

Lecture 13

Page Layout

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Summary of the previous lecture

- **Font properties**
- **Controlling text with CSS**
- **Styling links**
- **Styling background**
- **Styling tables**

Outline

- **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**

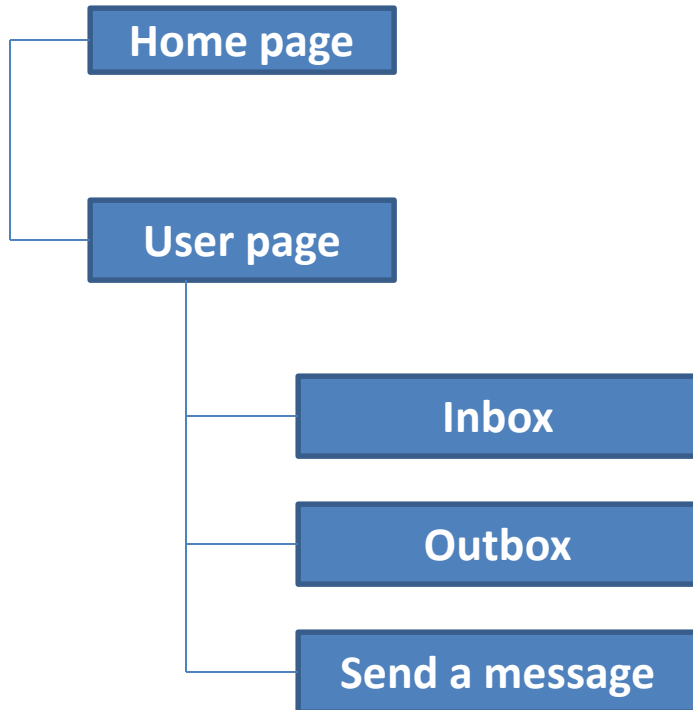
1.2 Grouping and categorization

- **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



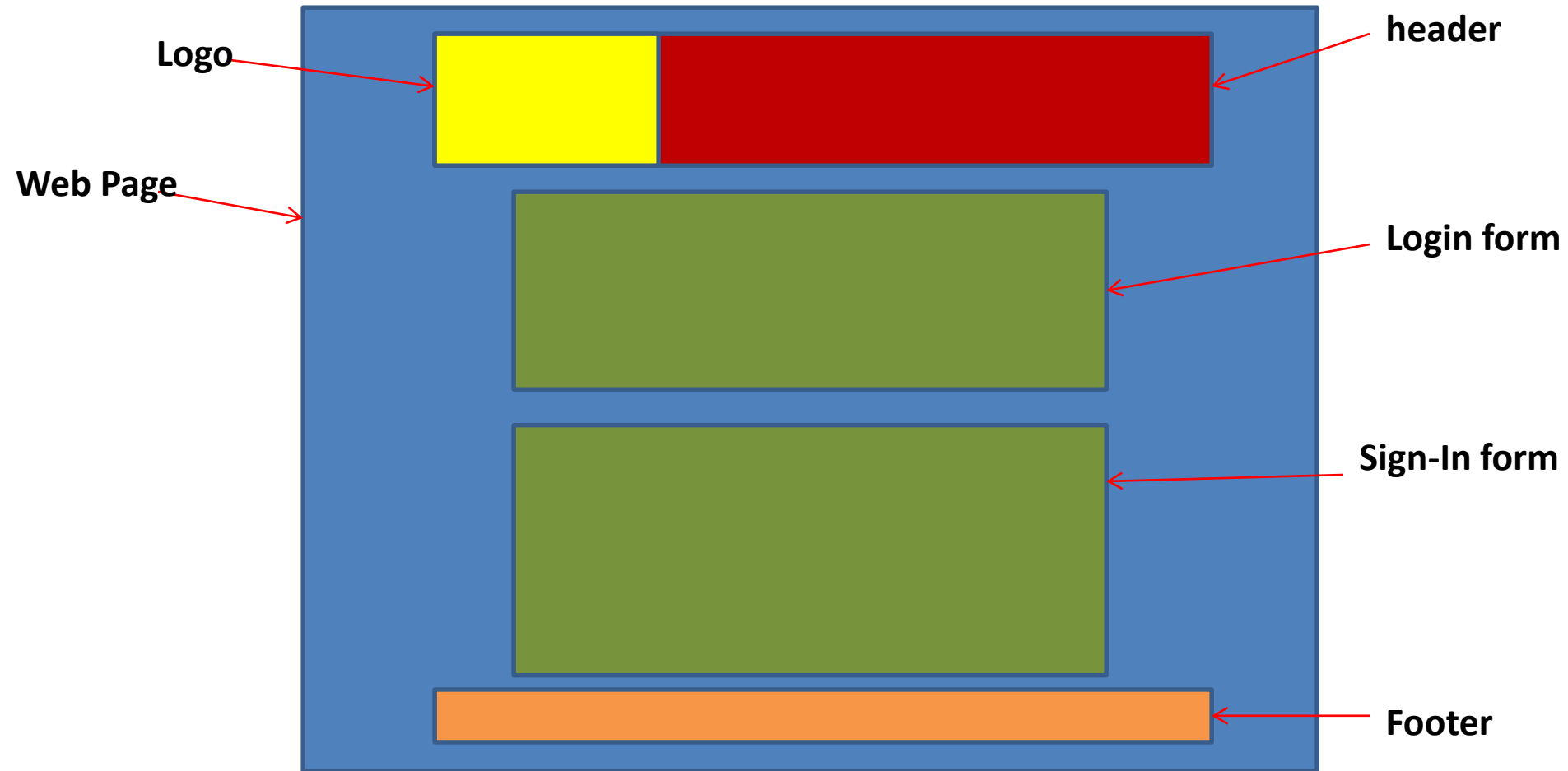
1.4 Key element for each page

- **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**

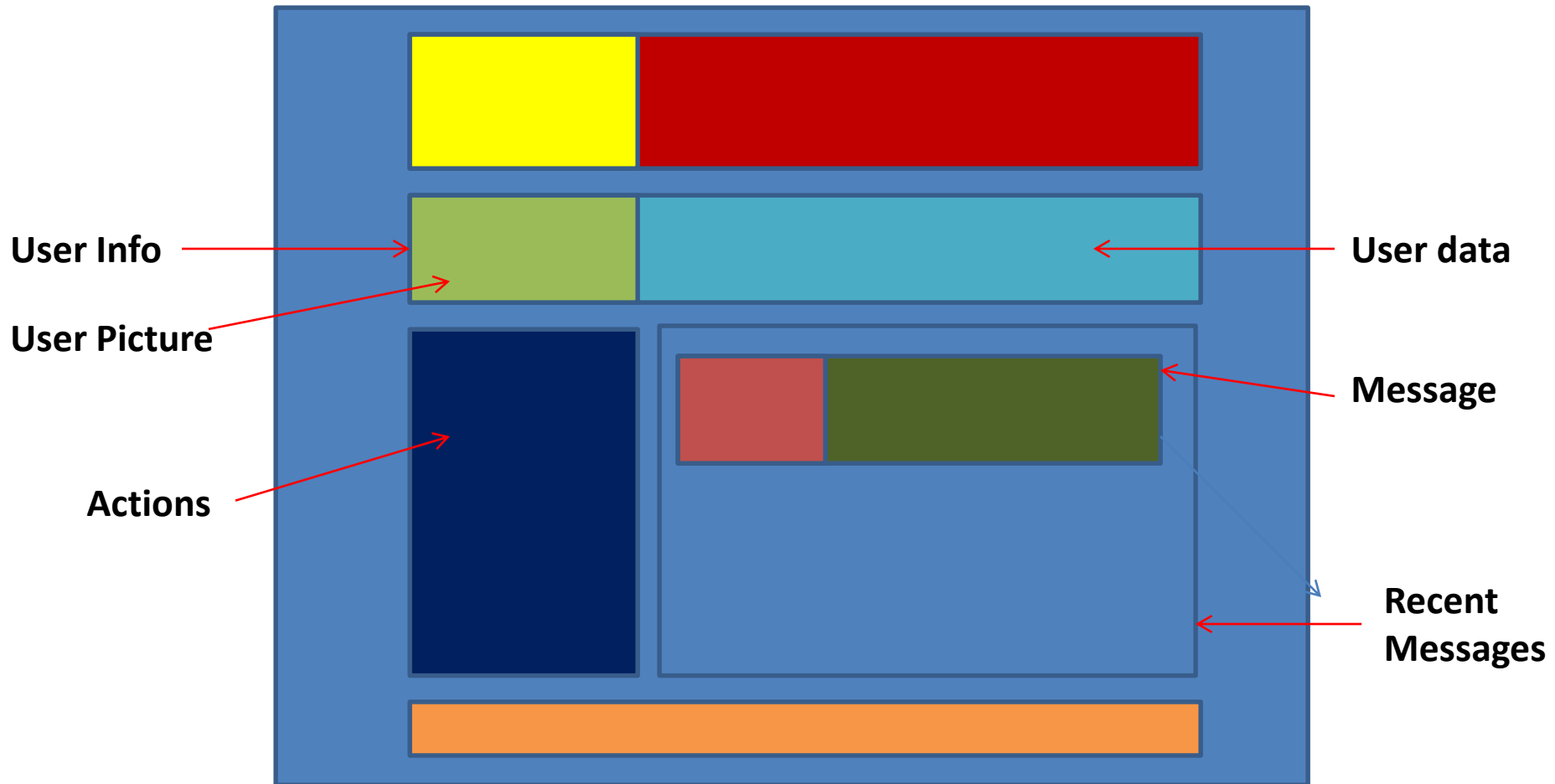
1.4 Key element for each page...

