

TUTORIAL UNTUK MEMBINA LAMAN WEB

**VERSI 1.3
KHAS UNTUK YANG BELUM PERNAH, TETAPI INGIN MENCUBA**

**OLEH:
UMARZUKI BIN MOCHLIS**

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Prakata

Bermula dengan HTML semenjak tahun 2002 yang kemudiannya menjadi salah satu bahasa pengaturcaraan yang saya gemari. Pada mulanya saya sekadar mencuba-cuba sahaja. Bermula dengan menggunakan Microsoft™ Word™, Kemudian Geocities™ Pagebuilder™, kemudian Macromedia™ Dreamweaver™, NVU dan beberapa perisian yang saya tidak berapa ingat namanya. Akhirnya saya 'bersara' dengan Notepad2 dan Notepad++. Bezanya dengan Notepad standard adalah kebolehan untuk mewarnakan syntax(jika pada istilah bukan Sains Komputer; tatabahasa/ grammar).

Tutorial ini saya hasilkan pada cuti semester 1 pada tahun pengajian yang ke-2(bahagian 4) di UiTM Seri Iskandar kerana merasakan bahawa pentingnya pengetahuan IT kepada masyarakat terutamanya masyarakat Malaysia yang saya lihat rata-rata para remaja sekadar tahu melayari internet tetapi tidak mahir pengaturcaraan internet. Di negara-negara moden, kanak-kanak seawal 6 tahun sudah memahirkan diri dengan HTML dan saya sempat membaca artikel mengenai seorang 'hacker' yang telah mengambil upah mengaturcarakan halaman web semenjak 16 tahun. Untuk pengetahuan anda, hacker bukanlah seperti yang digembar-gemburkan oleh media kerana 'hackers build, cracker destroy'. Sekumpulan remaja 'evil-genius' yang mencero boh masuk sistem dan merosakkan atau mencuri maklumat atau kedua-duanya serta 'crack' perisian berbayar yang kos membinanya mencapai jutaan ringgit dan menguntungkan penjual perisian cetak rompak adalah digelar 'cracker', bukannya 'hacker' yang tugasnya adalah mulia bukannya terkutuk seperti cracker. Gelaran hacker diberi oleh komuniti hacker sendiri jika mereka merasakan anda layak, bukannya anda yang gatal-gatal nak menggelarkan diri anda sebagai hacker.

Diharapkan dengan langkah saya ini dapat menggalakkan perkongsian ilmu dan sikap bantu-membantu serta sentiasa dahagakan ilmu untuk melonjakkan negara kita ke status negara maju. Dengan cara apa lagi untuk memajukan sesebuah negara jika bukan ilmu?

Saya juga mempunyai halaman web sendiri:

- <http://bukakotak.tripod.com> - mengenai Perisian Sumber Terbuka
- <http://pplmanga.tripod.com> - mengenai Manga
- <http://umarzuki.freeweb7.com> - web promosi servis pembinaan laman web saya

Pengenalan

Perkara pertama yang perlu diketahui ialah membina halaman web biasanya dengan menggunakan bahasa pengaturcaraan **HTML (Hypertext Markup Language)**. Bahasa pengaturcaraan adalah bahasa yang boleh difahami, untuk yang pernah mempelajarinya sebelum ini, baik high level language(C++, Java, dll.) atau low-level(Assembly). Bahasa ini akan ditafsir/diterjemah oleh komputer kepada sesuatu yang boleh difahaminya dan dipaparkan mengikut apa yang telah diaturkan, seperti yang telah diterangkan diatas.

Sekalipun terdapat banyak web editor masa kini, anda mesti mencuba utuk memahami lebih lanjut mengenai pengaturcaraan HTML kerana sesebuah perisian itu selalunya tidaklah begitu 'wholesome' atau mencakupi segala yang difikirkan boleh/wajar oleh anda kerana dibina oleh manusia yang serba kekurangan. Jadi jalan penyelesaiannya mungkin hanya dengan mengaturcarakan sendiri.

