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BCS 2203 | WEB APPLICATION DEVELOPMENT

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AL-FATIHAH

COURSE OUTCOMES

At the end of this course, students should be able to:

- Create a master page
- Define editable regions within a master page
- Adding source code to a master page

What is Master Page

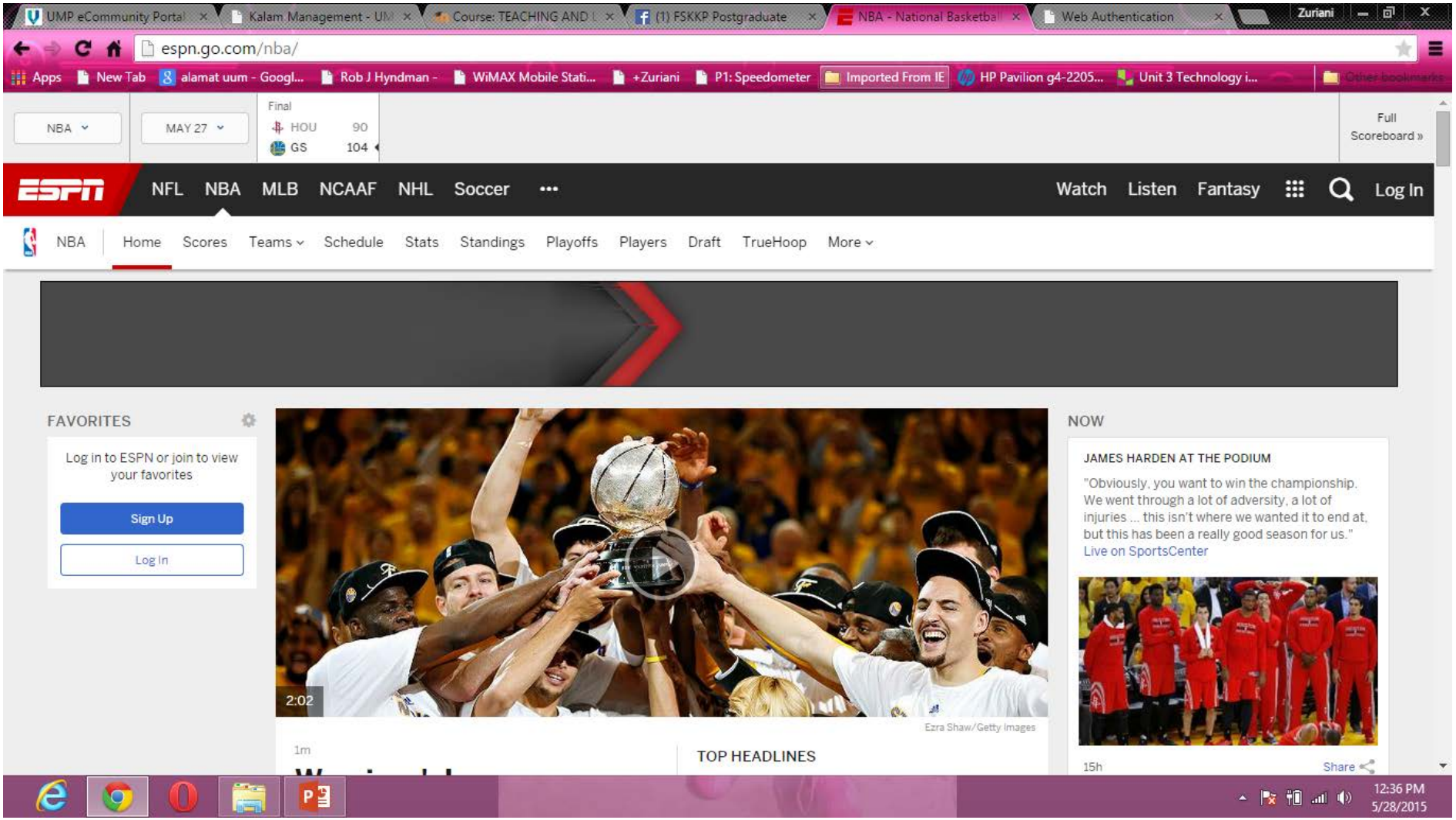
- One attribute of a well-designed website is a **consistent** look and feel across their pages.
- This includes layout
  - ✓ User interface elements appear
  - ✓ How they are oriented
- Fonts, Colors, Graphics Etc

✓ A master page provides a template for other pages, with shared layout and functionality.

✓ The master page defines placeholders for the content, which can be overridden by content pages.

✓ The output result is a combination of the master page and the content page.

Example of good website design



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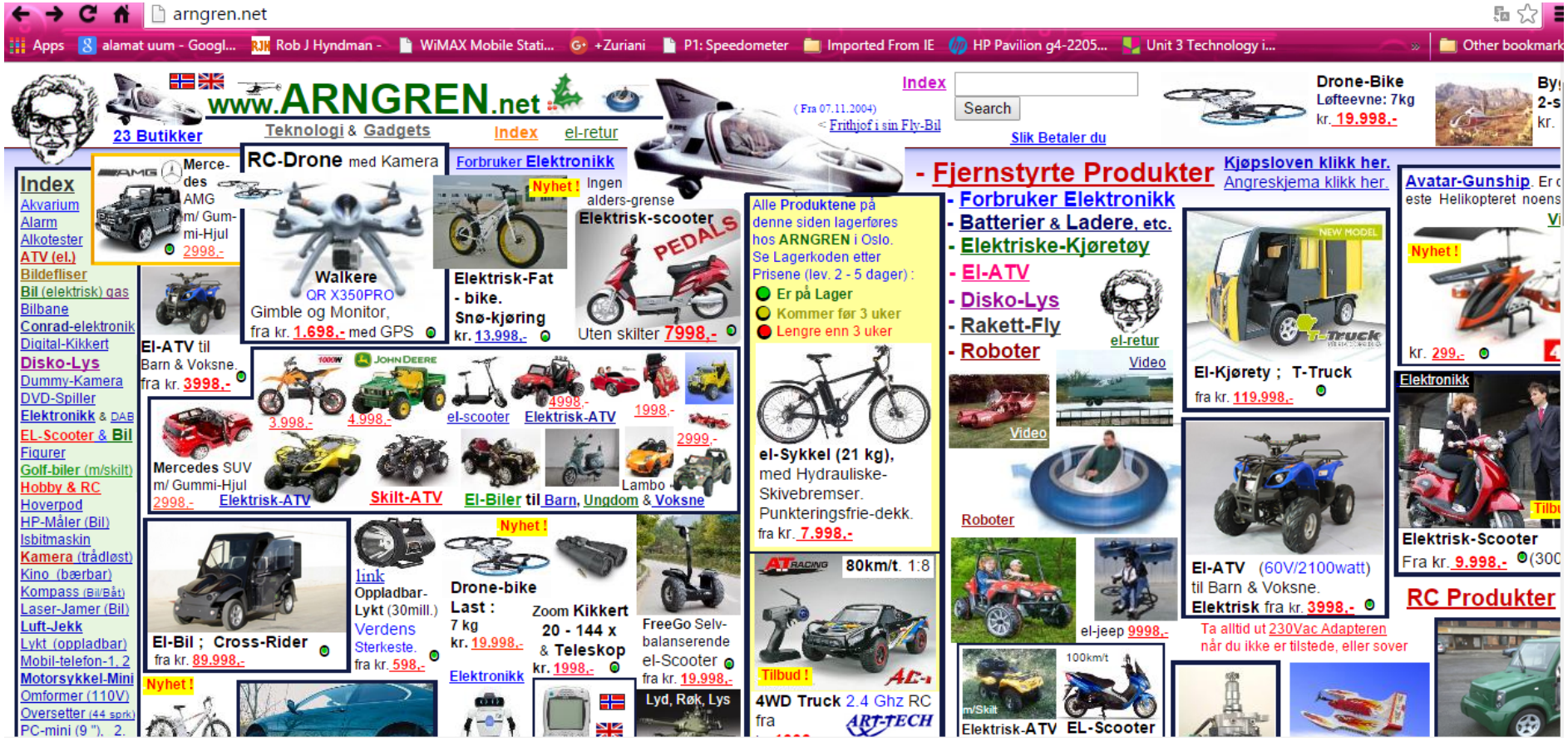
Example of bad website design



- Another attribute of a well-designed site is the ease with which the site's appearance can be changed.
  - The whole look and feel
  - the menu items
  - Or maybe a radically new design with different colors, fonts, and layout will be unveiled.
- Applying such changes to the entire site should be a fast and simple process that does not require modifying the thousands of web pages that make up the site.

- There are a variety of techniques for creating web pages with a consistent look and feel.
- A naive approach is to simply copy and paste the common layout markup into all web pages, but this approach has a number of downsides.
- For starters, every time a new page is created, you must remember to copy and paste the shared content into the page.
- Such copying and pasting operations are ripe for error as you may accidentally copy only a subset of the shared markup into a new page.
- And to top it off, this approach makes replacing the existing site-wide appearance with a new one a real pain because every single page in the site must be edited in order to use the new look and feel.

Master Page!

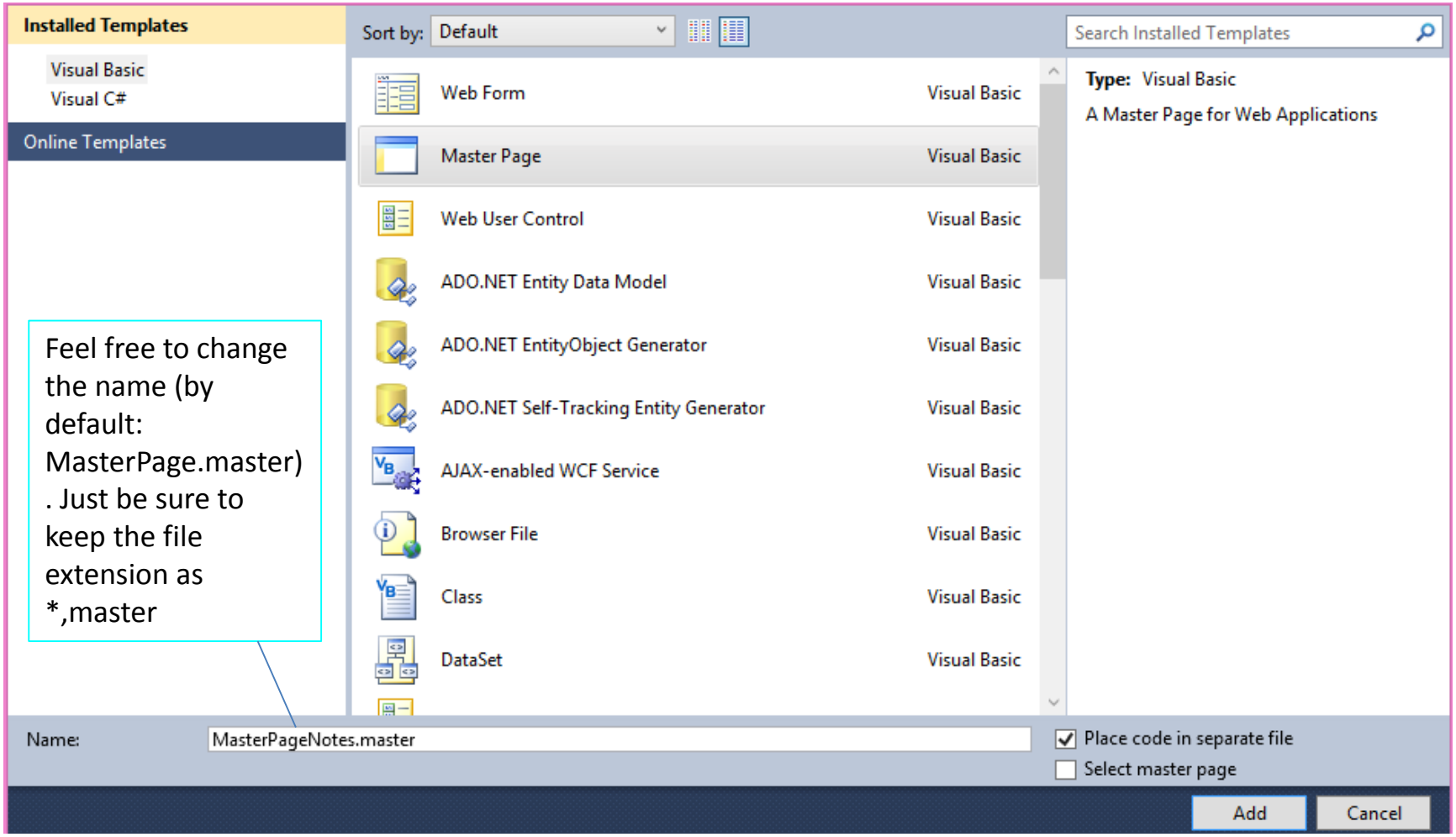
Creating a Master Page

- A master page is similar to ASP.NET pages.
- It consists of Web control, static HTML and server-side code.
- The main difference is that a master page's purpose is to define a template for the website.
- The extension of MasterPage is *.master.
- In a MasterPage we can have either inside ContentPlaceHolder or outside it.
- Only content inside the ContentPlaceHolder can be customized in the Content Page.
- We can have multiple MasterPage in one web application