- **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



1.5 Arranging elements on pages...



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

```
div - Notepad
File Edit Format View Help
<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>
```

Starts a div (points to the opening tag of the first div)

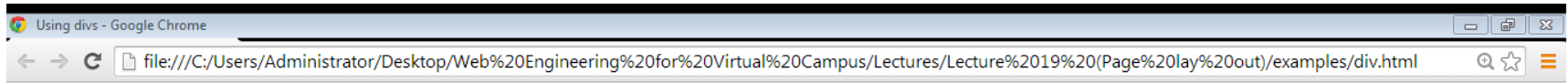
Div style (points to the style attribute of the first div)

Div contents (points to the text inside the first div)

Div ends (points to the closing tag of the first div)

Second div (points to the opening and closing tags of the second div)

2.2 The <div> tag...



This is the first section

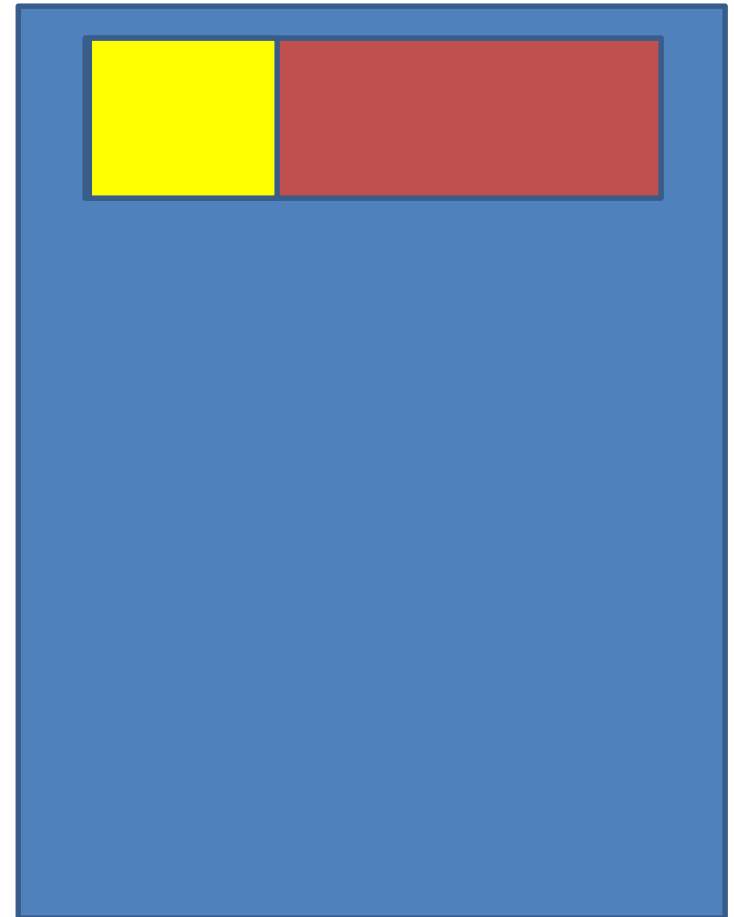
This is the second section

First div

Second div

2.3 Coding the design

```
<div id="container">  
<div id="header">  
<div id="logo"></div>  
</div> //header div ends  
</div> //container div ends
```



2.3 Coding the design...

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

Header and logo divs

```
<div id="center-content">
```

```
<div id="form-containter">
```

```
<div class="form-heading">
```

