Lecture 11

Page Layout

Mr. Mubashir Ali
Lecturer (Dept. of Computer Science)
dr.mubashirali1@gmail.com
Summary of the previous lecture

• Font properties
• Controlling text with CSS
• Styling links
• Styling background
• Styling tables
• The process to design a page layout
• div tag
• Coding a page using divs and CSS
Consider a web application to develop

• CONNECtIONS: a smaller version of social web
• Users can register themselves
• After registration they can send a text message to anybody who is registered with the website
• User’s can view the received messages
1. The process

- Determine the **requirements** of the site
- **Group** the required information
- Make a **site map**
- **Identify** key elements for each page
- Decide about the **arrangement** of information on each page
- **Translate** the design into code
1.1 Determining requirements

• Understanding the audience
  
• **Who?** Who will visit the site?
  
  – You can create fictional visitors
  
  – Men and women of 20 to 50 years of age

• **Why?** Why have they come to your site?
  
  – Send messages
  
  – View received messages
1.1 Determining requirements...

- **What?** What does a visitor need to achieve a goal?
  - Will they be familiar with your product?
- **How often?** How often can you realistically expect them to visit?
  - In-order to make changes
1.1 Determining requirements...

• Things You Want the Site to Do

• Determining the requirement of the owner of the site which are not already listed
  – User must register themselves in-order to send and receive messages
1.2 Grouping and categorization

• Group related information/sections
  – Home page: login form, registration form
  – User page: user’s information, recent messages
  – Inbox: Received messages
  – Outbox: Sent messages
  – Send a message: Send message form
1.3 Make a site map...

- Site map shows how many pages you need and how they relate
- Usually look like either a family tree or folder list
1.3 Make a site map

- Home page
  - User page
    - Inbox
    - Outbox
    - Send a message
1.4 Key element for each page

- **Common sections** (header, navigation, footer etc.)
- **Page specific sections**
- **Common Sections** (header, footer)
- **Page specific sections**
- **Home page**: login form, registration form
- **User page**: user’s information, recent messages
1.4 Key element for each page...

- **Inbox page**: received messages
- **Outbox page**: messages sent by the user
- **Send message page**: form to send a message
1.5 Arranging elements on pages

Web Page

Logo

Login form

Sign-In form

Footer

header
1.5 Arranging elements on pages...

User Info

User Picture

Actions

User data

Message

Recent Messages

Mubashir Ali - Lecturer (Department of Computer Science)
2. Translating design into code

- Liquid vs Fixed design
- The Div tag
- Coding the design
2.1 Liquid vs Fixed design

• Liquid Design
  – designs *automatically* fits to the screen
  – Use *percentage* values to declare height and width of sections

• Fixed design
  – Designs remain *fixed* width
  – Use *fixed* values to declare height and width of sections
2.2 The `<div>` tag

- Defines a **division or section** in an HTML document
- Visually, allows us to make **containers** that can be formatted
- Can be declared as
  - `<div>.......</div>`
2.2 The `<div>` tag

```html
<html>
<head>
<title>Using divs</title>
</head>
<body>
<div style="background-color:gray">This is the first section</div>
<div style="background-color:red">This is the second section</div>
</body>
</html>
```
2.2 The `<div>` tag...
2.3 Coding the design

```html
<div id="container">
  <div id="header">
    <div id="logo"></div>
  </div>  //header div ends
</div>  //container div ends
```
2.3 Coding the design...

```html
<div id="container">

Header and logo divs

<div id="center-content">
<div id="form-container">
<div class="form-heading">
Heading text </div>
<div class="form-rows">
Form element </div>
</div> //form container ends
</div> //end of center content
</div> //container div ends
```
2.3 Coding the design...

<div id="container">

Header and logo divs
<div id="center-content">
Login form div's
<div id="form-container">
<div class="form-heading">
Heading text </div>
<div class="form-rows">
Form element </div>
</div> //form container ends
</div> //end of center content
</div> //container div ends
2.3 Coding the design...