…Creating a Master Page

- As usual:
  - Right click the project name in the Solution Explorer
  - Add New Item
  - Choose the Master page
  - Choose a name for the master page.
  - Click Add

…Creating a Master Page



CHAPTER | MASTER PAGE

<% Master %>
-Master directed

MasterPageNotes.master

Client Objects & Events | (No Events)

```
<%@ Master Language="VB" CodeFile="MasterPageNotes.master.vb" Inherits="MasterPageNotes" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <asp:ContentPlaceHolder id="head" runat="server">
    </asp:ContentPlaceHolder>
</head>
<body>
    <form id="form1" runat="server">
    <div>
        <asp:ContentPlaceHolder id="ContentPlaceHolder1" runat="server">

        </asp:ContentPlaceHolder>
    </div>
    </form>
</body>
</html>
```

Delete, and go to Design

The layout of the page:

- The header region
- The navigation region
- The main region
  - Contain ContentPageHolder Web control
- The footer region

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Layout A

A	
B	C

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Layout B

A	B	
C	E	D

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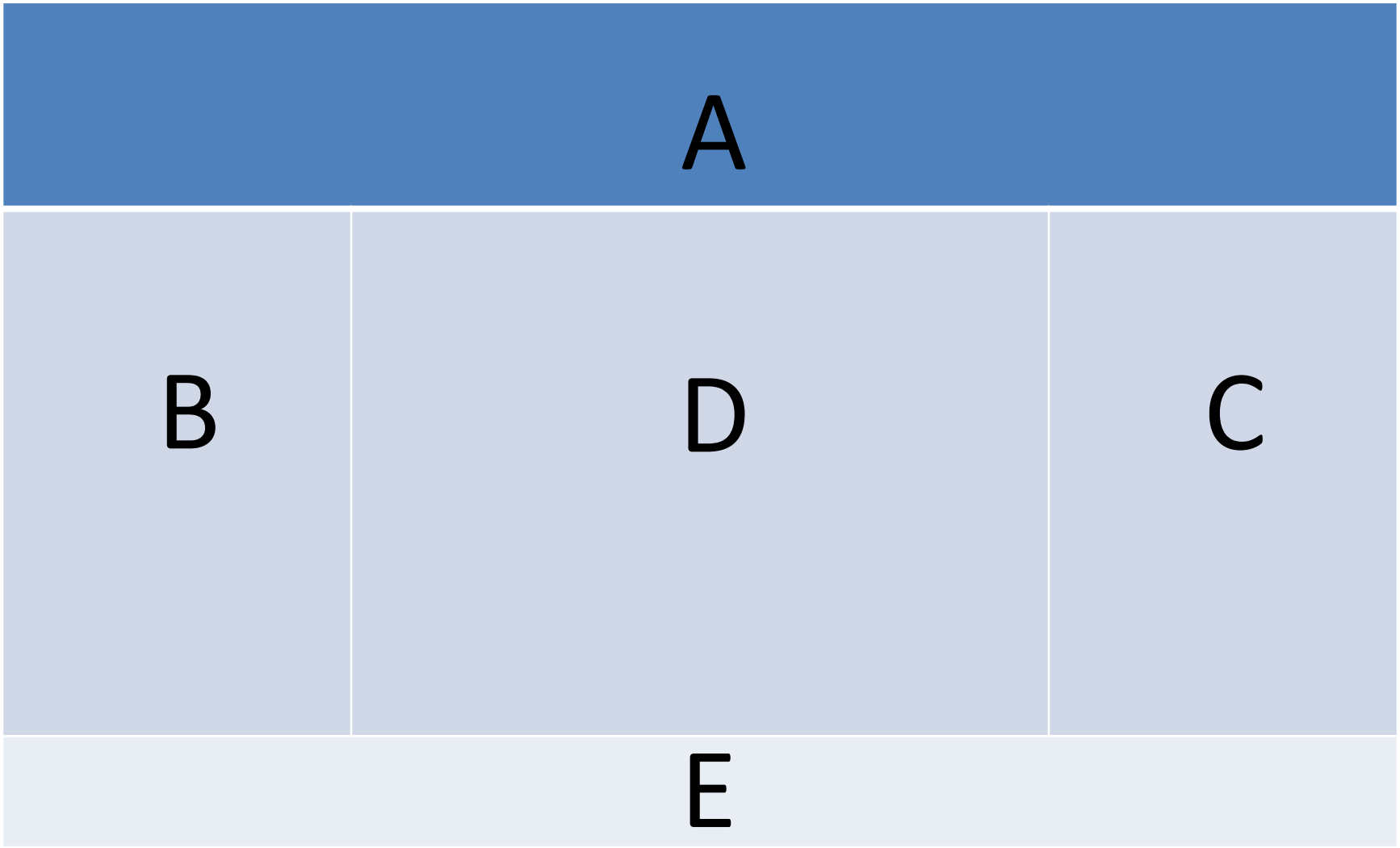
Layout C



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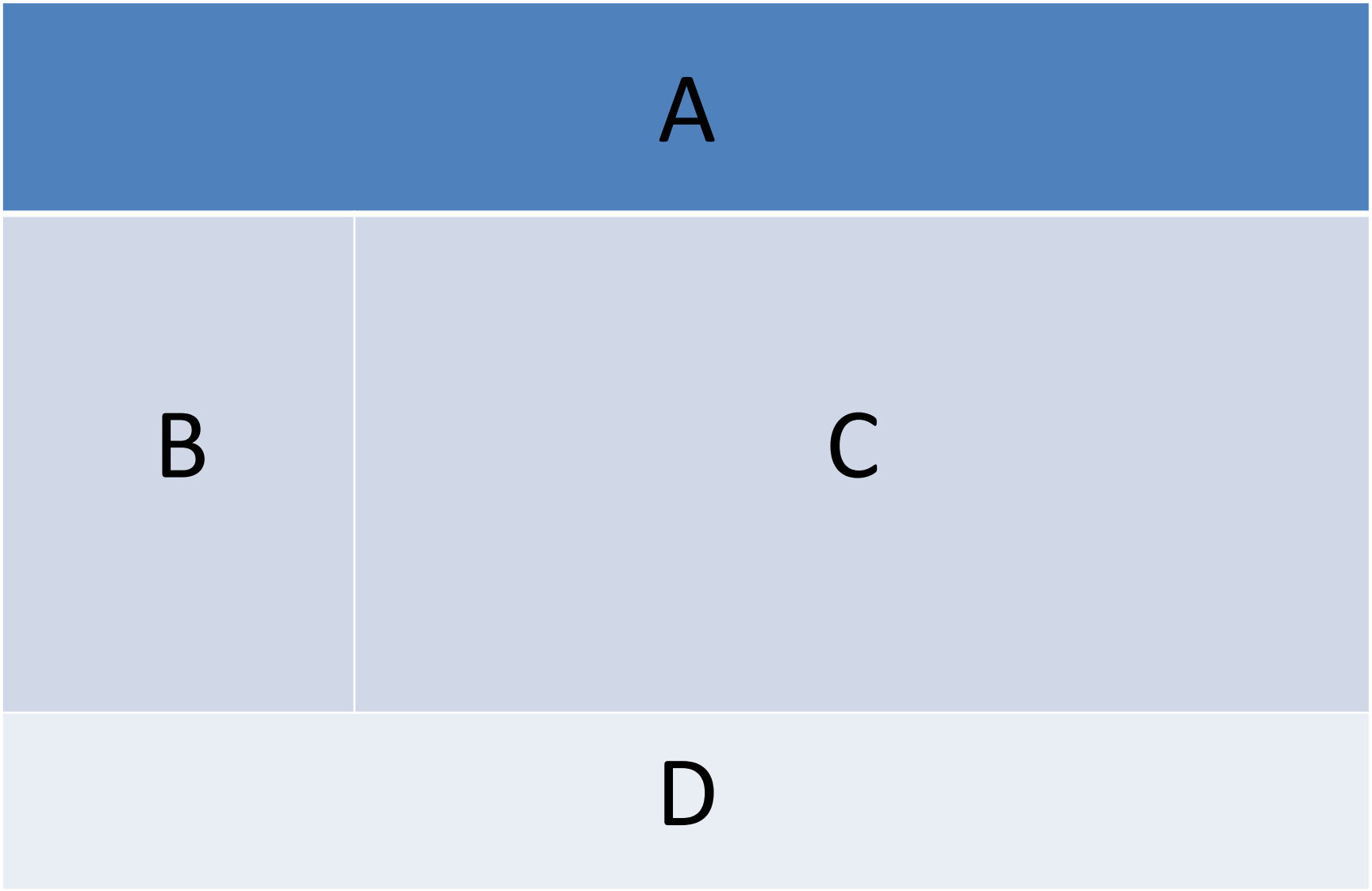
Layout D



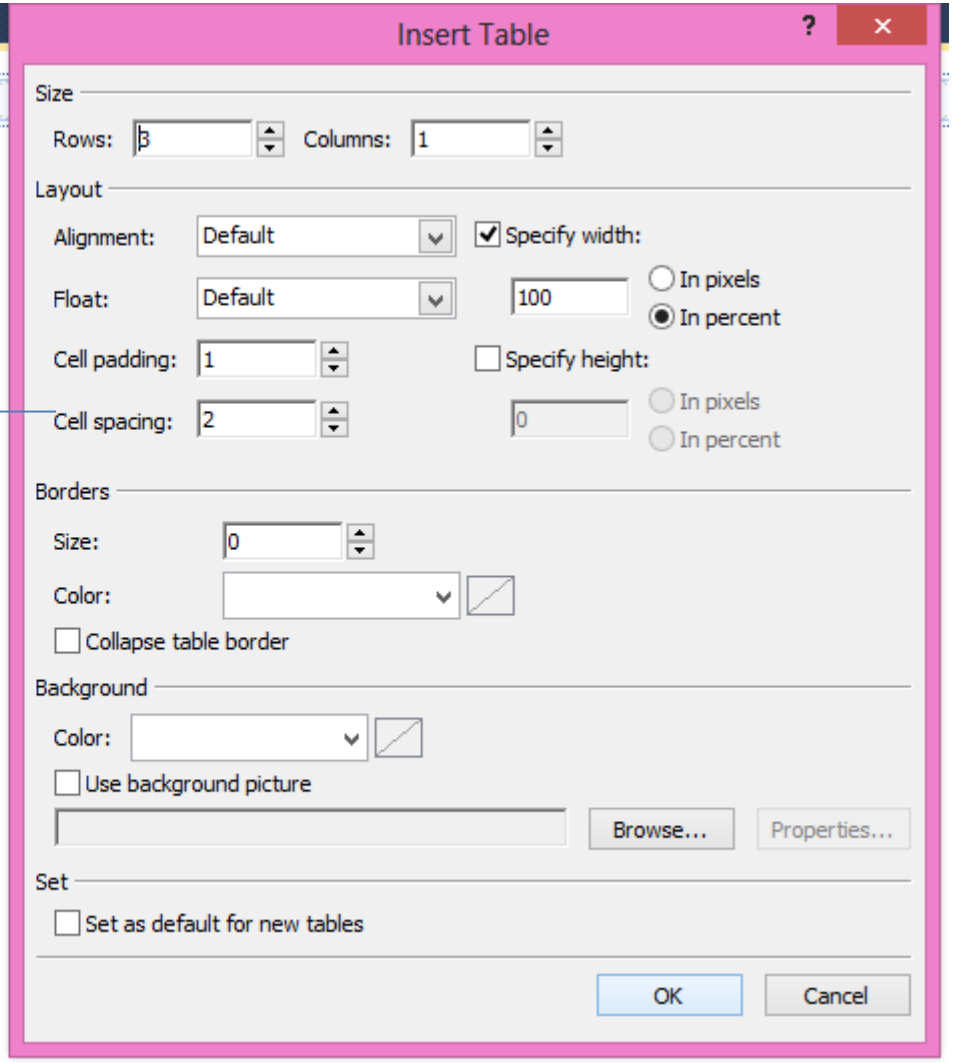
- How to create such layout?
  - HTML?
  - Other approach?