Heading text </div>

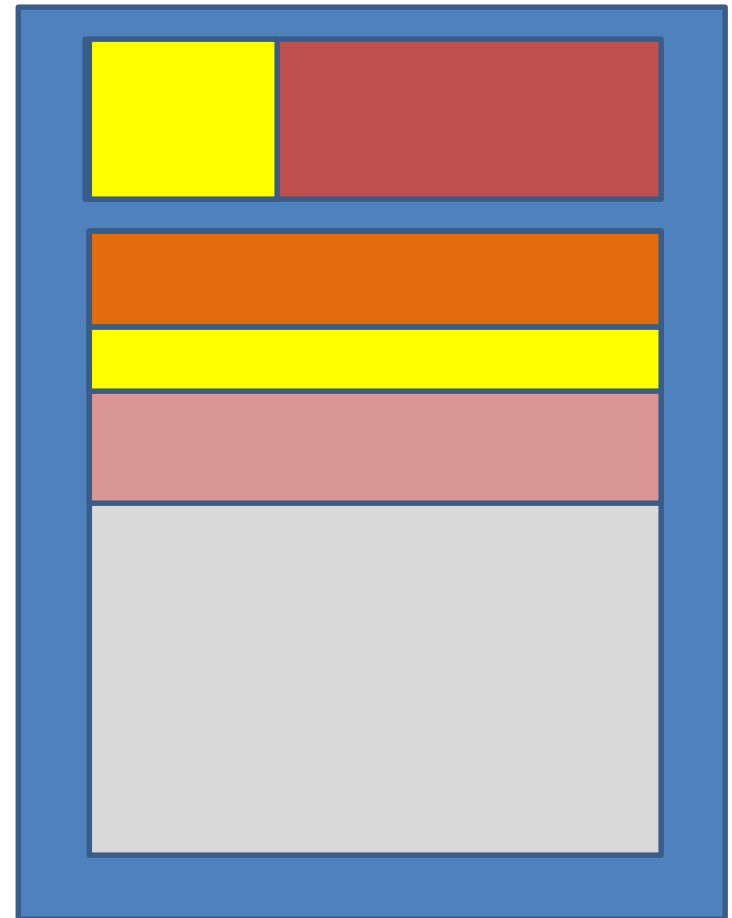
```
<div class="form-rows">
```

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-containter">
```

```
<div class="form-heading">
```

Heading text </div>

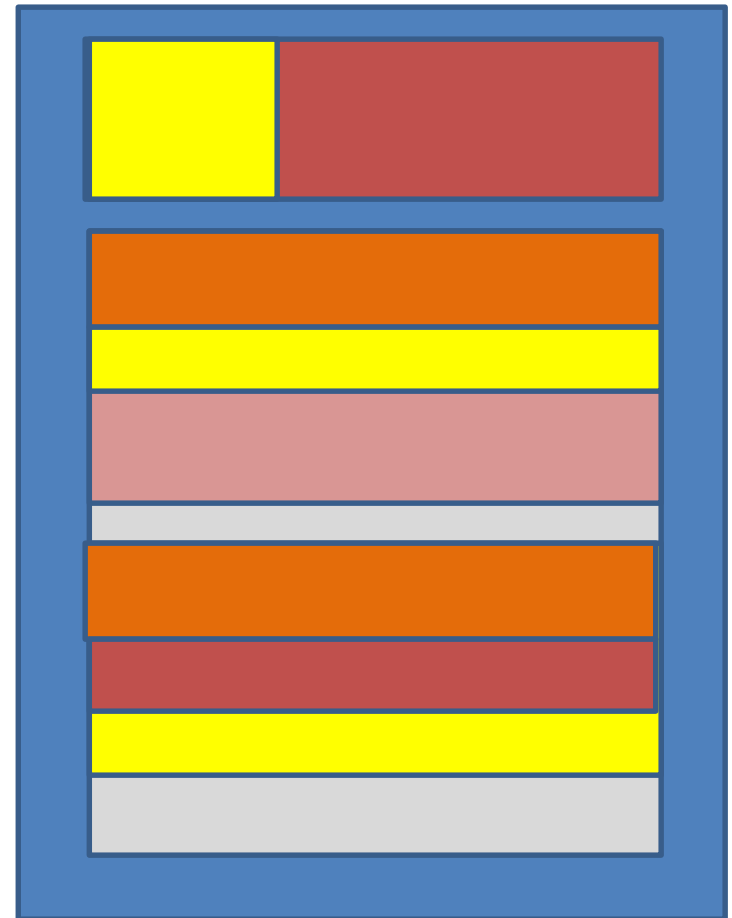
```
<div class="form-rows">
```

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

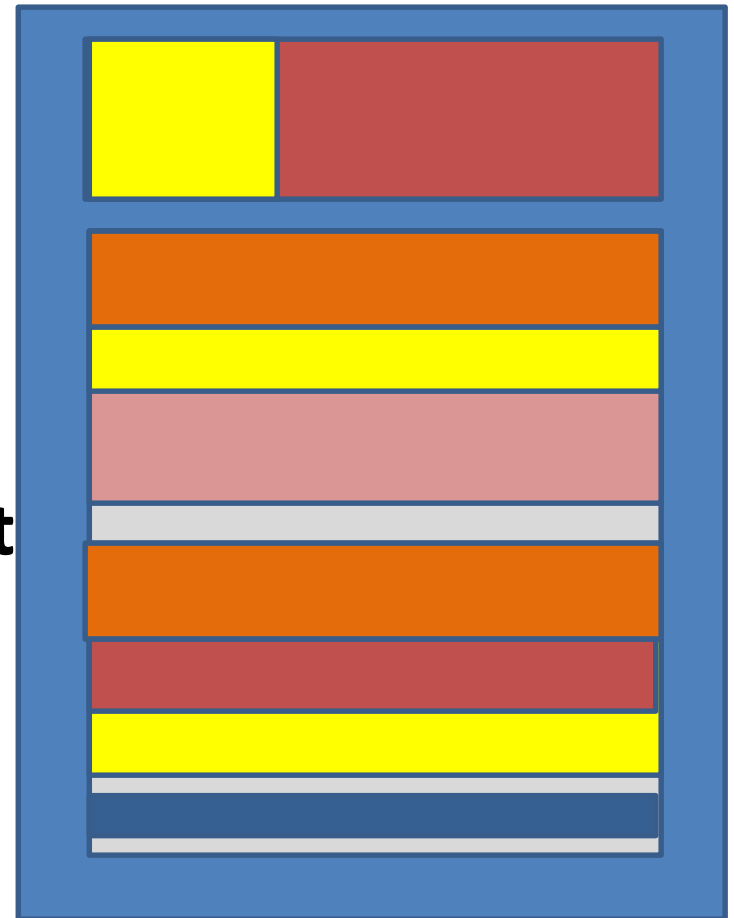
Registration form div's

