

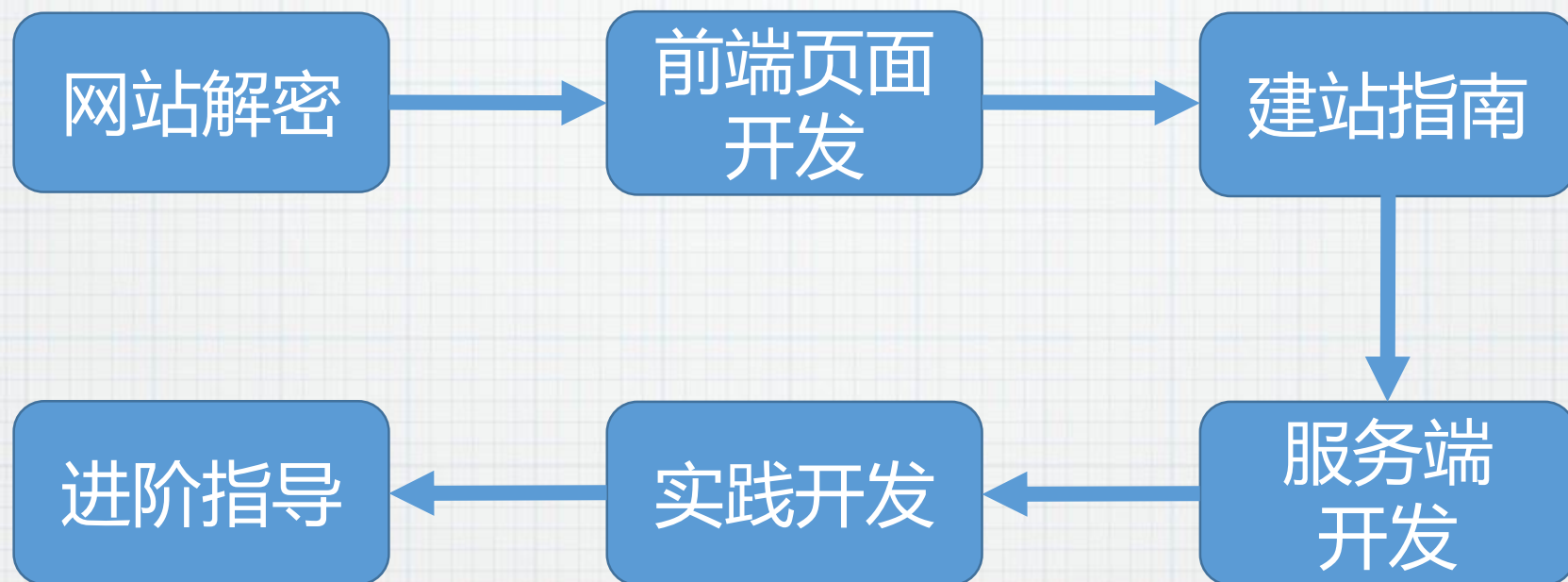
Hello Web

主讲人：朱润凯

课程目的

- 目标:
- 从零基础到完成一个简单的动态网站（14学时）
- 成果:
- 自己设计并实现一个具有一定功能的完整的动态网站
- 前提:
- 1. 按时完成作业
- 2. 每节课都来听