MasterPageNotes.master*

div

Cursor in the tag

Insert Table to make the layout of the MasterPage.
Let say 3 rows and 1 column



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Header

Home Pag

td.style3

Insert another Table in the second row of the first Table. Let say 2 columns and 1 row. Specify the height to 100, in Percent

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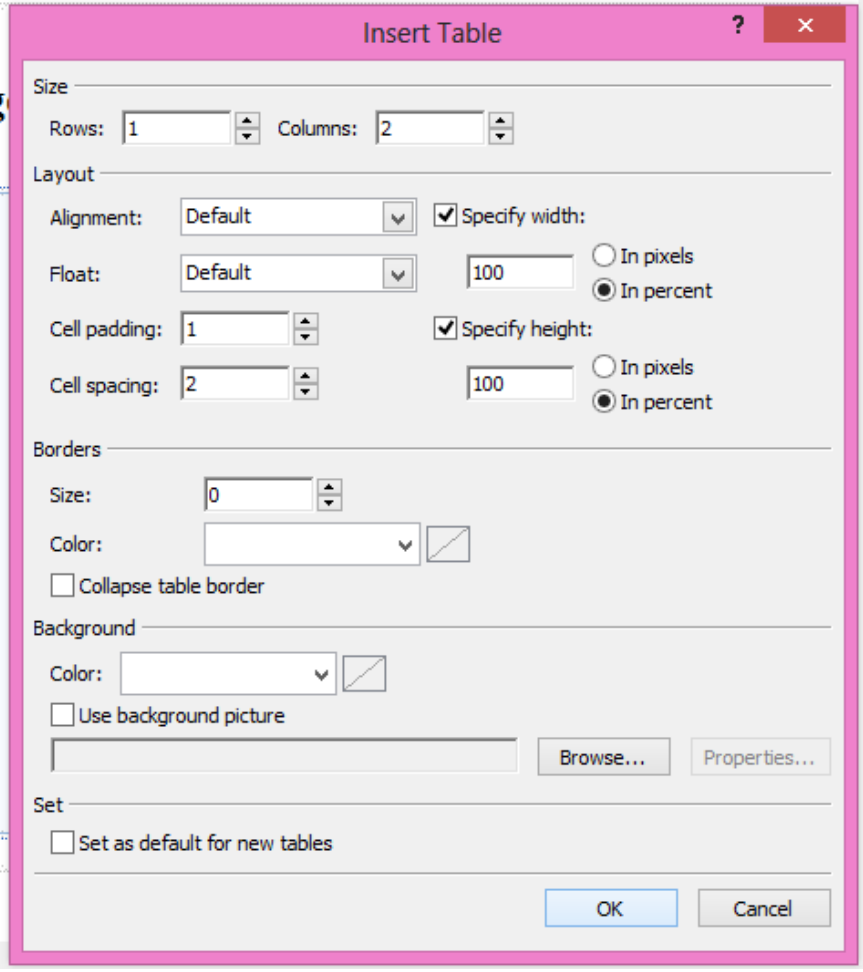
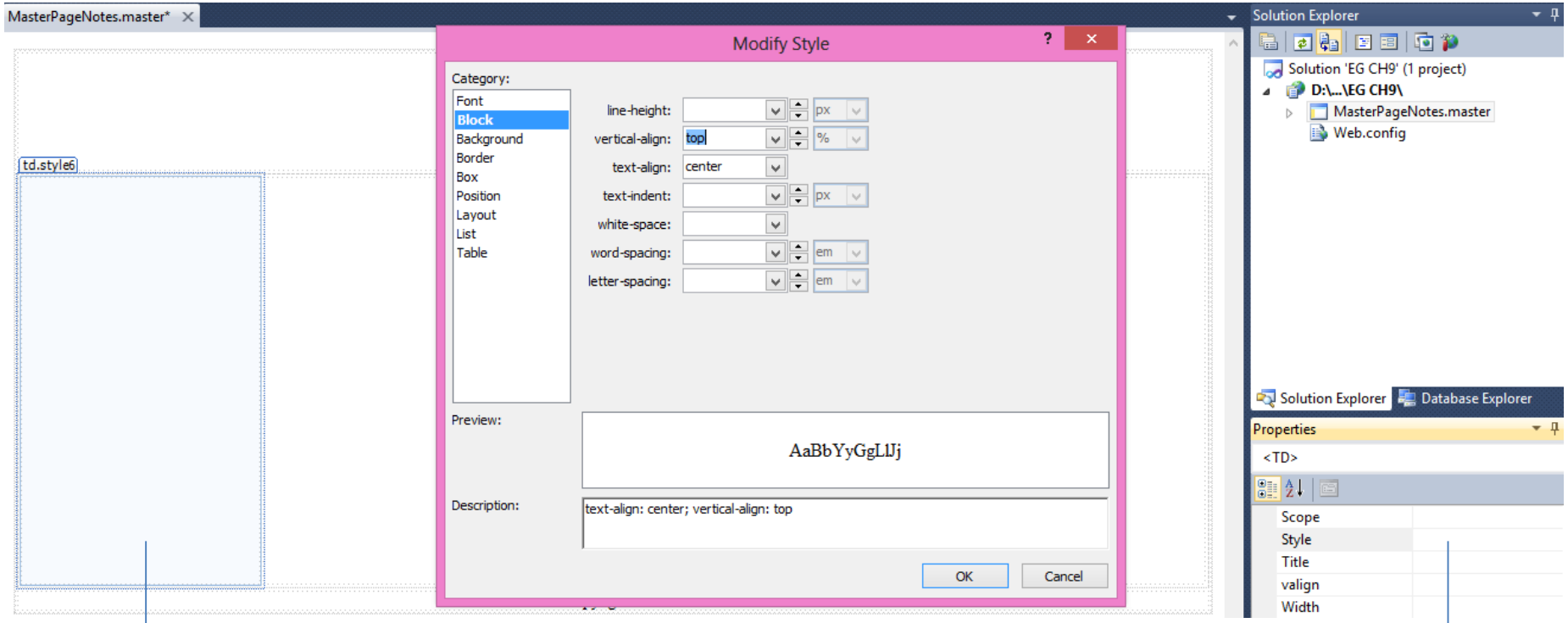
Footer



CHAPTER | MASTER PAGE



For the second Table:
Set the first column smaller than the second column.
Set the style for the first column.

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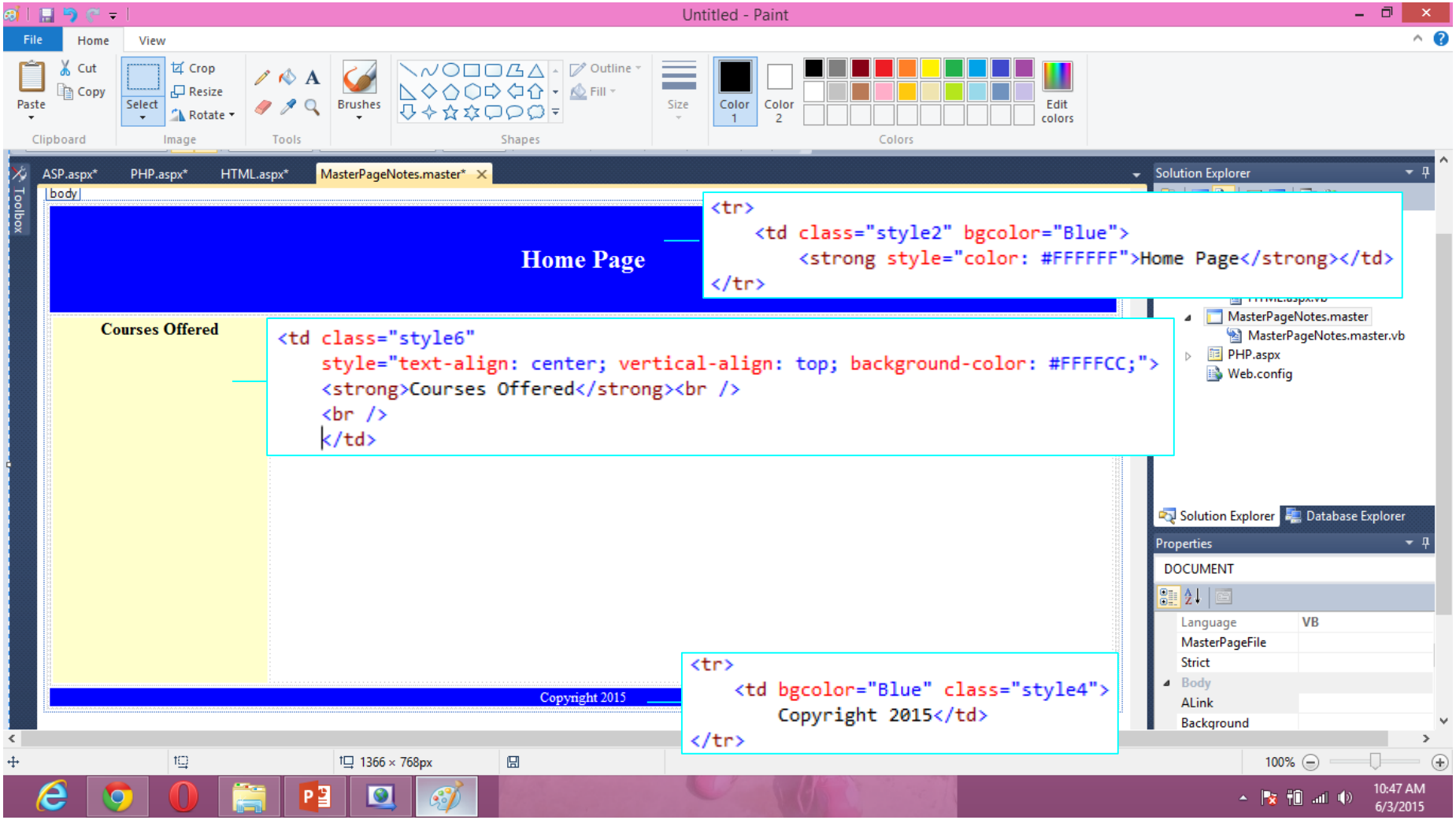

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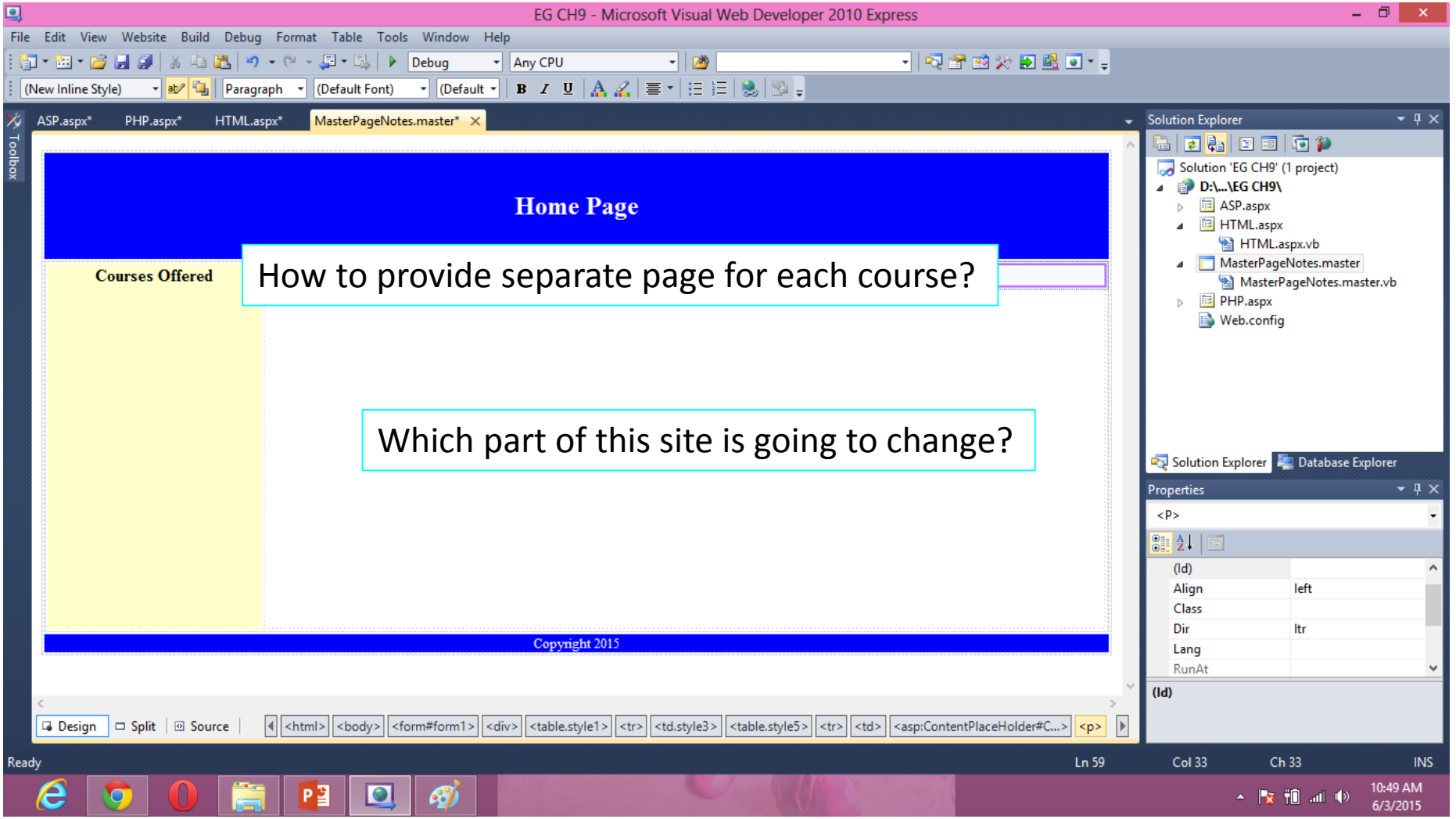

