

Internet and website development

Assignment2- Part1 Documentation of booking restaurant

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XML design-seat

The XML design for the two tables layout are the same, one of the outside table had an extra table is different layout and follow the following pattern.

The root element is <restaurant>.

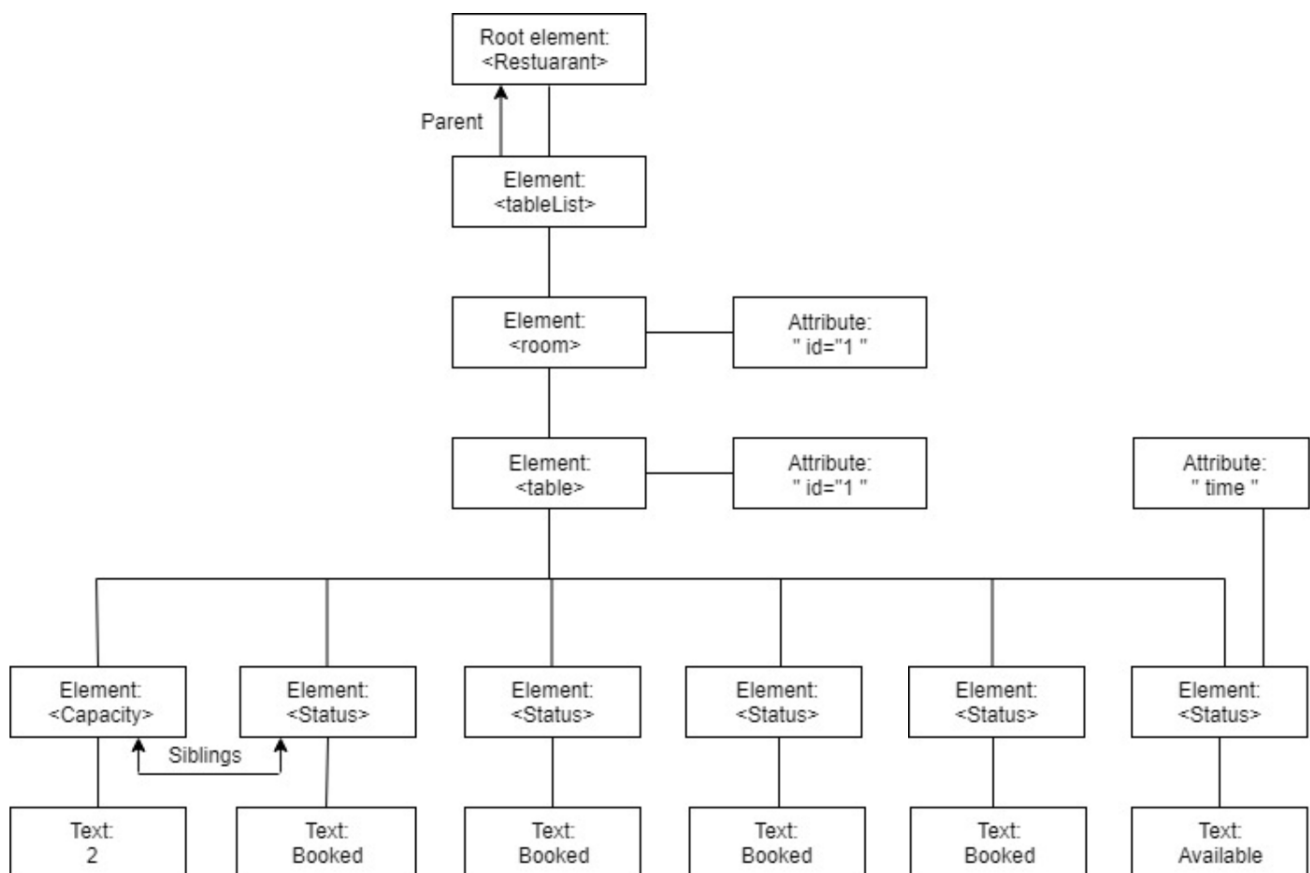
There are several elements here

<room> used to set three different table so <table id = "1">.