课程内容



第一课

动态网站解密

网站的基础——网络

网站的基础——网络

时间：1969年

主导者：美国国防部高级研究计划管理局

名称：ARPAnet

目的：把美国的几个军事及研究用电脑主机联接起来

当初，ARPAnet只联结4台主机，从军事要求上是置于美国国防部高级机密的保护之下，从技术上它还不具备向外推广的条件

网站的基础——网络

- 1977-1979年

ARPAnet推出了如今形式的**TCP/IP**体系结构和协议

- 1980年前后

ARPAnet上的所有计算机开始了TCP/IP协议的转换工作，并以ARPAnet为主干网建立了初期的**Internet**

网站的基础——网络

- 1984年

美国国家科学基金会NSF规划建立了13个国家超级计算中心及国家教育科技网。NSFnet替代了ARPANET的骨干地位

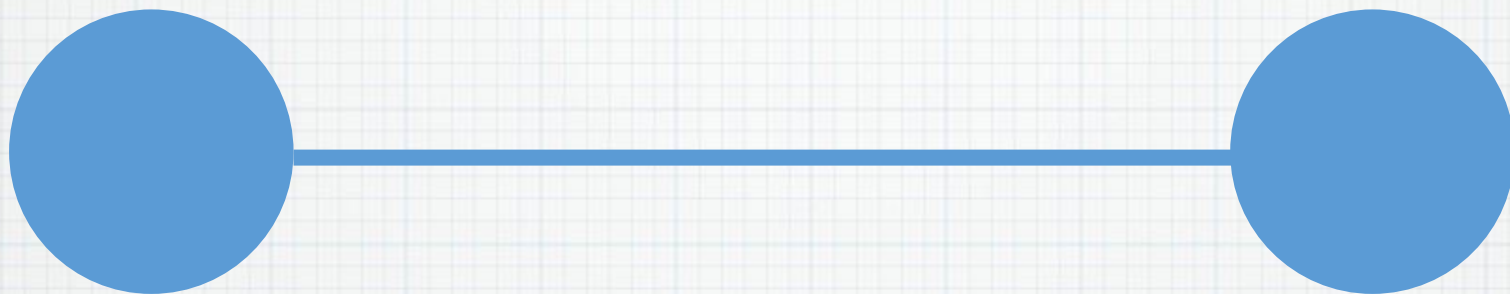
- 1988年

Internet开始对外开放

- 1991年6月

在连通Internet的计算机中，商业用户首次超过了学术界用户，这是Internet发展史上的一个里程碑

最简单的网络



Computer

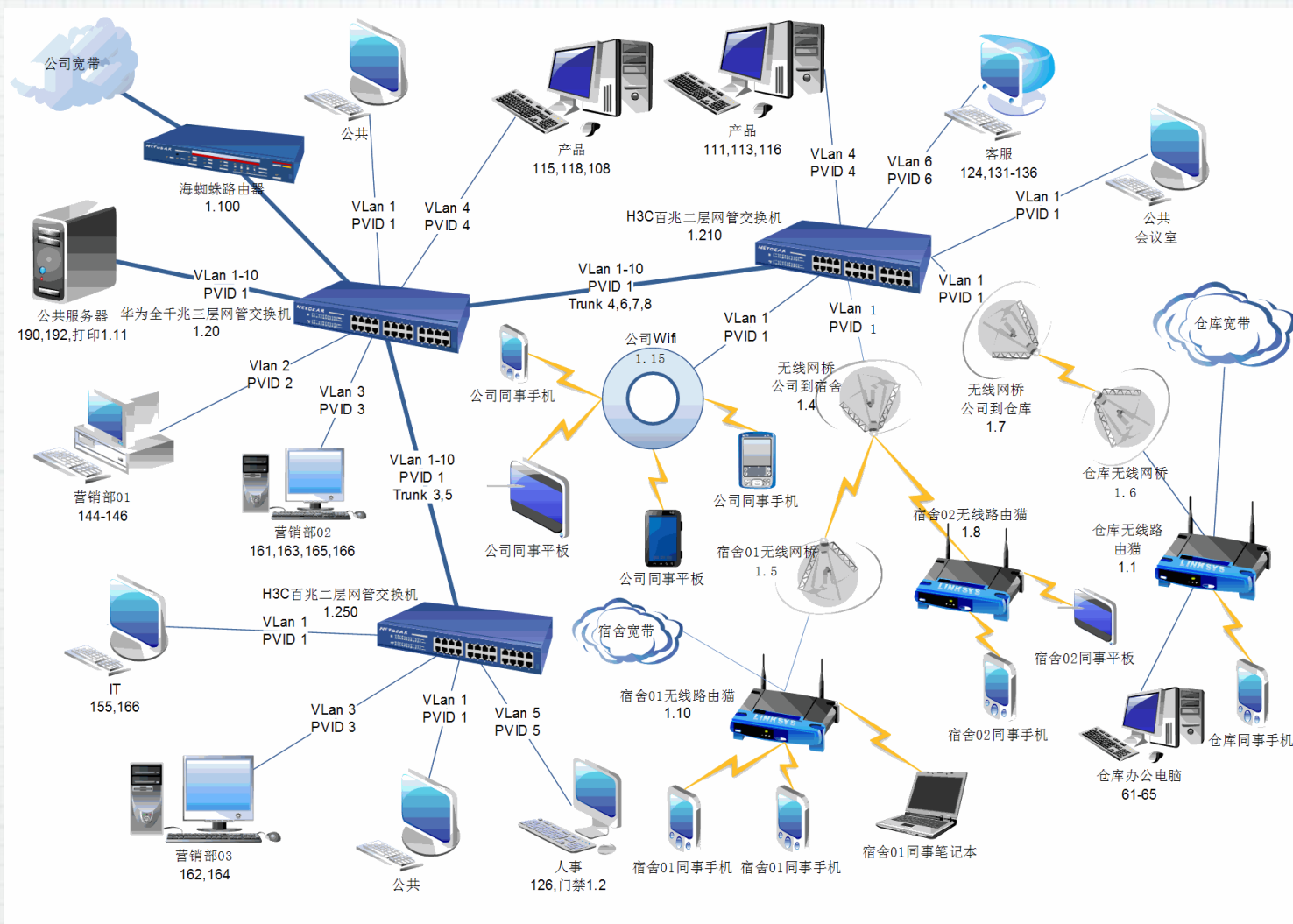
Computer



Client

Server

真实的网络



浏览网页发生了什么

浏览网页发生了什么

- 想象一个场景

- 餐馆就餐

1. 想起一个餐馆名称
2. 查找餐馆的地址
3. 前往餐馆坐下
4. 呼叫服务员
5. 服务员走过来取出菜单
6. 你浏览到菜单，然后点餐吃饭

浏览网页发生了什么