Penghargaan

Setinggi-tinggi penghargaan diucapkan kepada mereka yang pernah memberi komen dan cadangan kepada penambahbaikan tutorial ini, antaranya:

Al Hafiz - Rakan sepengajian di UiTM Sri Iskandar yang memberi cadangan untuk menambah kod-kod yang jarang digunakan.

powerabu - Ahli Putera.com yang memberi komen-komen dan cadangan yang bernas.

Serta ahli Putera.com, CodeDB.org serta para pembaca budiman yang banyak memberi galakan dan cadangan.

Bahagian 1:

1.1 Perkara Penting Perlu Anda Ketahui

Saya mengandaikan anda telah mendaftar pada mana-mana web-hosting seperti di [Tripod](#), Geocities, Angelfire, [FreeWeb7](#). Anda diingatkan untuk memilih id yang sesuai kerana id tersebut akan menjadi alamat halaman web anda. Jika ID anda adalah **manga_girl**, maka tapak web anda adalah beralamat **manga_girl.tripod.com** dan halaman utama mestilah dinamakan **index** kerana jika nama lain, contohnya **:utama.html**, alamatnya akan jadi seperti berikut: **manga_girl.tripod.com/utama.html**.

Jika **index.html**, maka alamatnya hanya perlu menaip **manga_girl.tripod.com**. Yang penting tidak menyusahkan pengguna, mungkin rakan yg ingin melayari laman web anda, ika mereka merasa alamatnya terlalu panjang dan susah diingati, mereka mungkin malas untuk melayarinya (mungkin tdk terjadi kpd laman web yang mempunyai isi yang menarik, sekalipun alamatnya panjang berjela-jela ^_^). Meskipun begitu, fungsi *bookmark yg terdapat pada kebanyakan browser adalah penyelesaiannya.

*Untuk 'bookmark' pada website tertentu:

- IE: Favorites > Add To Favorites
- Mozilla Firefox: Bookmarks > Bookmark This Page

Bahagian 2:

2.1 Mula mempelajari HTML (Hyper Text Markup Language).

Jangan risau, saya akan megajar anda asasnya satu-per-satu.

Caranya:

Buka notepad atau apa-apa word processor.

Mesti dimulai dgn `<HTML>` dan diakhiri dengan `</HTML>`

Begini:

```
<HTML>
<HEAD>
  <title></title>
</HEAD>
<BODY></BODY>
</HTML>
```

Diantara `<HEAD>` dan `</HEAD>` adalah tempat anda memasukkan sambungan kpd fail **Javascript** (.js) dan **CSS** (.css) dimana akan saya terangkan dengan lebih lanjut kemudian. Kita mulakan dengan asasnya dahulu. Lihat pada `<title></title>` kanak-kanak kecil yang boleh memahami bahasa Inggeris pun pasti faham apa gunanya. Ia adalah untuk meletakkan tajuk halaman anda. Apa akan terjadi jika anda tidak meletakkan apa-apa? Tajuk halaman anda (yang dipaparkan oleh browser) akan menjadi **'untitled'**.

Sekarang **buat folder** (klik kanan > New > Folder), cuba **save** dan namakan sebagai **index.html** di dalam folder yang telah anda buat. Berikan nama folder itu, misalnya HTML supaya mudah diingati. Mulai sekarang kita akan menggunakan fail ini sebagai bahan pembelajaran. Nah, sekarang **klik 2 kali** pada fail **index.html** dan lihat hasilnya. Kecuali tajuk, jika anda meletakkan sebarang tajuk, yang lainnya adalah kosong. Kenapa? Jawapannya adalah...Segala yang anda ingin paparkan pada sesebuah halaman web hendaklah diletakkan di antara `<BODY>` dan `</BODY>`.

Sekarang taip apa-apa sahaja atau jika malas salin sahaja di bawah diantara tag `<BODY>` seperti di bawah:

```
<BODY>
Hey! Ada sesuatu muncul!
</BODY>
```

Sekarang anda telah mempunyai idea bagaimana pengaturcaraan html. Tidak susah kan? *Jangan lupa refresh browser (**F5**) setiap kali selesai edit.