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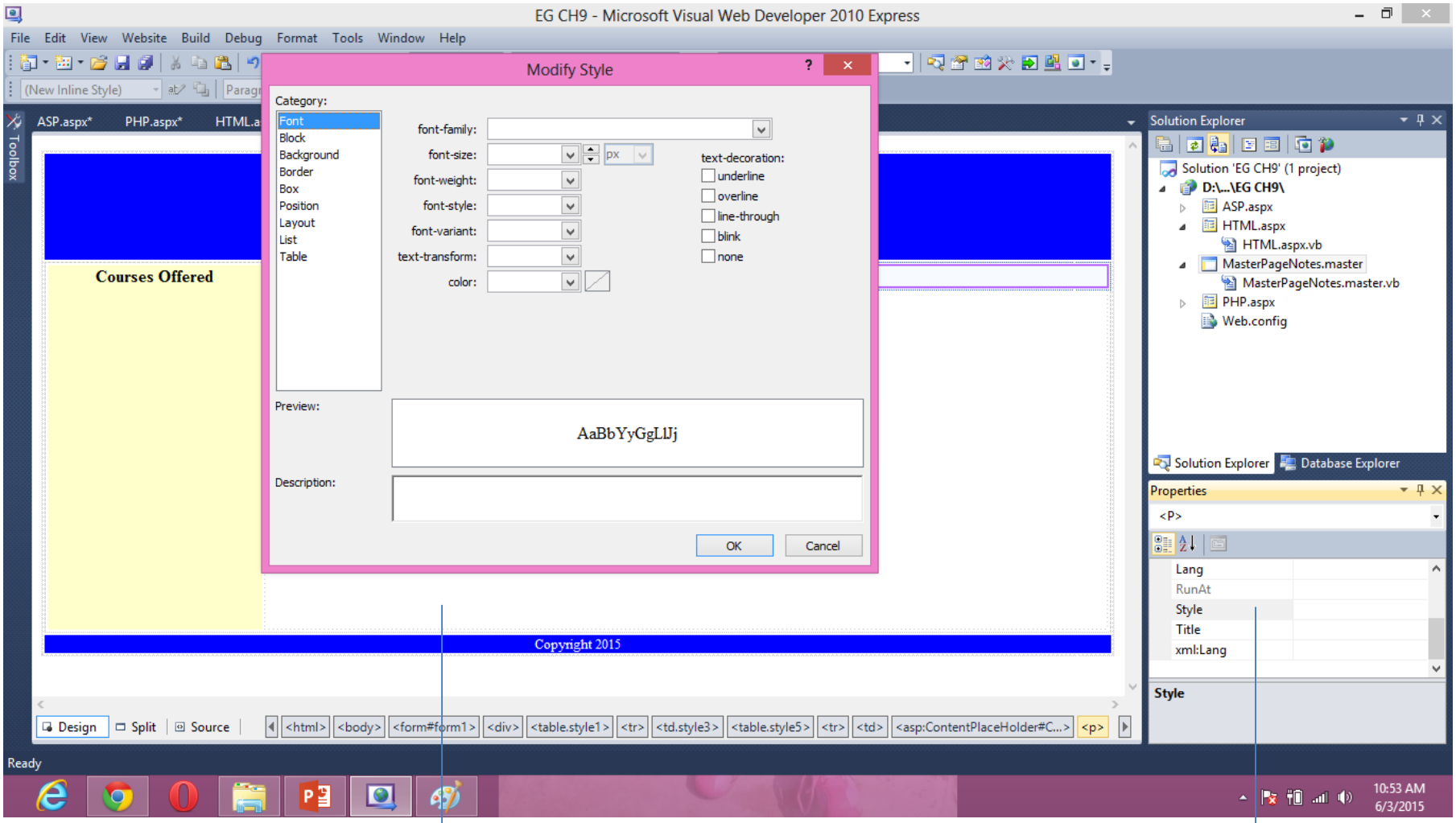
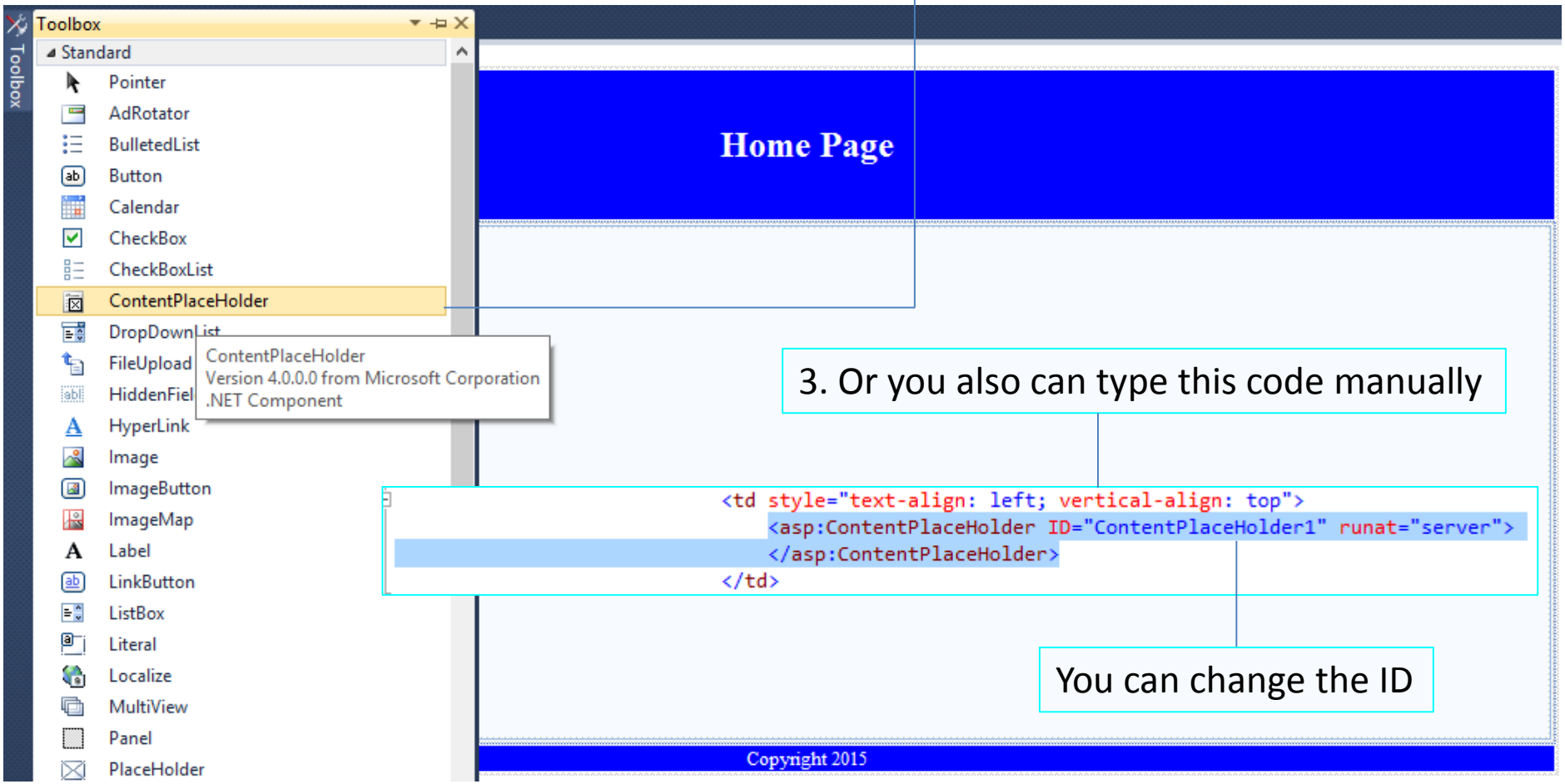


1. You can set the style for this part

2. In this particular section, we can drag and drop the ContentPlaceHolder

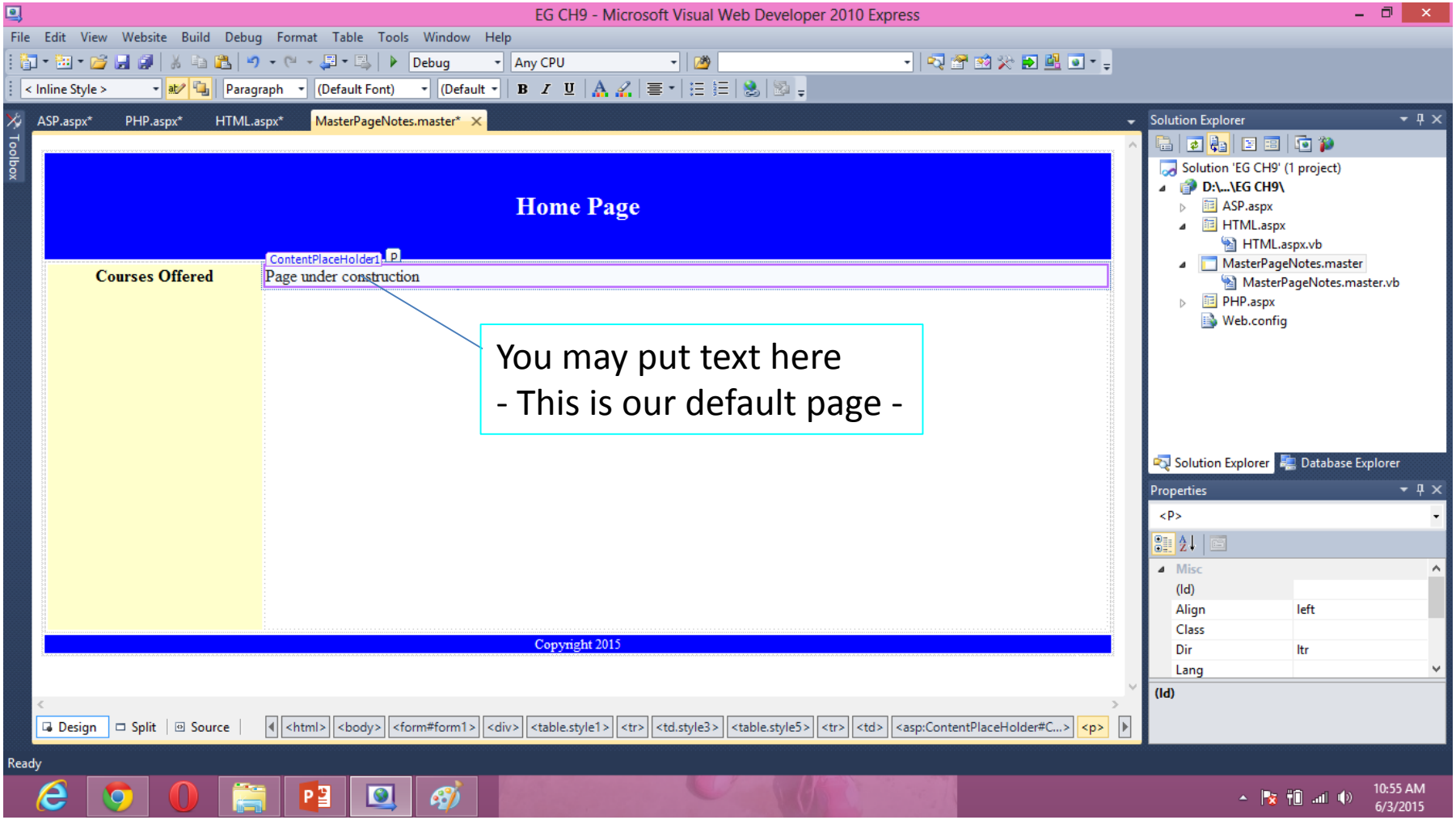


3. Or you also can type this code manually

```
<td style="text-align: left; vertical-align: top">
    <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
    </asp:ContentPlaceHolder>
</td>
```