1. 打开浏览器、输入网址（域名、IP）



浏览器：可以显示网页服务器或者文件系统的HTML文件（标准通用标记语言的一个应用）内容，并让用户与这些文件交互的一种软件。

网址？域名（domain）？IP？如何查看

域名：从右到左，域名从高层到低层；
www是历史遗留问题，<http://no-www.org/>

浏览网页发生了什么

2. 解析域名，找到主机IP

Domain有意义，几乎无限；IP没意义，有限

IP和Domain的关系：

DNS: (Domain Name System, 域名系统)

因特网上作为域名和IP地址相互映射的一个分布式数据库
能够使用户更方便的访问互联网，而不用去记住能够被机器
直接读取的IP数串

```
Microsoft Windows [版本 6.3.9600]
```

```
(c) 2013 Microsoft Corporation。保留所有权利。
```

```
C:\Users\karezi>ping www.baidu.com
```

```
正在 Ping www.a.shifen.com [220.181.111.188] 具有 32 字节的数据:
```

```
来自 220.181.111.188 的回复: 字节=32 时间=5ms TTL=52
```

```
来自 220.181.111.188 的回复: 字节=32 时间=12ms TTL=52
```

浏览网页发生了什么

IP查找顺序：

1. 浏览器缓存
2. Hosts文件（C:\Windows\System32\drivers\etc）
3. 路由器
4. ISP服务商（互联网服务提供商-北网通南电信）
5. 域名服务器递归
- 6.