```
</div> //end of center content
```

```
<div id="footer">
```

```
</div>
```

```
</div> //container div ends
```

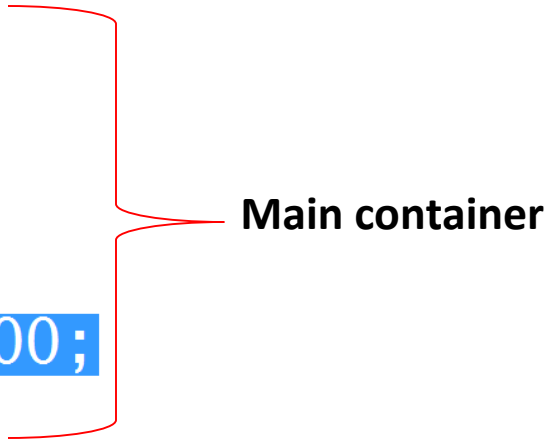


2.3 Coding the design...

- **Divs required to make the structure:**
- **Main container**
- **Header**
- **Logo**
- **Center container**
- **Form container**
- **Form heading**
- **Form row**

2.3 Coding the design...

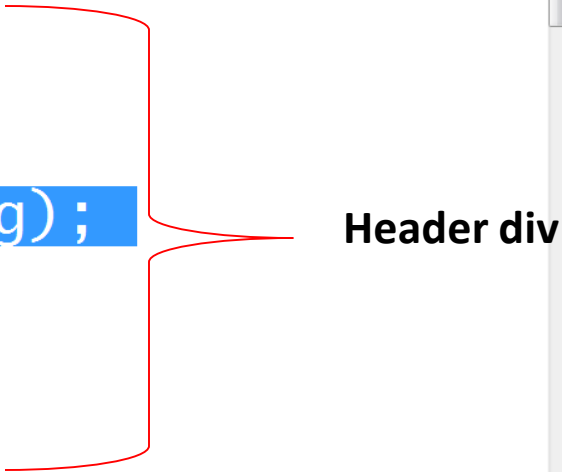
```
style - Notepad
File Edit Format View Help
body{
background-color:#CCCCCC;
}
#container{
height:auto;
width:80%;
margin-left:10%;
border:2px;
border-color:550000;
}
#header{
width:100%;
height:18%;
```



Main container

2.3 Coding the design...

```
style - Notepad
File Edit Format View Help
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;
```



Header div

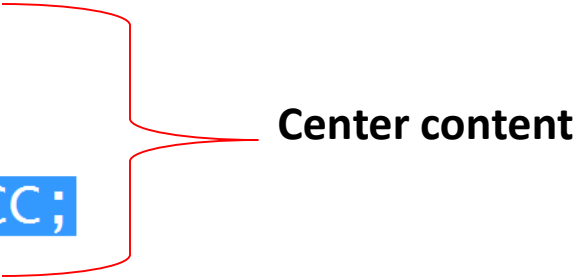
2.3 Coding the design...

```
style - Notepad
File Edit Format View Help
margin:auto;
}
#logo{
float:left;
padding:0px;
height:100%;
width:100%;
}
#center-content{
height:auto;
width:100%;
background-color:#CCCCCC;
}
```

Logo div

2.3 Coding the design...

```
style - Notepad
File Edit Format View Help
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;
}
```



Center content

2.3 Coding the design...

```
style - Notepad
File Edit Format View Help
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...

```
style - Notepad
File Edit Format View Help
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...

```
style - Notepad
File Edit Format View Help
margin-left:100px;
}
div.space
{
height:10px;
}
#footer
{
margin-top:10px;
color:white;
text-align:center;
height:30px;
width:100%;
background-color:550000;
}
```

Div adding space

Footer div

2.3 Coding the design...