2.1.1 Pengaturcaraan melibatkan teks

Cuba ini:

```
<H1> Paling Besar </H1>
<H2> Kedua </H2>
<H3> Ketiga </H3>
<H4> Keempat </H4>
```

Kesemuanya mempunyai saiz tersendiri dan tebal (bold), jadi sesuai untuk tajuk utama sesuatu topik.

Anda juga boleh alihkan ke tengah, kiri atau kanan.

```
<H1 align="center"> Di Tengah-tengah </H1>
<H1 align="left"> Sebelah Kiri </H1>
<H1 align="right"> Sebelah Kanan </H1>
```

Cuba :

```
Perenggan satu
Perenggan dua
```

Bagaimana? Tak seperti diharapkan?

Untuk buat perenggan baru, masukkan perenggan diantara **<P>** dan **</P>**

Cuba ini pula:

```
<P>Perenggan satu</P>
<P>Perenggan dua</P>
```

Untuk meletakkan meletakkan perkataan pada baris berikutnya, taip **
** sebelum menambah kandungan perkataan.

Cuba:

```
<P>Dalam satu perenggan, tapi ni dalam baris pertama<BR>Ni dalam baris
kedua</P>
```

Untuk meletakkan sambungan / hyperlink:

```
<A href="www.a.com"> Teks </A>
```

Dimana www.a.com adalah alamat yang hendak disambungkan (web browser akan di buka) apabila anda klik pada teks.

2.1.2 Senarai (list)

Untuk membuat senarai dalam bentuk mengikut bilangan atau bentuk poin:

```
<OL>  
<LI>Senarai 1</LI>  
<LI>Senarai 2</LI>  
<LI>Senarai 3</LI>  
<LI>Senarai 4</LI>  
<LI>Senarai 5</LI>  
</OL>
```

```
<UL>  
<LI>Senarai 1</LI>  
<LI>Senarai 2</LI>  
<LI>Senarai 3</LI>  
<LI>Senarai 4</LI>  
<LI>Senarai 5</LI>  
</UL>
```

***OL** = ordered list/ mengikut urutan nombor manakala **UL** sebaliknya

2.1.3 Sisipan Imej

Untuk berbuat demikian:

```
<IMG src="imej.jpg">
```

Selepas **IMG src=**, alamat dan nama fail serta jenis format ditaip diantara pembuka dan penutup kata. Disini alamat tidak perlu disertakan kerana **index.html** berada dalam satu direktori dengan **imej.jpg**. Imej juga boleh dialihkan seperti <P> begitu juga dengan tag-tag yang lain.

Imej juga boleh dialih seperti H1:

```
<IMG src="imej.jpg" align="center">
```

..akan menjadikan imej berada di tengah-tengah halaman.

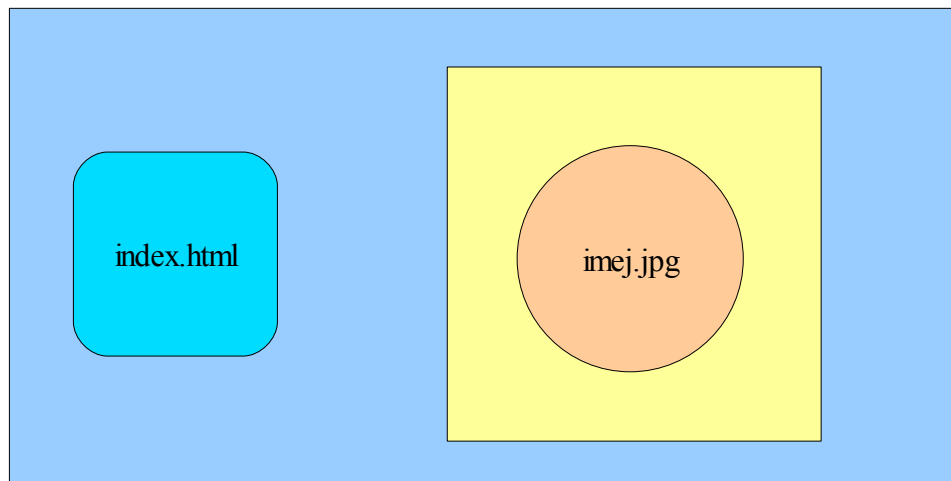
Bagaimana menentukan alamat imej?