<div id="container">

Header and logo divs

<div id="center-content">

Login form div’s

Registration form div’s

</div> //end of center content

<div id="footer">

</div>

</div> //container div ends
2.3 Coding the design...

- Divs required to make the structure:
  - Main container
  - Header
  - Logo
  - Center container
  - Form container
  - Form heading
  - Form row
2.3 Coding the design...

```html
body{
background-color:#CCCCCC;
}
#container{
height:auto;
width:80%;
margin-left:10%;
border:2px;
border-color:550000;
}
#header{
width:100%;
height:18%;
}
```
2.3 Coding the design...

border: 2px;
border-color: 550000;
}

#header{
width: 100%;
height: 18%;
background: url(images/header.jpg);
background-repeat: repeat;
background-position: 0px 0px;
margin: auto;
}

#logo{
float: left;
2.3 Coding the design...

```html
margin: auto;
}

#logo{
float: left;
padding: 0px;
height: 100%;
width: 100%;
}

#center-content{
height: auto;
width: 100%;
background-color: #CCCCCC;
}
```
2.3 Coding the design...

div.center-content{
  height:auto;
  width:100%;
  background-color:#CCCCCC;
}
div.form-container{
  margin-left:25%;
  margin-right:25%;
  margin-top:10px;
  height:auto;
  width:auto;
  border:2px;
  border-style:solid;
}
2.3 Coding the design...

```html
div.form-heading {
    padding:10px;
    height:40px;
    font-family:calibri;
    color:white;
    font-weight:bold;
    font-size:26px;
    background-color:550000;
}

div.form-row {
    padding:5px;
    height:25px;
}
```

Form heading

Form row
2.3 Coding the design...

```html
label{
  font-family:Calibri;
  font-size:12px;
  padding:10px;
  width:200px;
  float:left;
  font-weight:bold;
}
input{
  float:left;
  height:25px;
  width:250px;
}
input.sub{
  float:left;
}
```

Styling label

Styling input field
2.3 Coding the design...

```html
margin-left: 100px;
}
div.space
{
  height: 10px;
}
#footer
{
  margin-top: 10px;
  color: white;
  text-align: center;
  height: 30px;
  width: 100%;
  background-color: #550000;
}
```
2.3 Coding the design...

```html
<head>
<title>Connection Home Page!</title>
<link href="style.css" rel="stylesheet" type="text/css"/>
</head>
<body>
<div id="container">
<div id="header">
<div id="logo"><img src="images/logo.jpg" height="116" width="170"></div>
</div>
</div>
<div>
</div>
</body>
</html>
```
2.3 Coding the design...
2.3 Coding the design...

```html
<div id="logo"><img src="images/logo.jpg" height="116" width="170"></div>

<div id="center-content">
  <div class="form-container">
    <div class="form-heading">User Login</div>
    <form>
      <div class="form-row">
        <label>Your ID</label>
        <input type="text" name="ID">
      </div>
    </form>
  </div>
</div>

Center content starts
Form container start
Form starts
Form heading
Row starts
Label
Input field
Row ends
Form container end
Center content ends
2.3 Coding the design...
2.3 Coding the design...

```html
</div>
<div class="space"> </div>
<div class="form-container">
<div class="form-heading">User Registration</div>
<form>
<div class="form-row">
<label>Your Full Name:</label>
<input type="text" name="name">
</div>
<div class="form-row">
<label>Your Email Address:</label>
<input type="text" name="email">
</div>
</form>
</div>
</div>
```

Space is added
Form container
heading
Form row
Second row
2.3 Coding the design...
2.3 Coding the design...

```html
<div class="form-row">
  <label>Your Picture:</label>
  <input type="file" name="pic">
</div>
<div class="form-row">
  <label></label>
  <input class="sub" type="submit" value="Register">
</div>
</div>

<div id="footer">&copy; all rights reserved</div>
</div>
```
2.3 Coding the design...
Summary

• The process to design a page layout
• div tag
• Coding a page using divs and CSS
References