You can change the ID

CHAPTER | MASTER PAGE



Next step:

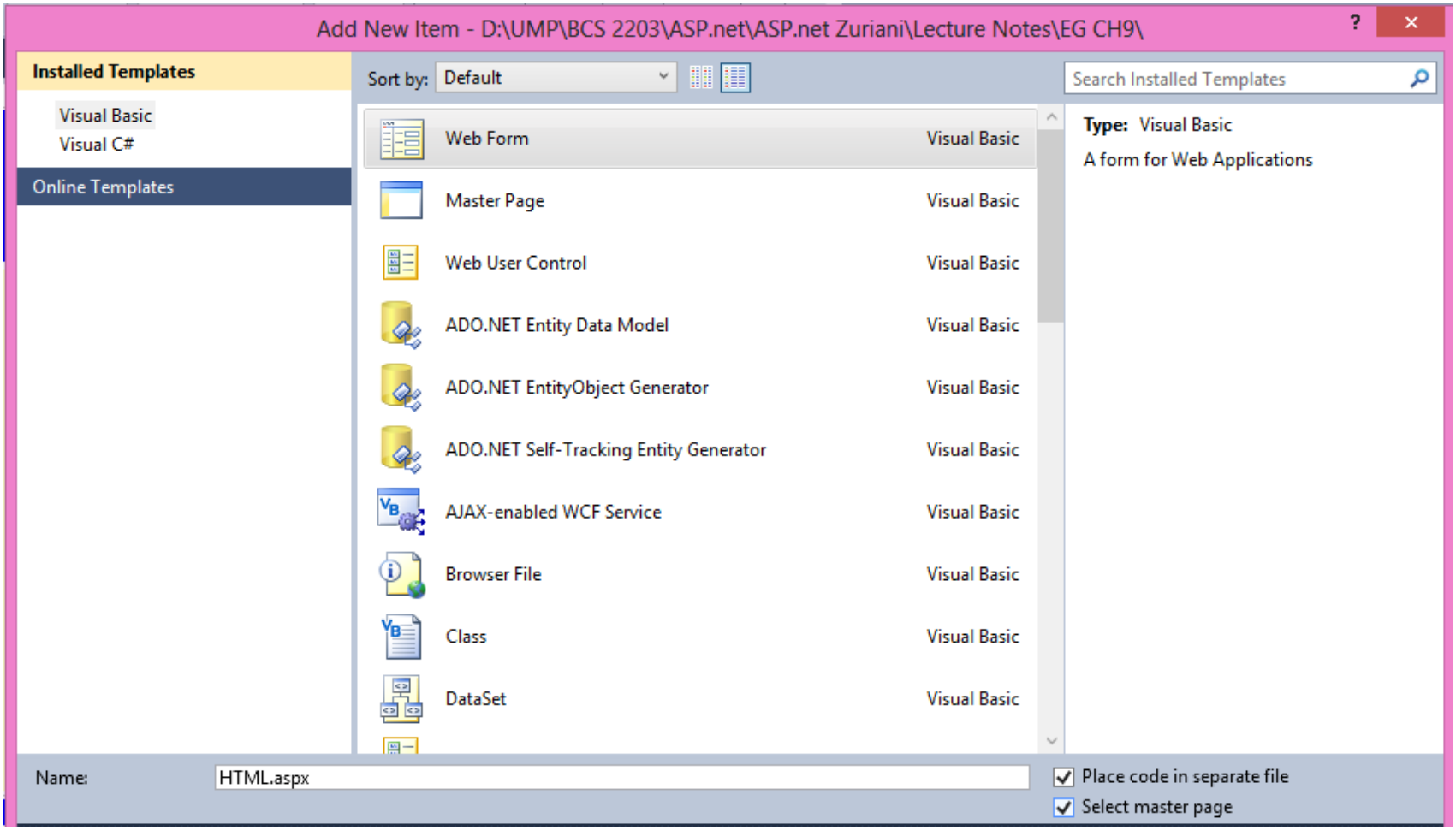
- With our master page created, the next step is to create a content page.
- When creating a content page, we start by identifying what master page to use.
- Next we define the content specific this page, which is placed in the regions defined by the master page's ContentPlaceHolder

Creating a Content Page

- A content page is an ASP.NET page that is bound to the master page
- The content pages contain the content you want to display.
- When users request the content page, ASP.NET merges the pages to produce output that combines the layout of the master page with the content of the content page.

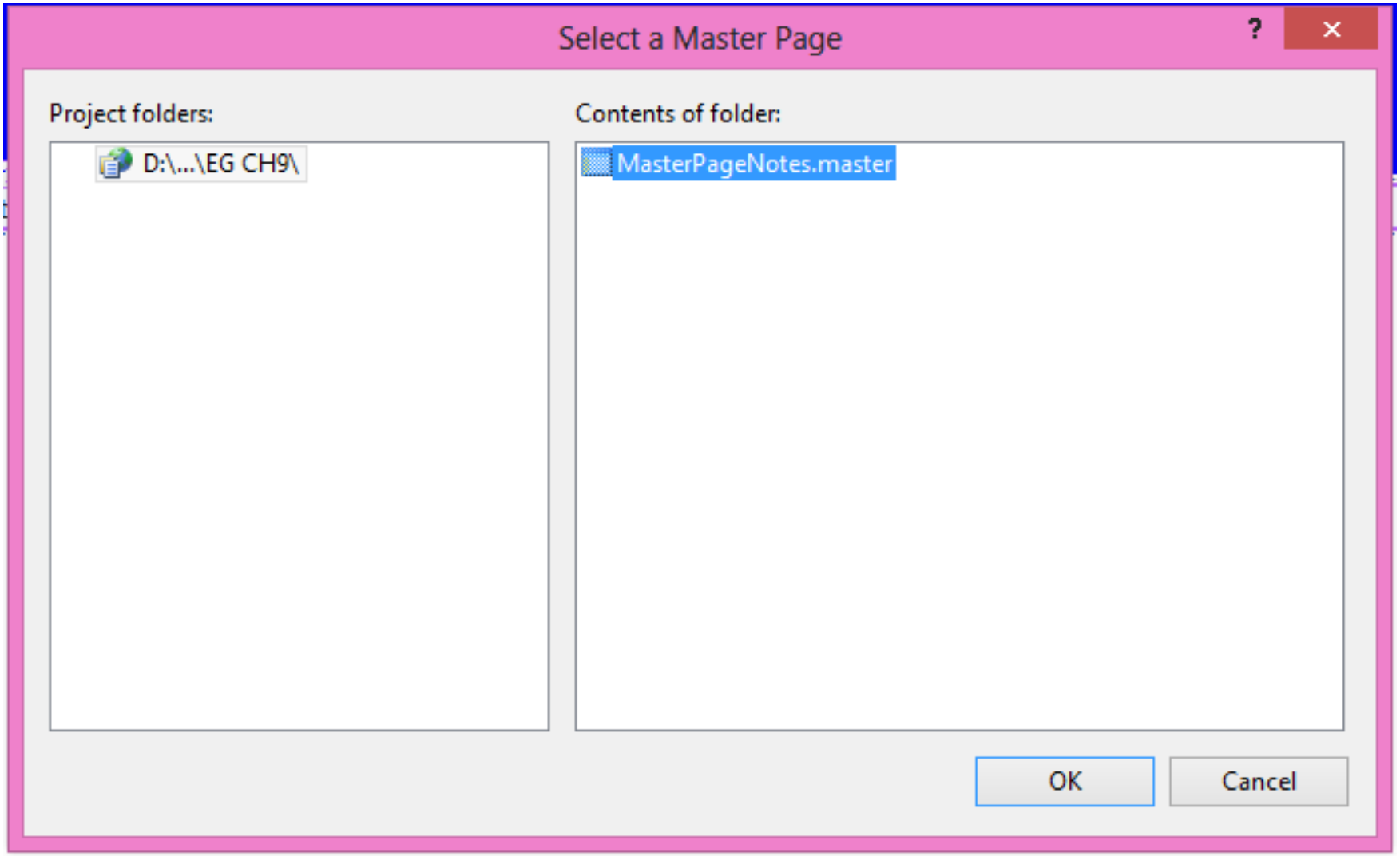
Creating a Content Page

Now, add a new Web Form, name it as HTML.aspx



Make sure both checkboxes are checked

Select your MasterPage -> OK



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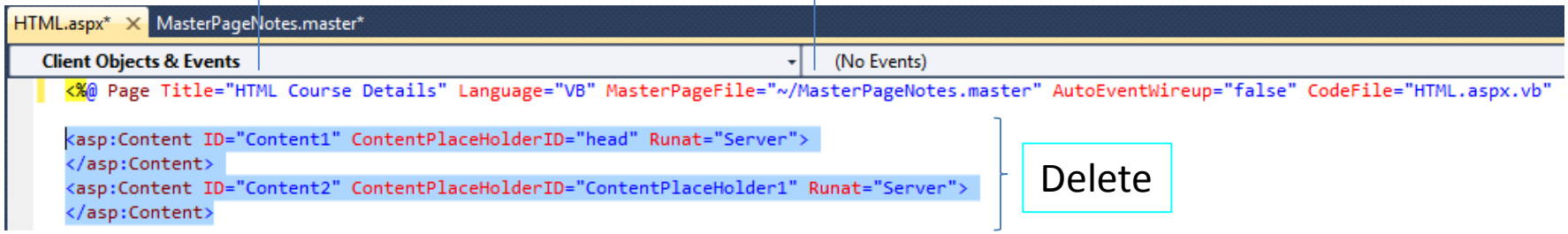
Insert your Title here

Referencing to MasterPage file



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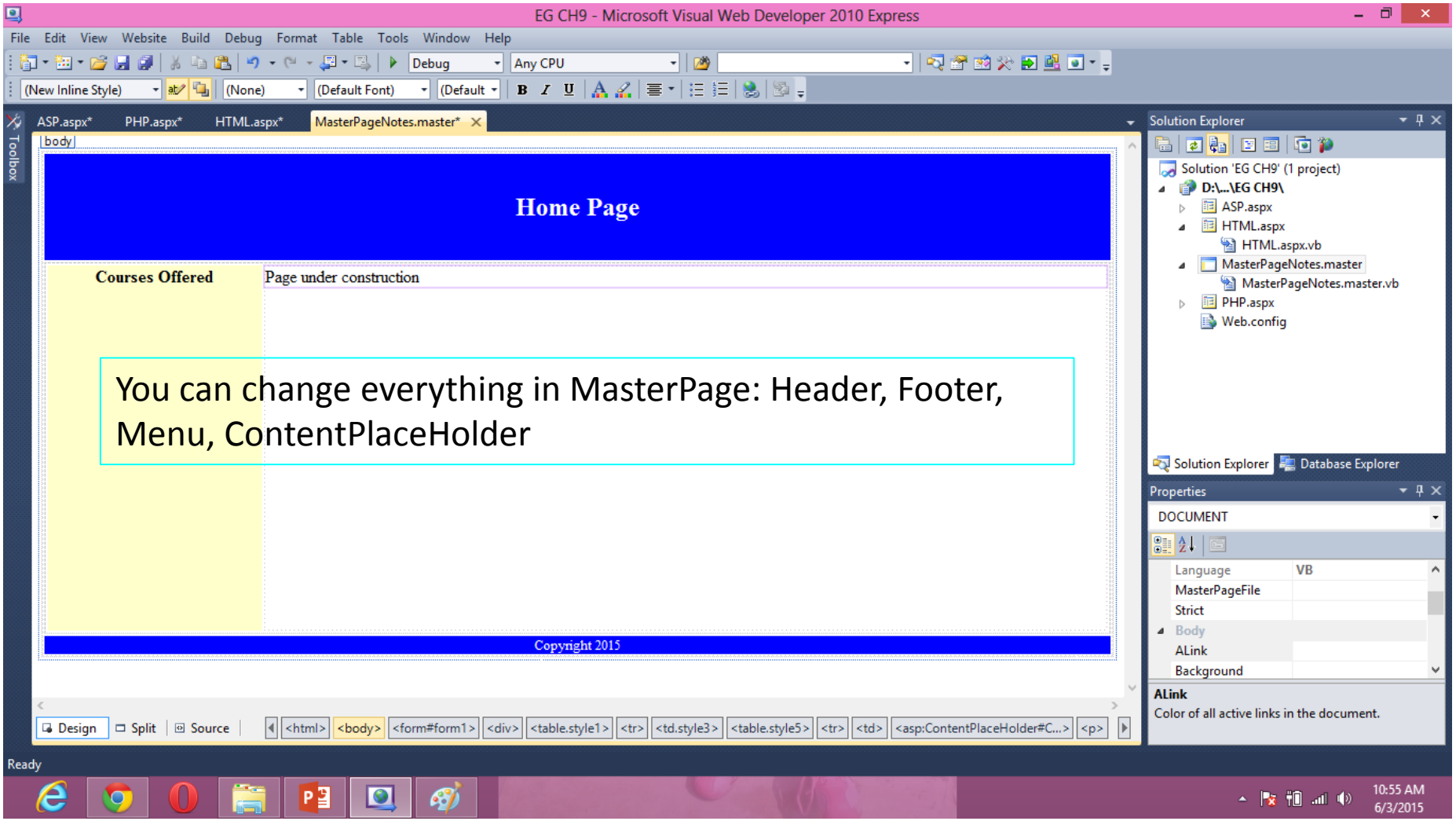