```
index - Notepad
File Edit Format View Help
<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"></div>
</div>
</div>
</body>
```

Container div

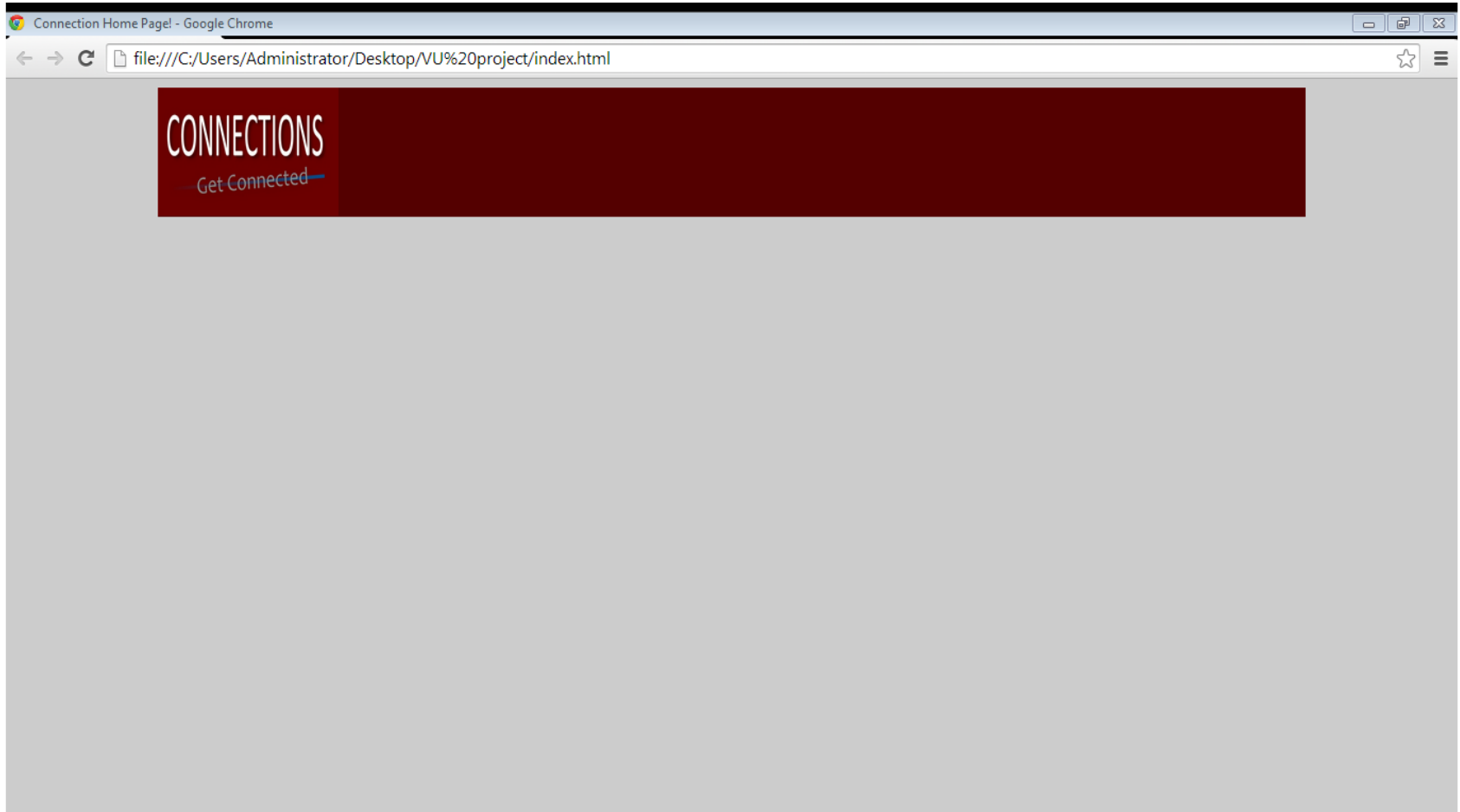
Header div

Header ends

Logo div

Container ends

2.3 Coding the design...



2.3 Coding the design...

```
index - Notepad
File Edit Format View Help
<div id="logo"></div>
</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>
</div>
</div>
```

Center content starts

Form container start

Form heading

Form starts

Row starts

Label

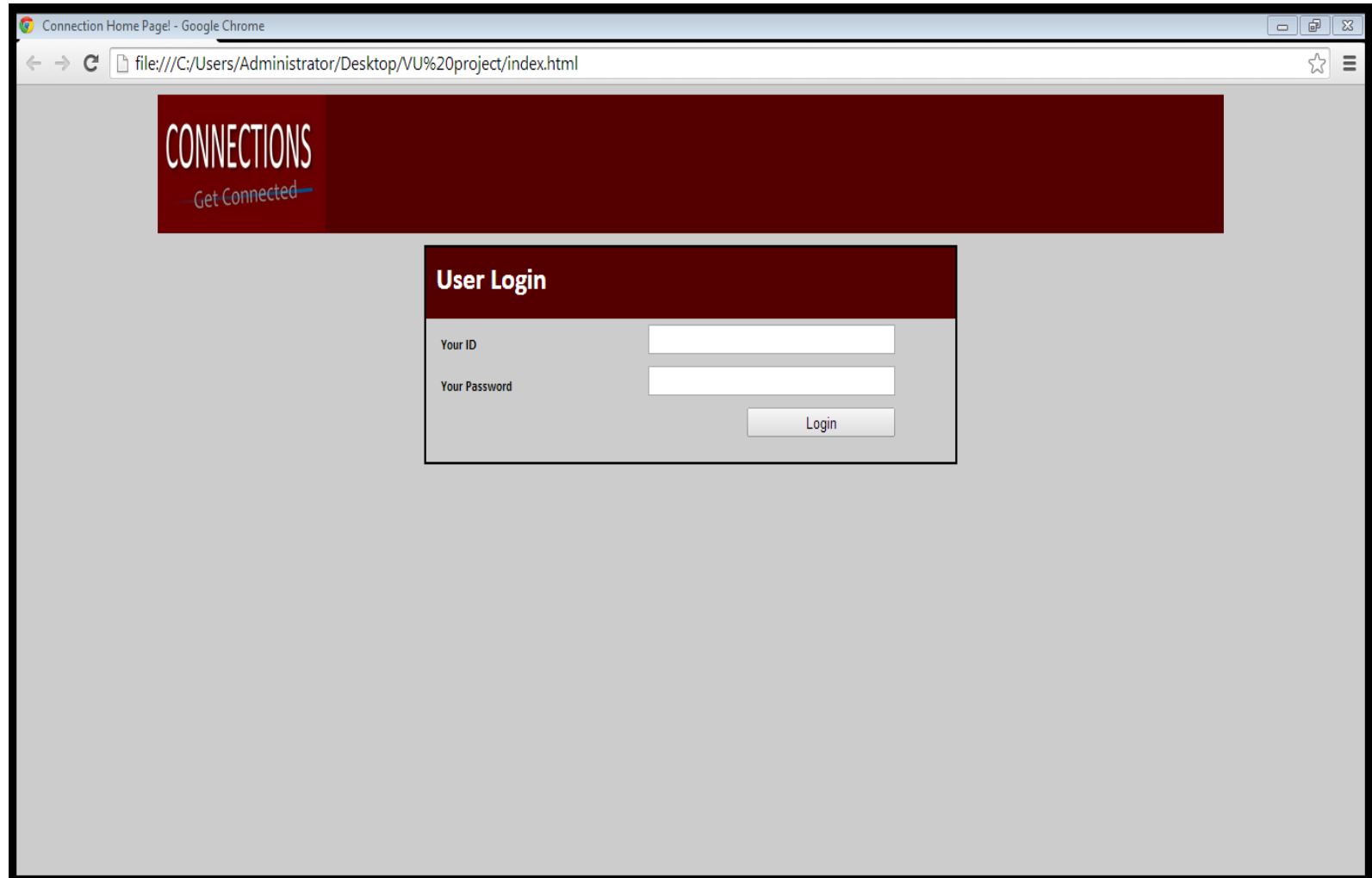
Input field

Row ends

Form container end

Center content ends

2.3 Coding the design...



2.3 Coding the design...

