewelry ,household groceries. Shop items have their own details id, name , color , price , rating , discounts etc.
Restaurants have dishes. Information regarding price quantity rating category as also mentioned. The Gaming section has the details about games age_limit,,price_per_head, etc.
DTD
We have used attributes both compulsory and optional. Elements have been prefixed with (" + ", " - "," ?") to allow flexibility on number and ease of constructing the XML.
XML has all the data regarding the shopping mall.

Certain instances and a brief description of the DTD are mentioned below :
<!ELEMENT shopping_mall (shopping_mall_name, building+, parking*, address)>: This defines the root element of the XML document, shopping_mall, which must contain a shopping_mall_name, one or more building elements, zero or more parking elements, and an address element.
<!ELEMENT building (floor ,no_of_floors)>: This defines the building element, which must contain a floor element and a no_of_floors element.

<!ELEMENT no_of_floors (#PCDATA)>: This defines the no_of_floors element, which can contain only parsed character data (#PCDATA).

<!ELEMENT floor (shop* , restaurant* , multiplex* , gaming_zone*)>: This defines the floor element, which can contain zero or more shop, restaurant, multiplex,and gaming_zone elements.

Some part of XML is data mentioned below:

```
<building>
…
       …

<product rating="4.0" warranty ="1" product_number="2355">
      <product_name>T-Shirts</product_name>
      <product_color>red</product_color>
      <product_brand>CalvinKlein</product_brand>
      <product_price>1500</product_price>

       <product_detail>
```

Fine mini stripes for a sporty design. Smooth compact cotton for effortless, extra sleek comfort. Regular fit: relaxed through arms, comfortable fit around body Crewneck and short sleeves, Straight hem, topstitching and seaming details Machine wash 100% cotton Imported Model is approximately 6'1" wearing size Medium 28.75" garment length

```
      </product_detail>
</product>
      ….
.....
</building>
```

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