<table> used to set up the id=1 tables in the first room <table id="1">

<capacity> used to set the id=1 table for 2 people <capacity> 2</capacity>

<status> used to set the booking time, status time is 4:30, 5:30, 6:30, 7:30, 8:30, only the 8:30 has been available, the available can be booked. As is shown in dish design in terms of a XML tree.



There are 3 rooms to be cooked: 1.Sun room 2.Moon room 3. Sky deck so I will use the data dictionary to explain the design.

Sun room

Table	Capacity	Status time 4:30	Status time 5:30	Status time 6:30	Status time 7:30	Status time 8:30
Table id = "1"	2	Booked	Booked	Booked	Booked	Available
Table id = "2"	4	Available	Available	Available	Booked	Booked
Table id = "3"	6	Available	Available	Available	Booked	Booked
Table id = "4"	2	Booked	Booked	Booked	Booked	Available
Table id = "5"	4	Booked	Booked	Available	Booked	Booked
Table id = "6"	8	Available	Booked	Booked	Available	Available

Moon room

Table	Capacity	Status time 4:30	Status time 5:30	Status time 6:30	Status time 7:30	Status time 8:30
Table id = "1"	4	Available	Available	Available	Available	Available
Table id = "2"	8	Available	Available	Available	Available	Available
Table id = "3"	2	Available	Available	Available	Available	Available
Table id = "4"	4	Available	Available	Available	Available	Available
Table id = "5"	6	Available	Available	Available	Available	Available
Table id = "6"	2	Available	Available	Available	Available	Available

On this question: Guest A booked at 4:30pm but Guest B already booked the same table at 5:30pm because the "Guest B" comes from the .XML data when reading the data from XML that's why I put the message box to warn the guest that cannot book the table for 2 hours because another guest already book the table one hour after her booking. Otherwise the guest can book another table in the room 2 so all the tables are available all day in room2.

Sun Room=read data from .xml file

Moon Room=available all day

Sky deck

Table	Capacity	Status time 4:30	Status time 5:30	Status time 6:30	Status time 7:30	Status time 8:30
Table id = "1"	2	Available	Available	Available	Available	Available
Table id = "2"	4	Available	Available	Available	Available	Available
Table id = "3"	6	Available	Available	Available	Available	Available
Table id = "4"	6	Available	Available	Available	Available	Available
Table id = "5"	8	Available	Available	Available	Available	Available
Table id = "6"	2	Available	Available	Available	Available	Available
Table id = "7"	4	Available	Available	Available	Available	Available

Outside Deck = depends on the weather and temperature so just booked today

There are setting the name of the outdoor room as deck and set an outdoor room that can only reserved for the day because of the weather so not able to make an appointment if the weather is below 18 degrees or thunderstorm.

The code is shown in the application as shown in the figure below:

```
<restaurant>
<tableList>
  <room id="1">
    <table id="1">
      <capacity>2</capacity>
      <status time="4:30">Booked</status>
      <status time="5:30">Booked</status>
      <status time="6:30">Booked</status>
      <status time="7:30">Booked</status>
      <status time="8:30">Available</status>
    </table>
    <table id="2">
      <capacity>4</capacity>
      <status time="4:30">Available</status>
      <status time="5:30">Available</status>
      <status time="6:30">Available</status>
      <status time="7:30">Booked</status>
      <status time="8:30">Booked</status>
    </table>
    <table id="3">
      <capacity>6</capacity>
      <status time="4:30">Available</status>
      <status time="5:30">Available</status>
      <status time="6:30">Available</status>
      <status time="7:30">Booked</status>
      <status time="8:30">Booked</status>
    </table>
  </room>
</tableList>
</restaurant>
```