```
index - Notepad
File Edit Format View Help
</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>
```

Space is added

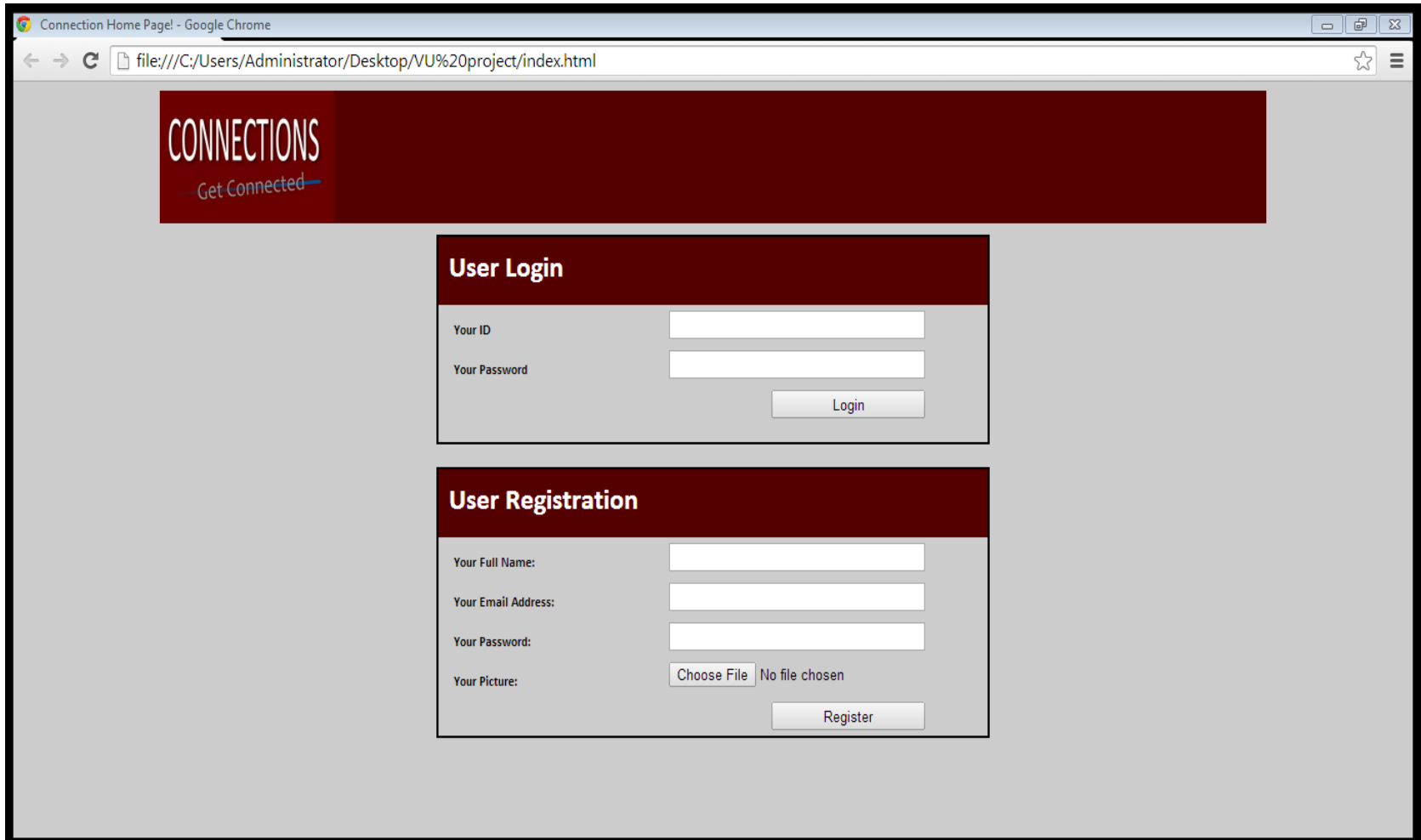
Form container

heading

Form row

Second row

2.3 Coding the design...



The screenshot shows a web browser window with the title "Connection Home Page! - Google Chrome". The address bar contains the file path: `file:///C:/Users/Administrator/Desktop/VU%20project/index.html`. The page features a dark red header with the text "CONNECTIONS" and "Get Connected" below it. Below the header, there are two main sections: "User Login" and "User Registration".

User Login