Mudah, anda tentukannya berdasarkan jarak dari fail .html, misalnya index.html. Katakan anda ingin menggunakan imej.jpg yang diletakkan dalam folder yang sama dengan index.html, anda cuma perlu buat seperti contoh di atas. Bagaimanapun, jika index.html di dalam folder yang dinamakan HTML dan imej.jpg di dalam folder IMEJ dan folder IMEJ di dalam folder HTML. Gambarajahnya seperti di bawah.


Anda hanya perlu buat seperti di bawah:

```
<IMG src="IMEJ/imej.jpg">
```


sekalipun folder HTML berada dalam My Documents.



 FOLDER HTML

 FAIL HTML <index.html>

 FOLDER IMEJ

 FAIL IMEJ <imej.jpg>

2.1.4 Table

Table adalah salah cara untuk menyusun data tabular (yang biasanya disusun seperti kad laporan sekolah anda) dalam keadaan yang lebih tersusun. Seperti mengemas meja, ini bukannya kerja mudah, kalau anda malas.

Caranya:

```
<TABLE>
  <TR>
    <TD> 1.1 </TD>
    <TD> 1.2 </TD>
  </TR>
  <TR>
    <TD> 2.1 </TD>
    <TD> 2.2 </TD>
  </TR>
</TABLE>
// Sengaja saya susun begini
```

<TABLE> dan **</TABLE>** fungsinya untuk menyatakan bahawa kod didalamnya adalah berbentuk table.

<TR> dan **</TR>** menentukan jumlah kolum manakala **<TD>** **</TD>** menentukan jumlah baris.

Untuk menetapkan ketebalan sempadan masukkan **border="saiz"** didalam **<TABLE>** dimana saiz dalam integer.

```
<TABLE border="1">
  <TR>
    <TD> 1.1 </TD>
    <TD> 1.2 </TD>
  </TR>
  <TR>
    <TD> 2.1 </TD>
    <TD> 2.2 </TD>
  </TR>
</TABLE>
```

Bandingkan pula dengan di bawah:

```
<TABLE border="1" cellspacing="1" cellpadding="5">
  <TR>
    <TD> 1.1 </TD>
    <TD> 1.2 </TD>
  </TR>
  <TR>
    <TD> 2.1 </TD>
    <TD> 2.2 </TD>
  </TR>
</TABLE>
```

cellspacing="saiz" adalah ketebalan sel table dan **cellpadding="saiz"** adalah jarak antara isi kandungan sesebuah sel dengan dinding sel.

2.1.5 Frame

Untuk menjadikan website anda lebih elegan dan kemas, anda boleh menggunakan teknik frame.

Caranya:

1. Buat satu fail html yang baru seperti dibawah.

***cols** adalah kolom dimana bilangannya mengikut bilangan parameter yang diberi. Contoh yang diberi adalah 2 kolom (horizontal/melintang) yaitu yang pertama dari kiri adalah 15% dari saiz asal browser dan kedua 85%.

```
<HTML>
  <FRAMESET cols="15%, 85%">
    <FRAME src="nav.html">
    <FRAME src="index.html">
  </FRAMESET>
</HTML>
```

2. Dan save sebagai **frame.html** atau apa-apa nama sahaja yang anda inginkan.

Nav.html pula:

```
<HTML>
<HEAD></HEAD>
<BODY>
```

Navigasi

```
<UL>
  <LI><A href="www.b.com">Link 1</A></LI>
  <LI><A href="www.c.com">Link 2</A></LI>
  <LI><A href="www.d.com">Link 3</A></LI>
  <LI><A href="www.e.com">Link 4</A></LI>
  <LI><A href="www.f.com">Link 5</A></LI>
</UL>
</BODY>
</HTML>
```

Menarik kan?