TABLE

And then design the button

and use javascript to show the table design

```
var tableList = [];
var tableAvailability = [];
var timeAvailability = [];

var xmlhttp = new XMLHttpRequest();

if (!(window.XMLHttpRequest)) {
    // code for IE6, IE5
    xmlhttp = new ActiveXObject("Microsoft.XMLHTTP");
}

xmlhttp.open('GET', "seat.xml");
xmlhttp.responseType = 'document';
xmlhttp.overrideMimeType('text/xml');
```

```
//<tableList> elements tag
var tableListElements = xmlDoc.getElementsByTagName("tableList");

for (var i = 0; i < tableListElements.length; i++) {

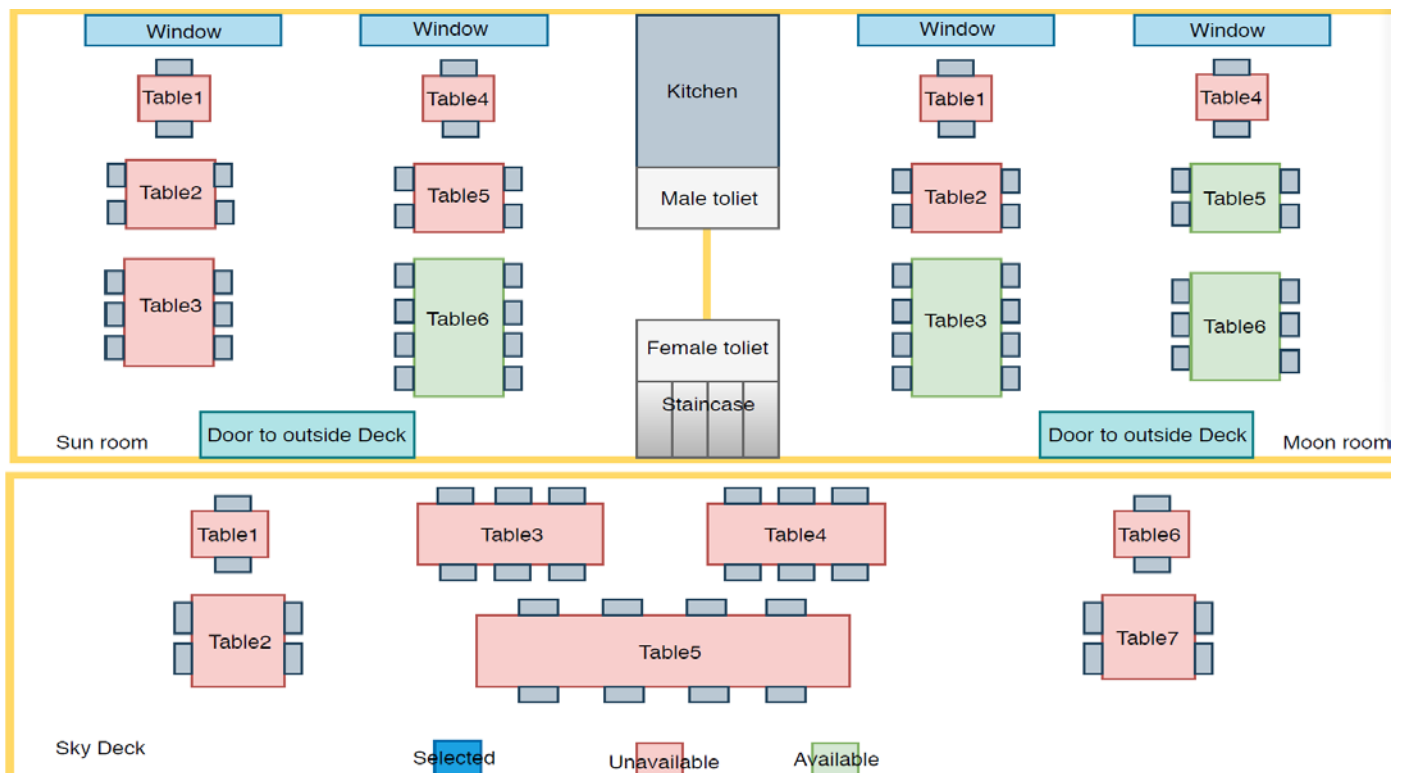
    //<room> elements tag
    var roomListElements = tableListElements[i].getElementsByTagName("room");

    for (var j = 0; j < roomListElements.length; j++) {

        //<table> elements tag
        var tableElements = roomListElements[j].getElementsByTagName("table");
```

In addition, some seat elements also have an attribute called booked which is booked if the seat is already booked by another user.