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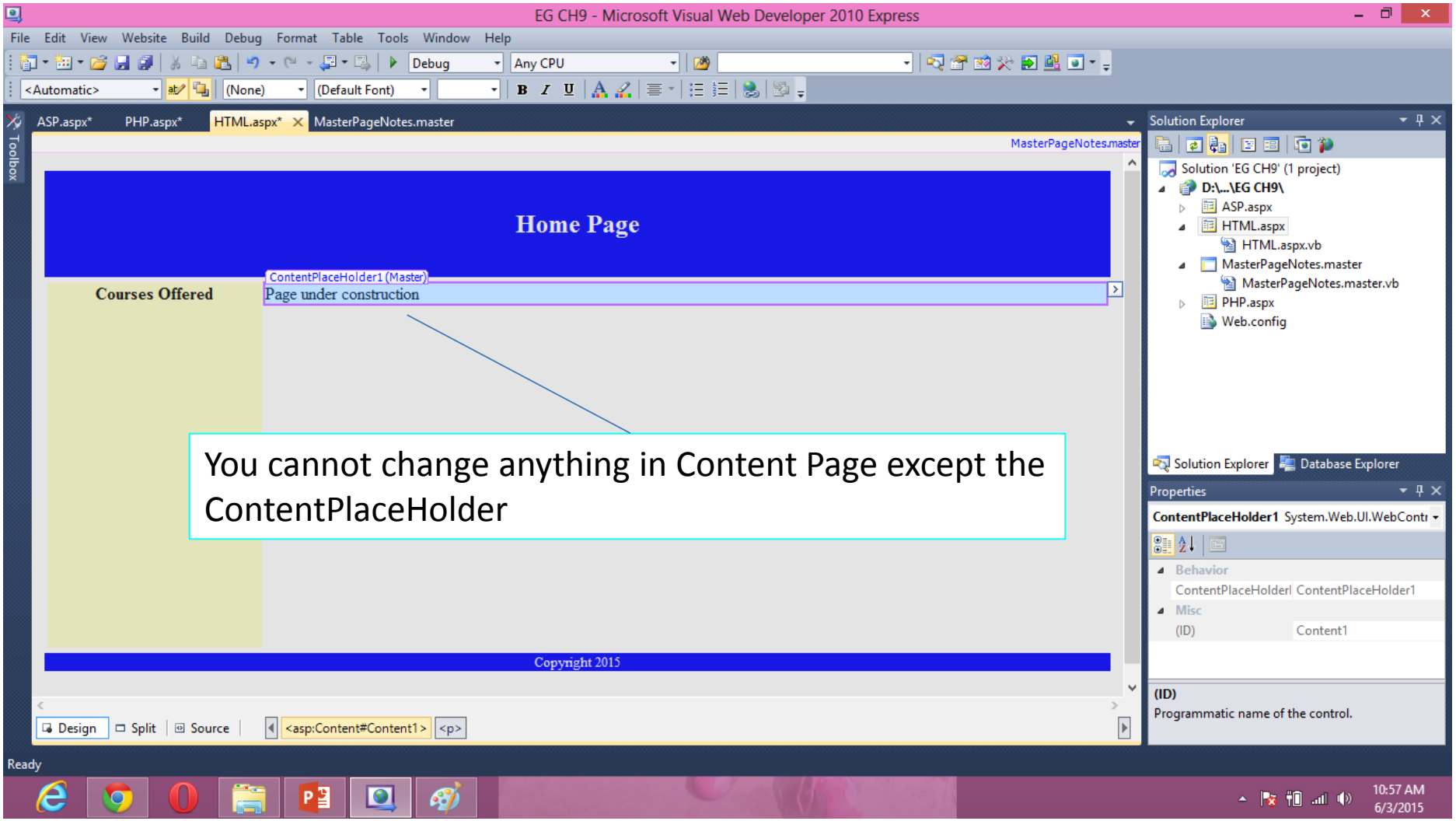

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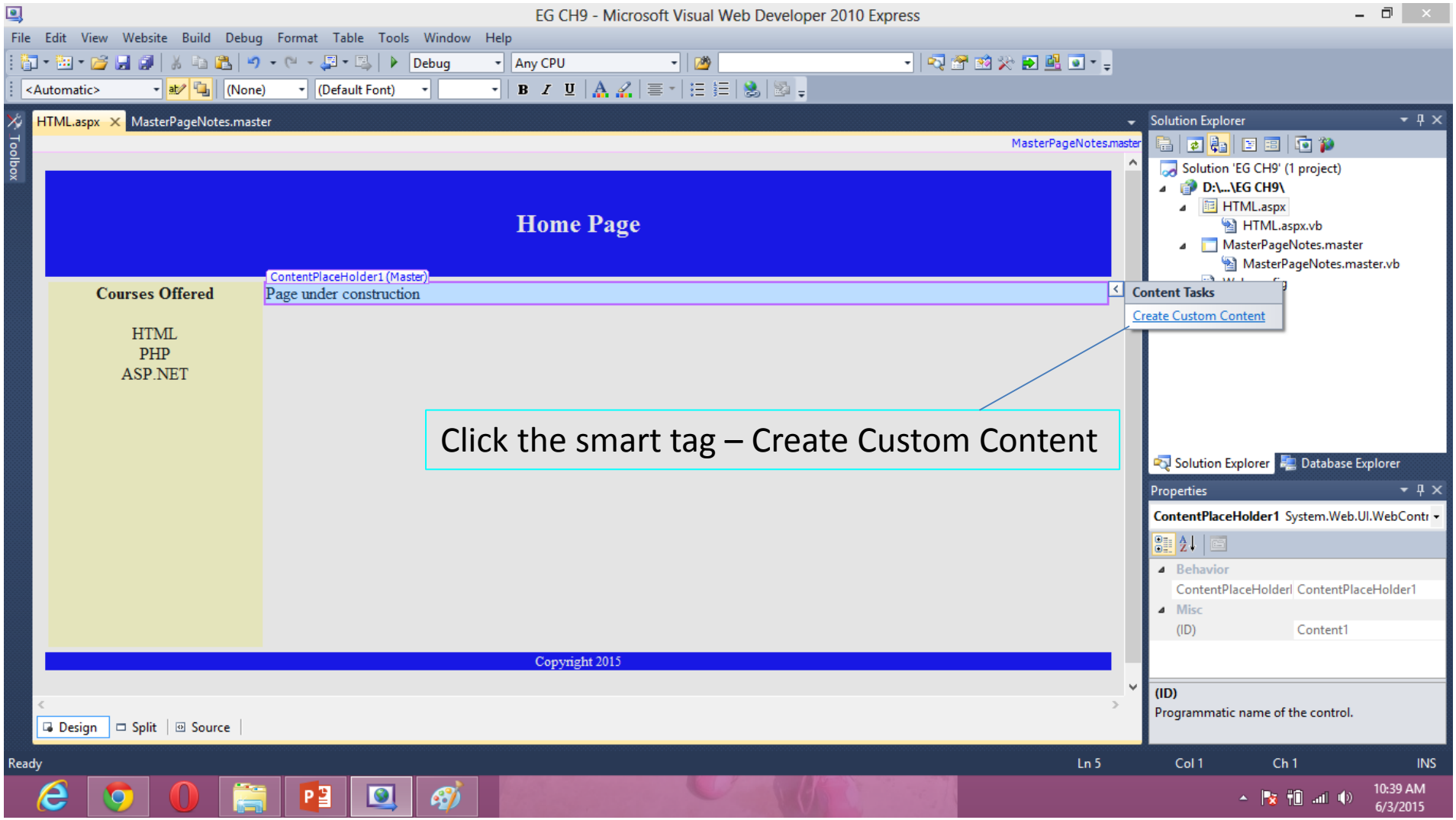
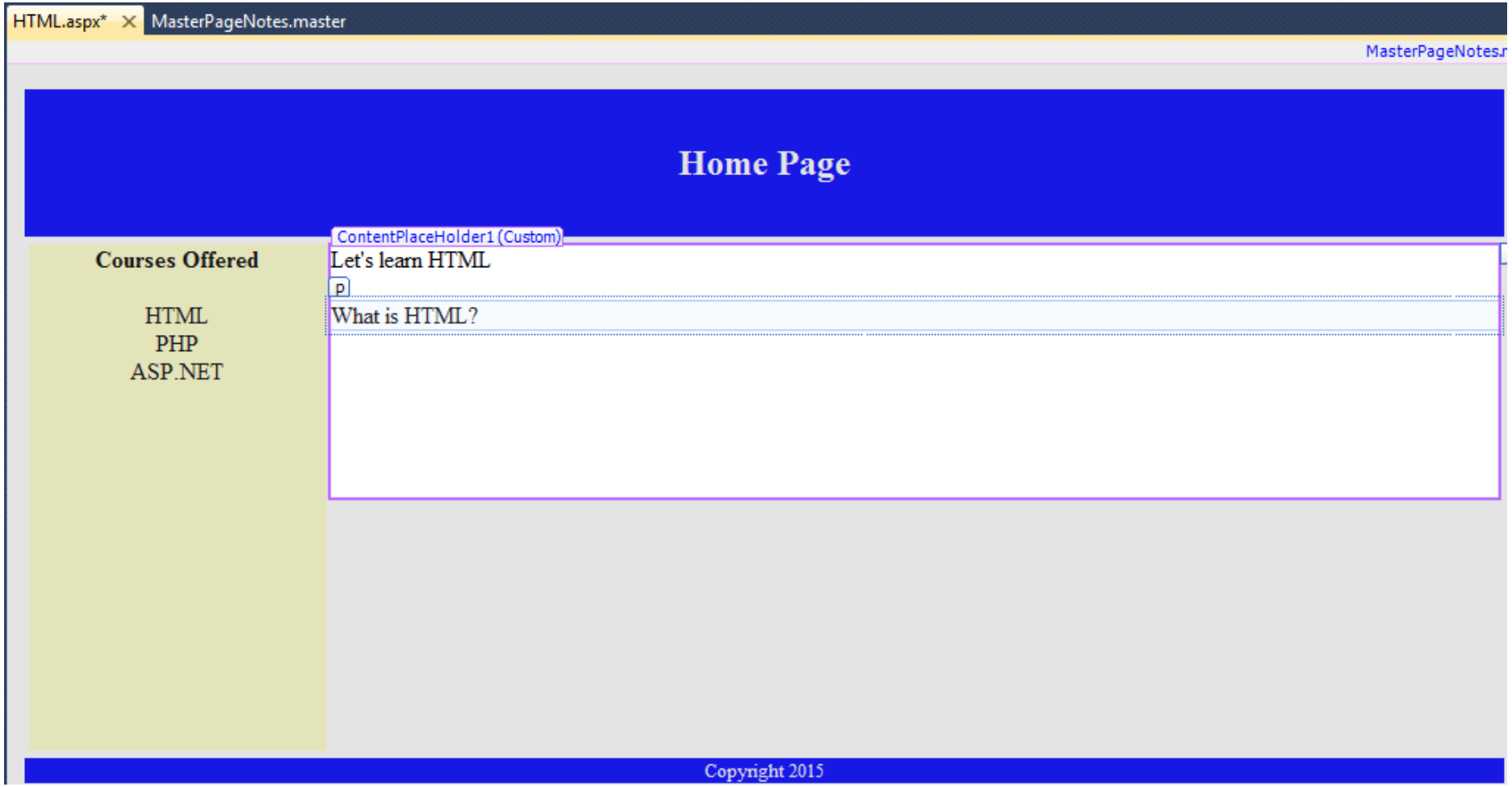
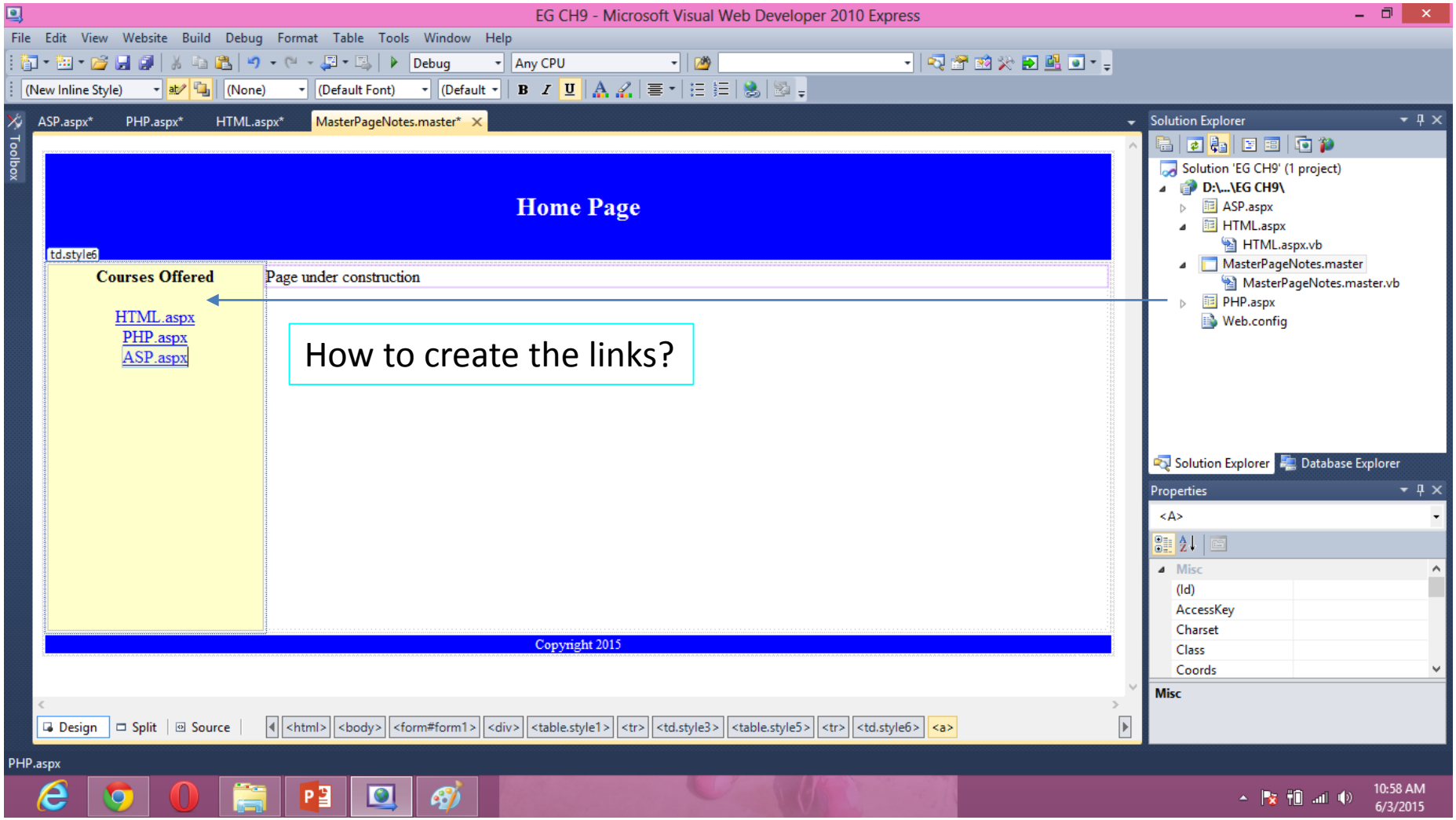