Dengan sedikit kreativiti, anda mesti pernah terfikir untuk melakukannya seperti ini:

```
<FRAMESET cols="100%">
  <FRAMESET rows="15%, 85%">
    <FRAME src="nav2.html">
    <FRAME src="index.html">
  </FRAMESET>
</FRAMESET>
```


2.1.6 CSS - Cascading Style Sheet

CSS adalah untuk menjadikan halaman web anda lebih menarik lagi dengan pelbagai kesan khas yang disediakan oleh **CSS**. Anda telah melakukannya apabila memasukkan **border="1"** pada `<TABLE>`.

Caranya:

1. Buka muka baru pada word processor anda
2. Masukkan kod CSS yang anda ingini
3. Namakan fail itu dengan format **.css**
4. Import dengan meletakkan beberapa kata kunci pada tag `<HEAD></HEAD>`

Contoh:

```
BODY { font-family: comics; }
P     { font-family: courier, verdana; }
TABLE { font-family: Arial; color: red; }
A     { text-decoration: none; }
A:hover { color: green; background: yellow; }
// Jangan lupa untuk menyusun kod anda supaya mudah proses debugging.
Dan save sebagai style.css.
```

Dalam tag `<HEAD> </HEAD>` halaman yang ingin anda gunakan, taip:

```
<LINK href="style.css" rel="stylesheet" type="text/css">
```

Apa akan terjadi?

BODY { font-family: comic sans ms;} menjadikan semua teks dalam `<BODY>` muka-taipnya Comic Sans MS.

P { font-family: courier, verdana;} menjadikan semua teks yang didalam `<P> </P>` muka-taipnya courier, jika courier tidak terdapat dalam sistem, verdana akan digunakan.

TABLE { font-family: Arial; color: red;} manjadikan muka taip untuk teks didalam table bermuka-taip Arial dan berwarna merah.

A { text-decoration: none;} menjadikan semua sambungan(link) tidak bergaris dibawahnya.

A:hover { color: green;} menjadikan teks yang diletakkan sambungan apabila cursor melaluinya akan bertukar menjadi hijau. Jika anda tidak menetapkan apa-apa untuk BODY, ada peluang untuk teks anda bermuka-taip Times New Roman.

Peringatan: Bukan semua sistem pengoperasian komputer mempunyai muka taip yang sama dengan yang dimiliki oleh sistem Windows™.

*Debugging adalah proses menyelesaikan permasalahan yang timbul yang boleh disebabkan dari pelbagai perkara seperti syntax(salah ejaan), salah pengiraan dan sebagainya.

Untuk lebih spesifik, tetapkan kelas dan gunakan pada tag yang anda ingini.

Caranya:

```
// Dalam style.css  
// Digunakan pada <P>,  
P.teks {
```

```
    color: blue;  
    border-style: dotted;  
    border-color: green;  
    background: cyan;  
}
```

```
// Untuk gunakan (dalam fail .html)
```

```
// Misalnya digunakan pada <P>
```

```
<P class="teks"> Teks ni berwarna biru, dikelilingi sempadan berbentuk titik yang  
berwarna hijau muda dan latar belakang berwarna biru muda </P>
```

Antara atribut selain `color`, `background` dan lain-lain yang telah saya gunakan, anda juga boleh gunakan:

```
text-align // Untuk alihkan teks
```

```
background-image: url("alamat/gambar.format"); // Untuk tetapkan gambar latar  
belakang
```

```
background-repeat: no-repeat; // Supaya latar belakang tidak diulang jika saiznya  
// terlalu kecil
```

```
background-position // Kedudukannya, sama ada; center, left, right, top, bottom
```

Setakat ini untuk CSS, banyak lagi maklumat yang boleh didapati di internet. Mestilah anda kena pandai mencarinya.

'Nak seribu daya, taknak seribu dalih'

Topik Khas:

Kesesuaian Web Browser

Diingatkan bahawa bukan semua orang menggunakan browser yang sama, sekalipun jika sama, versinya mungkin berlainan. Ada yang kekal dengan Internet Explorer 6 yang dibekalkan oleh Windows XP™, ada yang menggunakan Mozilla Firefox, ada yang menggunakan Seamonkey dan sebagainya.