This represents the data given in the requirements for the room layouts as below:



Use the JS to design the layout of seats in the three rooms such as tables, chairs, toilets and kitchens
And I changed the room name, room1 = sun room ,room2 = moon room, outside room = sky deck

Comment: pick color is already reserved when reading the date from XML.

Green color can book

Blue color can select when the mouse select the green color.

```
function initTable() {  
    var mycanvas = document.getElementById("testcanvas");  
    var cntx = mycanvas.getContext('2d');
```

```
//sun room  
cntx.fillStyle = 'rgb(236,240,230)';  
cntx.fillRect(20, 10, 530, 510);  
cntx.fillStyle = 'black';  
cntx.textAlign = "center";  
cntx.fillText("Sun Room", 60, 510);  
  
//moon room  
cntx.fillStyle = 'rgb(236,240,230)';  
cntx.fillRect(545, 10, 520, 510);  
cntx.fillStyle = 'black';  
cntx.textAlign = "center";  
cntx.fillText("Moon Room", 1020, 510);  
  
//sky deck room  
cntx.fillStyle = 'rgb(236,240,230)';  
cntx.fillRect(20, 530, 1040, 350);  
cntx.fillStyle = 'black';  
cntx.textAlign = "center";  
cntx.fillText("Sky Deck", 60,870);  
  
//windows1  
cntx.fillStyle = 'rgb(128, 204, 255)';  
cntx.fillRect(40, 10, 150, 25);  
cntx.fillStyle = 'black';  
cntx.textAlign = "center";  
cntx.fillText("Windows", 110, 25);
```

After booking confirmation is done- table should be marked as unavailable/booked for that time (plus two hours) and selected date.

Finally, I used JSON and the API to set it. The customer will be presented with a dialog box that says if the weather is below 18 degrees today or if it is a thunderstorm, outdoor seating will not be available.

Sorry for the inconvenience. Sky Deck is not available to book due to bad weather condition or the temperature is below 18.

OK

If the reservation is very late, we will remind you of the closing time.

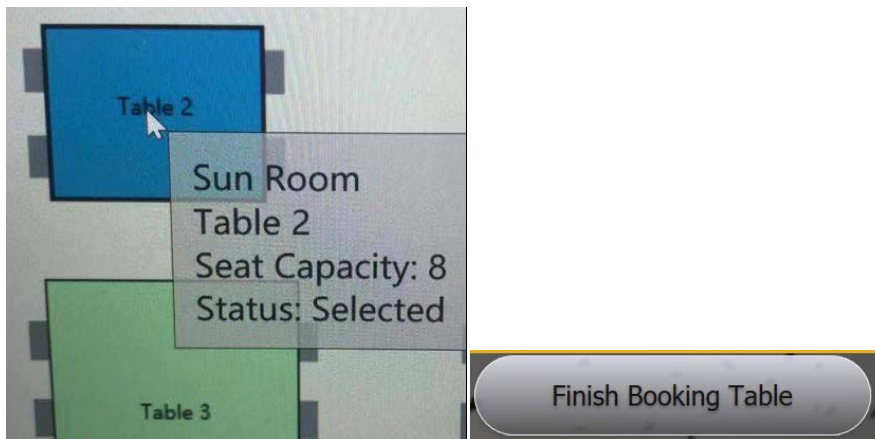
Please vacate the table within an hour because another guest has already booked this table one hour after 8:30 or the restaurant is closed down at 9.30pm.

Are you sure you want to continue booking?

OK

Cancel

When click table button and select the table can show the table color changed blue and show the table information so that customers can see the seat information clearly then click the finish booking table button the choose.



When the customer has successfully booked, the dialog box that you have booked will appear.