HTML.aspx*
MasterPageNotes.master
MasterPageNotes.r
Home Page
ContentPlaceHolder1 (Custom)
Courses Offered
HTML
PHP
ASP.NET
Let's learn HTML
p
What is HTML?
Copyright 2015

CHAPTER | MASTER PAGE



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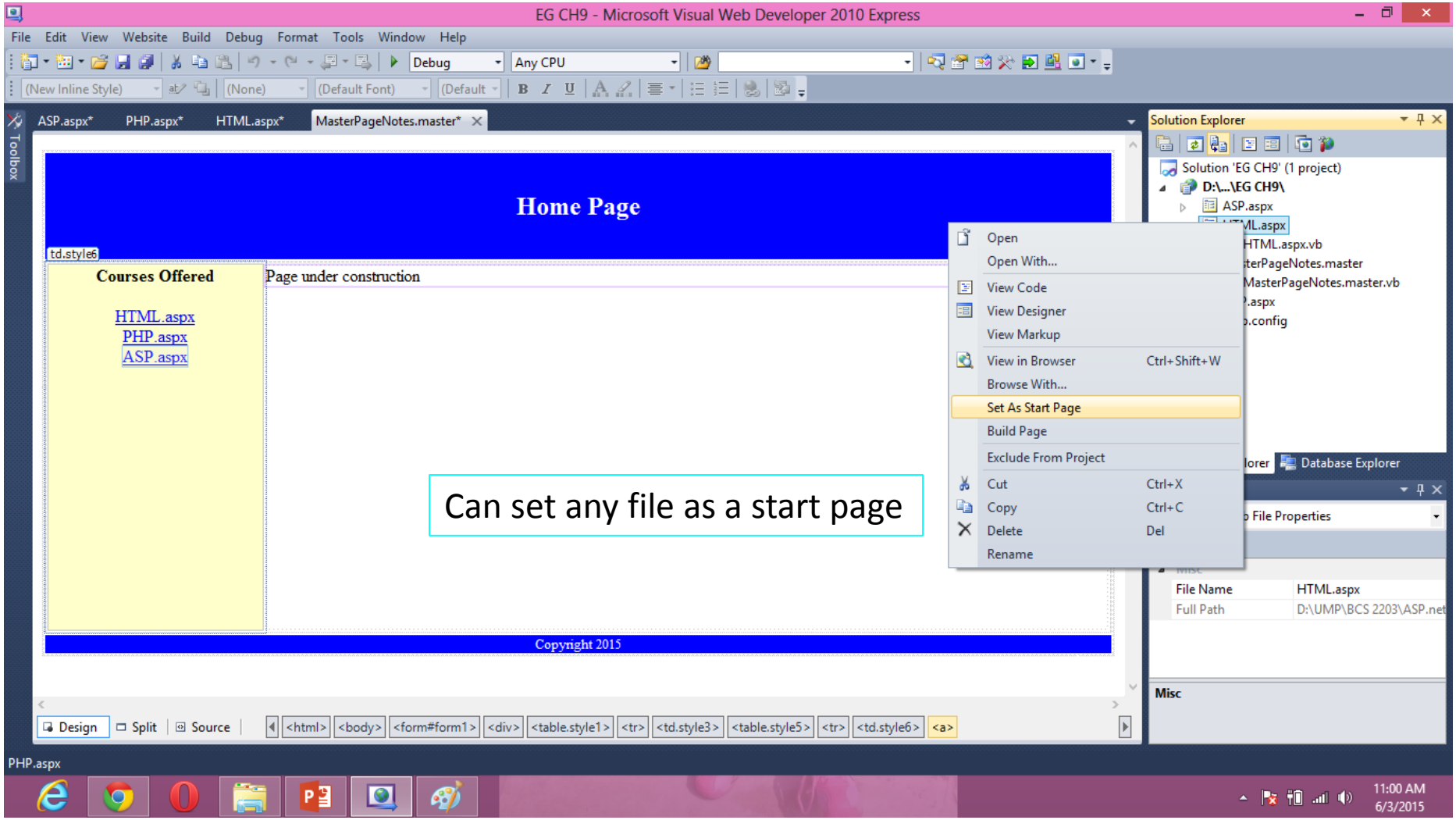

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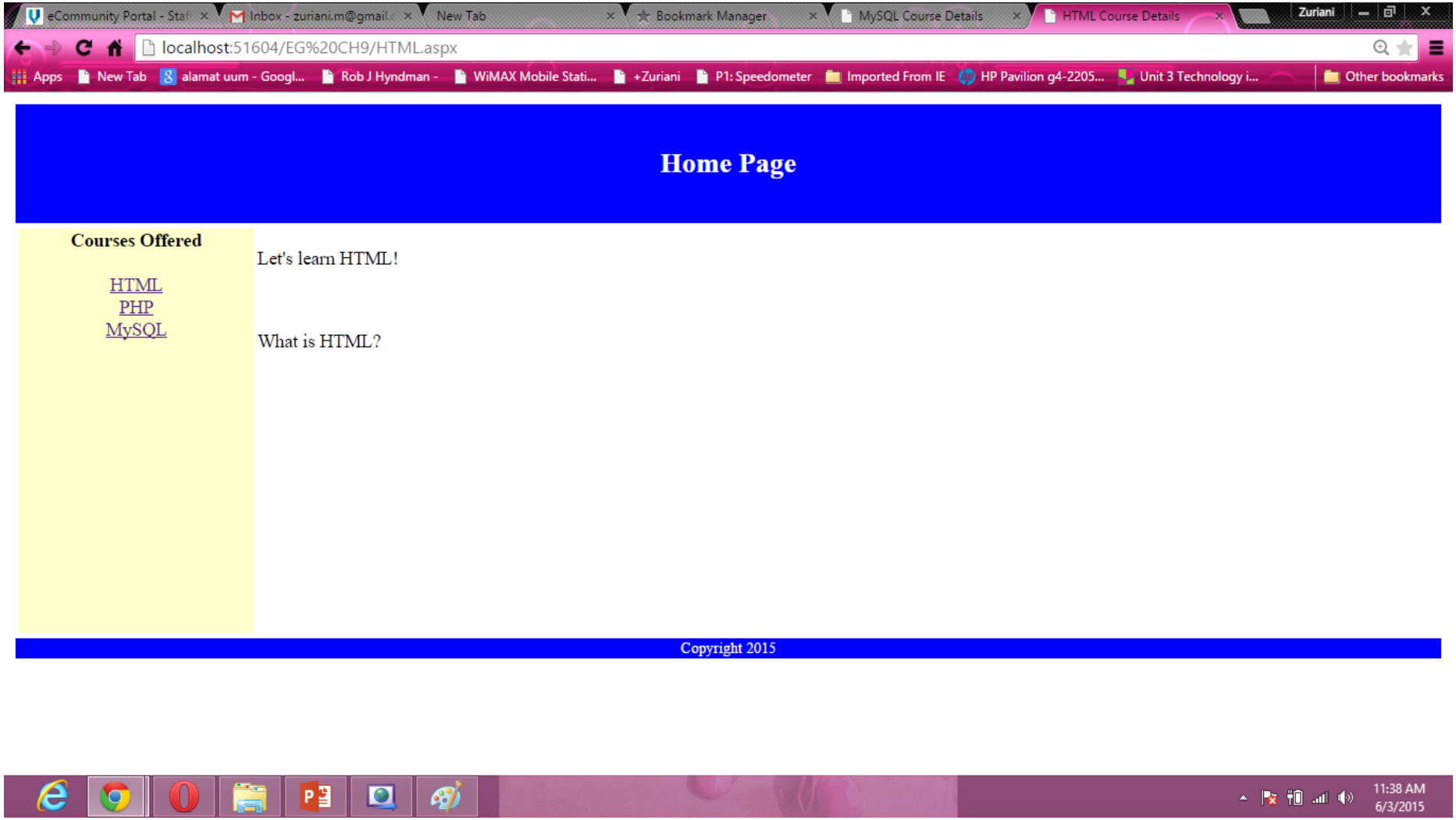
When HTML hyperlink is clicked, it shows the page for HTML (see the URL)