Your ID

Your Password

User Registration

Your Full Name:

Your Email Address:

Your Password:

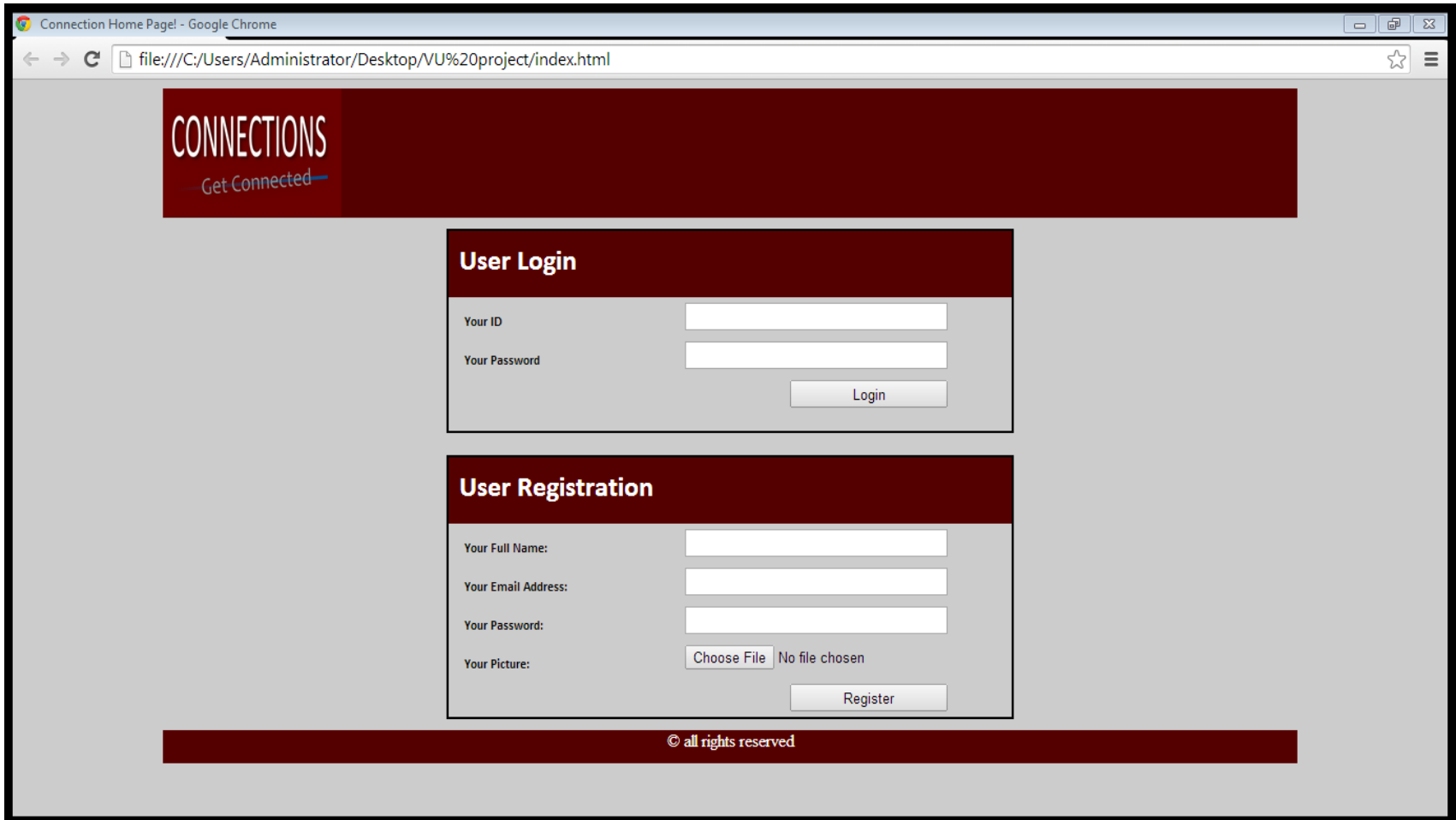
Your Picture: No file chosen

2.3 Coding the design...

```
index - Notepad
File Edit Format View Help
<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>
<div id="footer">&copy; all rights reserved
</div>
</div>
```

Footer div

2.3 Coding the design...



Summary

- **The process to design a page layout**
- **div tag**
- **Coding a page using divs and CSS**

References

- **Chapter 9, Beginning HTML, XHTML, CSS, and JavaScript**, by Jon Duckett, Wiley Publishing; 2009, ISBN: 978-0-470-54070-1.