Internet Explorer 6 misalnya, kurang bersesuaian dengan standard W3C. Antara masalahnya, kod CSS seperti *padding* yang tidak dipaparkan dengan betul dan gambar dengan format PNG tidak dapat dipaparkan transparency-nya dengan berkesan.

Mungkin penyelesaiannya adalah dengan menggunakan kod yang hanya boleh dipaparkan dengan betul pada IE 6 ataupun menggunakan Javascript untuk mengesan browser yang dipakai dan memberikan saranan yang sesuai kepada pengguna seperti pada website saya: <http://umarzuki.freeweb7.com> ataupun anda boleh menghalang terus pengguna yang menggunakan IE seperti: <http://mulder.dummwiedeutsch.de/home/?page=projects>, namun saya tidak menggalakkan cara ini.

Bagaimanapun, segalanya terpulang kepada anda sebagai pengarang halaman anda. Disinilah datangnya kepuasan sebagai seorang pengaturcara; menyelesaikan masalah.

Hayati syair dibawah:

*Aku mengenal keburukan bukan untuk melakukan keburukan, tetapi untuk memelihara dari bahayanya,
Sesiapa yang tidak mengenal keburukan yang dilakukan oleh manusia, maka ia akan menerima padahnya.*

Penutup, selesai?

Takkan taknak upload(muat naik) kut...Macam mana orang lain nak menghayati website anda yang best tu? Senang saja. Log in ke dalam halaman web hosting yang anda telah daftar, seperti Tripod dan biasanya kata kuncinya adalah berkaitan dengan fail dan pilih untuk upload dan apa lagi? Upload semua fail .html anda.

Diingatkan jika fail imej anda di dalam folder IMEJ seperti contoh dalam tutorial bahagian 'Sisipan Imej', bina folder yang mempunyai nama yang sama(IMEJ lah!) dan buka folder itu dan uploadkan semua imej yang diperlukan kedalamnya. Ingat tak ``?

Tidak...Proses pembelajaran tidak pernah berhenti, lagipun apa yang terdapat didalam tutorial ini hanya cebisan daripada teknik-teknik HTML. Jadi, bagaimana? Anda lanjutkan ilmu anda dengan mencari maklumat di internet ataupun kedai-kedai buku. Anda juga boleh mempelajari teknik-teknik HTML dengan memerhatikan kod sumber halaman web orang lain.

Caranya:

Untuk Internet Explorer: View > Source

Untuk Mozilla Firefox: View > Page Source

Antara halaman web yang mempunyai pelbagai maklumat mengenai HTML:

- [HTML Goodies](#)
- [W3](#)

Sekian dan saya harap tutorial ini berguna dan mampu menyumbang kepada peratusan celik IT di negara kita.

'Barangsiapa yang bersusah-payah mencari ilmu akan dipermudahkan jalannya ke syurga'

'In effect, creative ability is 2% inspiration and 98% perspiration'

Sebarang cadangan hubungi saya di alamat [umarzuki AT gmail DOT com](mailto:umarzuki@gmail.com)

Sejarah Pembinaan

1.3 <17 Ogos, 2007>	Penambahan lesen FDL, penambahan 'Topik khas', sedikit pembetulan dan penambahan.
1.22 <28 Jun, 2007>	Sedikit penambahan dan pembetulan serta syntax highlighting.
1.21	Sedikit penambahan dan pembetulan.
1.2	Beberapa penambahan dan pembetulan pada 2.1.1, 2.1.4, 2.1.52.1.6, 'Penutup, selesai?'serta beberapa kesalahan ejaan serta pembetulan-pembetulan kecil.
1.1	Sedikit penambahan pada tajuk 2.1.3 dan pembetulan ejaan serta 'Sejarah Pembinaan' pertama kali diadakan.'
1.0	Tutorial pertama kali dibuat.

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