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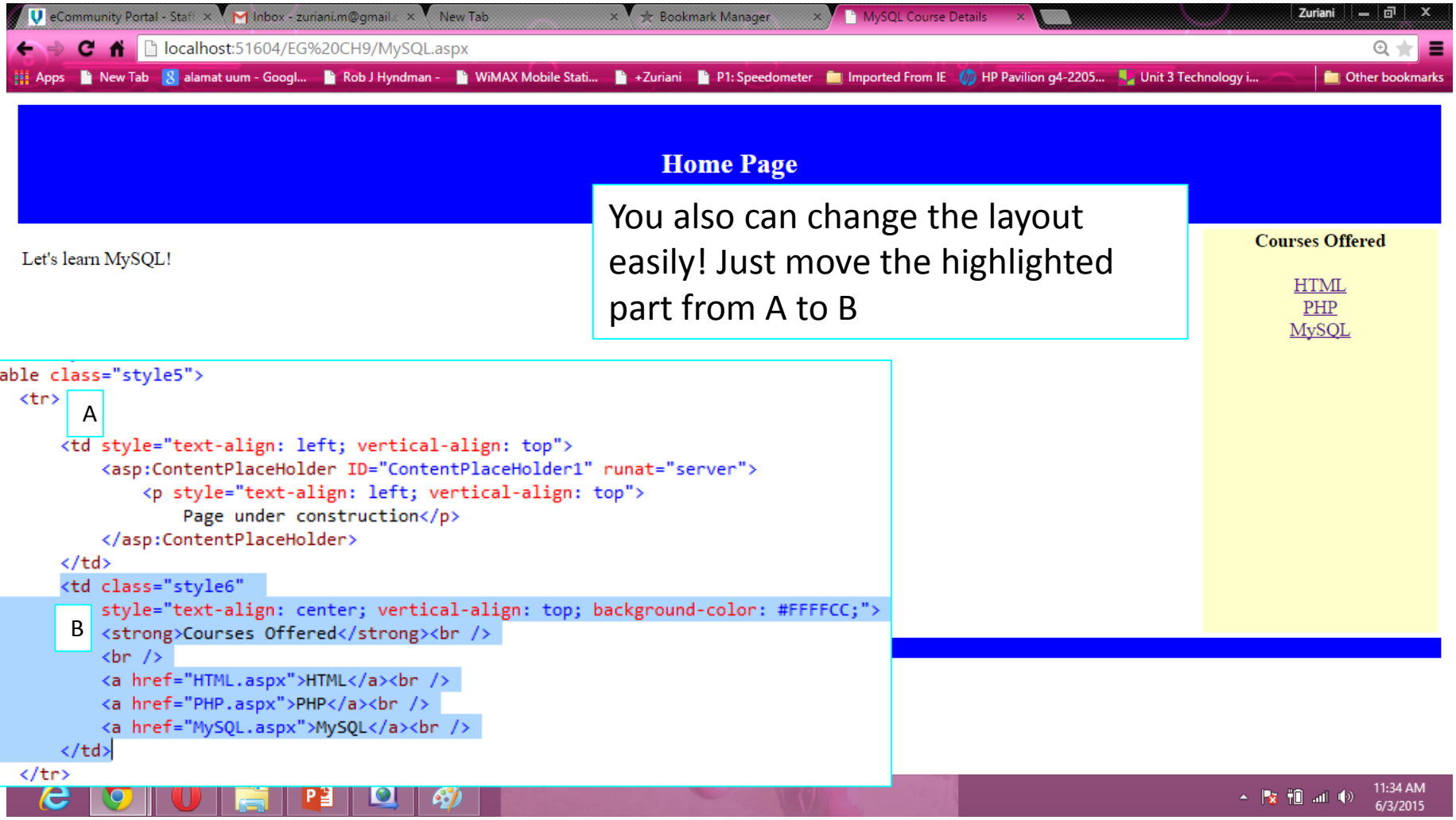

You also can change the layout easily! Just move the highlighted part from A to B

```
<table class="style5">
    <tr>
        A
        <td style="text-align: left; vertical-align: top">
            <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
                <p style="text-align: left; vertical-align: top">
                    Page under construction</p>
            </asp:ContentPlaceHolder>
        </td>
        <td class="style6"
        B style="text-align: center; vertical-align: top; background-color: #FFFFCC;">
            <strong>Courses Offered</strong><br />
            <br />
            <a href="HTML.aspx">HTML</a><br />
            <a href="PHP.aspx">PHP</a><br />
            <a href="MySQL.aspx">MySQL</a><br />
        </td>
    </tr>
```

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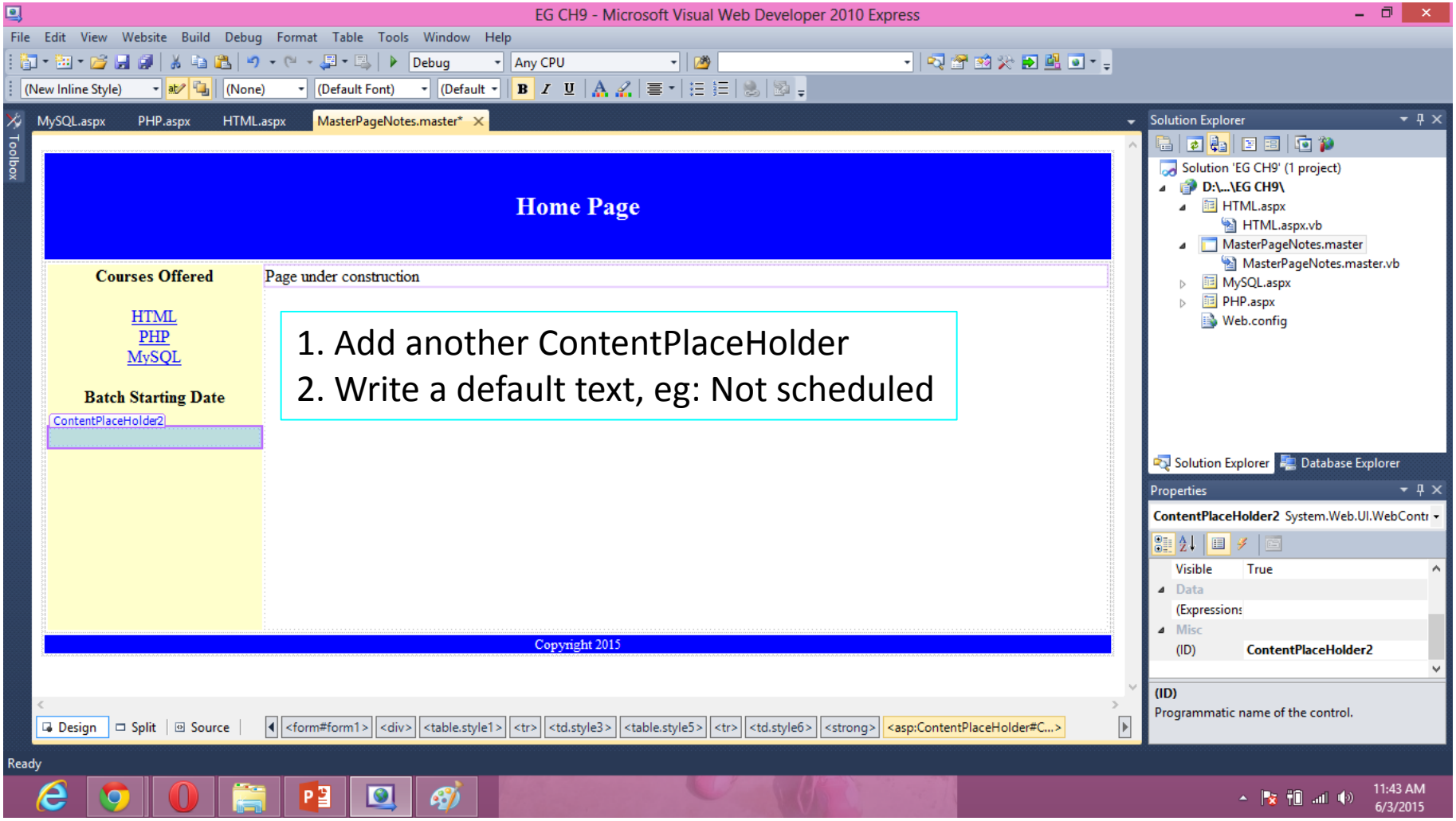

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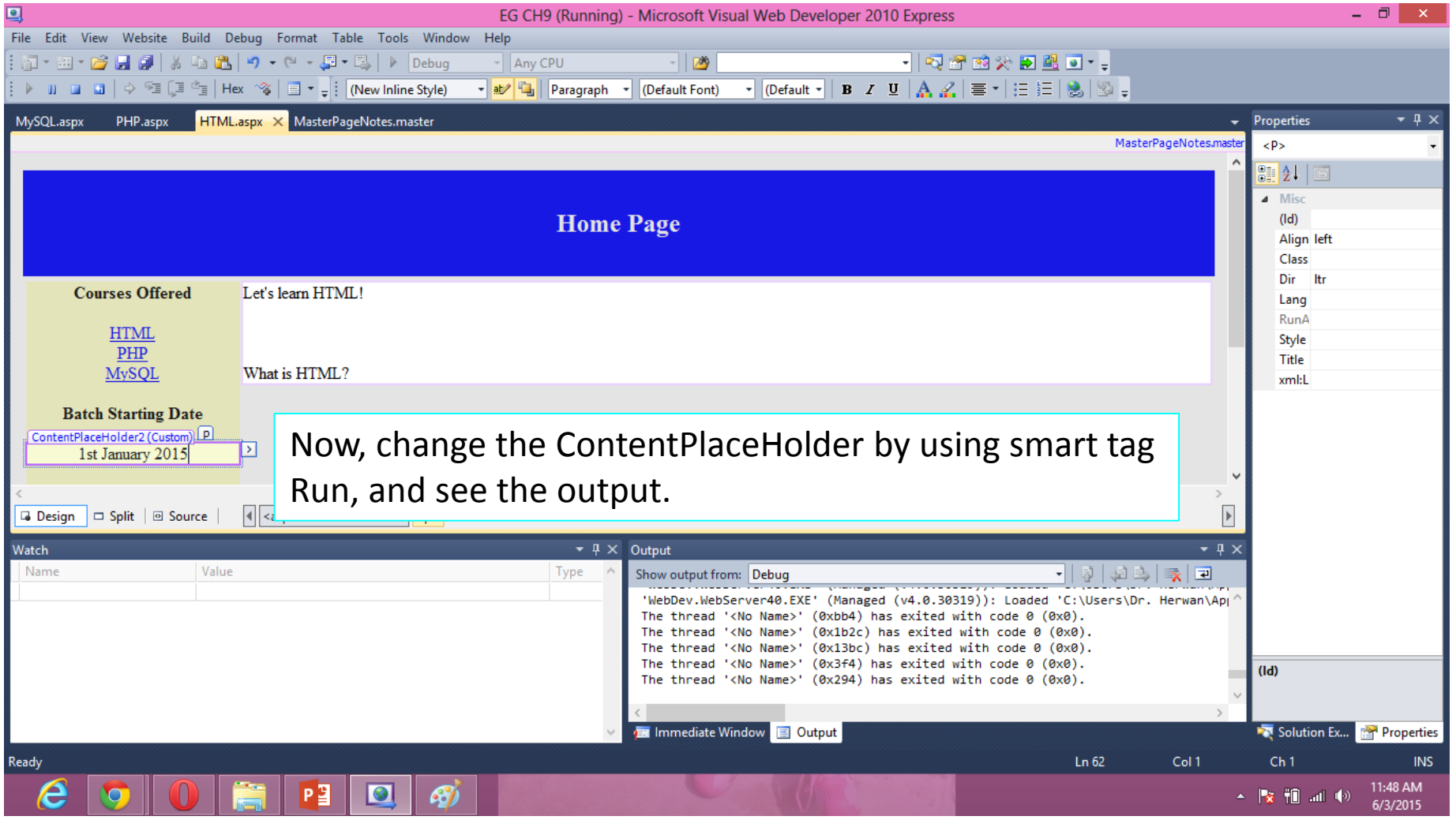

Working with a Master page's Source Code Portion

- Master pages have all the functionality found in ASP.NET pages. They can have Web controls in addition to static HTML.
- The Web controls in the master page can collect user input or retrieve data from a data source.
- In addition to Web controls and static HTML, master pages also have a server-side source code portion.

Advantage

1. Centralized Updating

The common code for the functionality of your pages can be stored in the master page's code behind, making coding and updates much easier.

2. Common Controls

How many times have you had to change menu layouts or drop down items. Placing server controls inside the Master page means you only have to edit the control in one location.

3. Flexibility

The Master page object model allows you to make changes to the master page from individual content pages. This allows fine grained control over the rendering of the final page.

…Advantage

4. Enhanced User Experience

Since all content pages are injected with the same master page controls, your interface will be more consistent and will provide a more consistent look and feel.

5. Site Management

Master pages improves site management because you're loading and having to work on fewer modules. Making changes to your application may not require you to load any content pages.

6. Less Code

Content pages are much easier to work with since they really don't have to contain any code whatsoever. A simple web app may only require code in its masterpage.master class only.

7. Less Storage Requirements

Since most of your UI code can be put in the same masterpage, your content pages will be considerably smaller.

To be continued at Database...