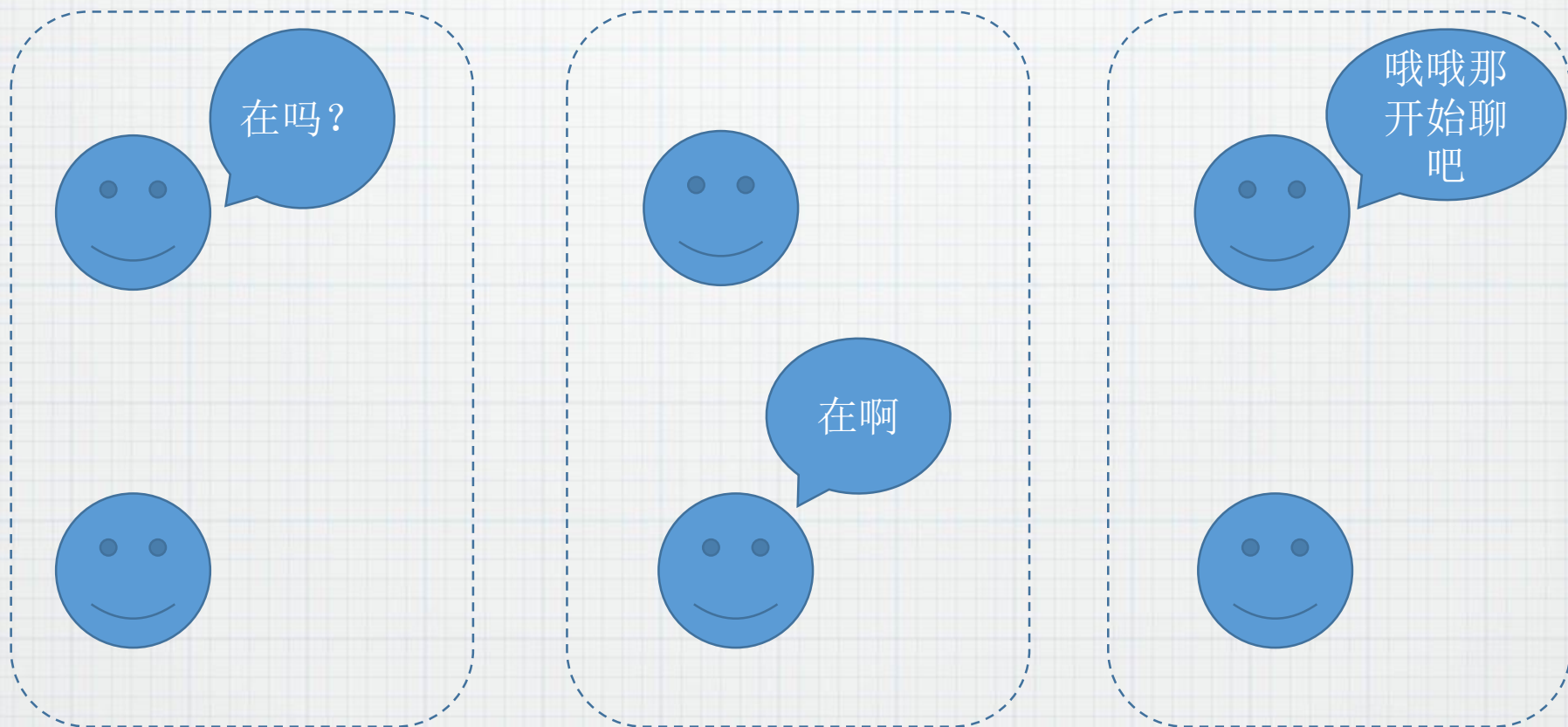
无法显示此网页

重新加载

详细信息


浏览网页发生了什么

- 3 浏览器与网站建立连接——三次握手



浏览网页发生了什么

- 4 浏览器发起GET请求

Name Path	Method	Status Text	Type
 www.baidu.com	GET	200 OK	text/html

Remote Address: 119.75.217.109:443

Request URL: <https://www.baidu.com/>

Request Method: GET

Status Code:  200 OK

▼ Request Headers [view source](#)

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8

Accept-Encoding: gzip, deflate, sdch

Accept-Language: zh-CN,zh;q=0.8

Cache-Control: max-age=0

Connection: keep-alive

Cookie: BAIDUID=CEC4D03304CD31A0DE793B04C8AAFFFA;FG=1; BAIDUPSID=CEC4D03304CD31A0DE793B04C8AAFFFA; BIDUPSID=CEC4D03304CD31A0DE793B04C8AAFFFA; BD_HOME=0; H_PS_PSSID=11194_13789_1435_13075_12867_13321_10562_12722_13892_13761_13256_13781_12194_13838_13086_13087_13088_13089_13090_13091_13092_13093_13094_13095_13096_13097_13098_13099_13100_13101_13102_13103_13104_13105_13106_13107_13108_13109_13110_13111_13112_13113_13114_13115_13116_13117_13118_13119_13120_13121_13122_13123_13124_13125_13126_13127_13128_13129_13130_13131_13132_13133_13134_13135_13136_13137_13138_13139_13140_13141_13142_13143_13144_13145_13146_13147_13148_13149_13150_13151_13152_13153_13154_13155_13156_13157_13158_13159_13160_13161_13162_13163_13164_13165_13166_13167_13168_13169_13170_13171_13172_13173_13174_13175_13176_13177_13178_13179_13180_13181_13182_13183_13184_13185_13186_13187_13188_13189_13190_13191_13192_13193_13194_13195_13196_13197_13198_13199_13200_13201_13202_13203_13204_13205_13206_13207_13208_13209_13210_13211_13212_13213_13214_13215_13216_13217_13218_13219_13220_13221_13222_13223_13224_13225_13226_13227_13228_13229_13230_13231_13232_13233_13234_13235_13236_13237_13238_13239_13240_13241_13242_13243_13244_13245_13246_13247_13248_13249_13250_13251_13252_13253_13254_13255_13256_13257_13258_13259_13260_13261_13262_13263_13264_13265_13266_13267_13268_13269_13270_13271_13272_13273_13274_13275_13276_13277_13278_13279_13280_13281_13282_13283_13284_13285_13286_13287_13288_13289_13290_13291_13292_13293_13294_13295_13296_13297_13298_13299_13300_13301_13302_13303_13304_13305_13306_13307_13308_13309_13310_13311_13312_13313_13314_13315_13316_13317_13318_13319_13320_13321_13322_13323_13324_13325_13326_13327_13328_13329_13330_13331_13332_13333_13334_13335_13336_13337_13338_13339_13340_13341_13342_13343_13344_13345_13346_13347_13348_13349_13350_13351_13352_13353_13354_13355_13356_13357_13358_13359_13360_13361_13362_13363_13364_13365_13366_13367_13368_13369_13370_13371_13372_13373_13374_13375_13376_13377_13378_13379_13380_13381_13382_13383_13384_13385_13386_13387_13388_13389_13390_13391_13392_13393_13394_13395_13396_13397_13398_13399_13400_13401_13402_13403_13404_13405_13406_13407_13408_13409_13410_13411_13412_13413_13414_13415_13416_13417_13418_13419_13420_13421_13422_13423_13424_13425_13426_13427_13428_13429_13430_13431_13432_13433_13434_13435_13436_13437_13438_13439_13440_13441_13442_13443_13444_13445_13446_13447_13448_13449_13450_13451_13452_13453_13454_13455_13456_13457_13458_13459_13460_13461_13462_13463_13464_13465_13466_13467_13468_13469_13470_13471_13472_13473_13474_13475_13476_13477_13478_13479_13480_13481_13482_13483_13484_13485_13486_13487_13488_13489_13490_13491_13492_13493_13494_13495_13496_13497_13498_13499_13500_13501_13502_13503_13504_13505_13506_13507_13508_13509_13510_13511_13512_13513_13514_13515_13516_13517_13518_13519_13520_13521_13522_13523_13524_13525_13526_13527_13528_13529_13530_13531_13532_13533_13534_13535_13536_13537_13538_13539_13540_13541_13542_13543_13544_13545_13546_13547_13548_13549_13550_13551_13552_13553_13554_13555_13556_13557_13558_13559_13560_13561_13562_13563_13564_13565_13566_13567_13568_13569_13570_13571_13572_13573_13574_13575_13576_13577_13578_13579_13580_13581_13582_13583_13584_13585_13586_13587_13588_13589_13590_13591_13592_13593_13594_13595_13596_13597_13598_13599_13600_13601_13602_13603_13604_13605_13606_13607_13608_13609_13610_13611_13612_13613_13614_13615_13616_13617_13618_13619_13620_13621_13622_13623_13624_13625_13626_13627_13628_13629_13630_13631_13632_13633_13634_13635_13636_13637_13638_13639_13640_13641_13642_13643_13644_13645_13646_13647_13648_13649_13650_13651_13652_13653_13654_13655_13656_13657_13658_13659_13660_13661_13662_13663_13664_13665_13666_13667_13668_13669_13670_13671_13672_13673_13674_13675_13676_13677_13678_13679_13680_13681_13682_13683_13684_13685_13686_13687_13688_13689_13690_13691_13692_13693_13694_13695_13696_13697_13698_13699_13700_13701_13702_13703_13704_13705_13706_13707_13708_13709_13710_13711_13712_13713_13714_13715_13716_13717_13718_13719_13720_13721_13722_13723_13724_13725_13726_13727_13728_13729_13730_13731_13732_13733_13734_13735_13736_13737_13738_13739_13740_13741_13742_13743_13744_13745_13746_13747_13748_13749_13750_13751_13752_13753_13754_13755_13756_13757_13758_13759_13760_13761_13762_13763_13764_13765_13766_13767_13768_13769_13770_13771_13772_13773_13774_13775_13776_13777_13778_13779_13780_13781_13782_13783_13784_13785_13786_13787_13788_13789_13790_13791_13792_13793_13794_13795_13796_13797_13798_13799_13800_13801_13802_13803_13804_13805_13806_13807_13808_13809_13810_13811_13812_13813_13814_13815_13816_13817_13818_13819_13820_13821_13822_13823_13824_13825_13826_13827_13828_13829_13830_13831_13832_13833_13834_13835_13836_13837_13838_13839_13840_13841_13842_13843_13844_13845_13846_13847_13848_13849_13850_13851_13852_13853_13854_13855_13856_13857_13858_13859_13860_13861_13862_13863_13864_13865_13866_13867_13868_13869_13870_13871_13872_13873_13874_13875_13876_13877_13878_13879_13880_13881_13882_13883_13884_13885_13886_13887_13888_13889_13890_13891_13892_13893_13894_13895_13896_13897_13898_13899_13900_13901_13902_1390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浏览网页发生了什么

- 5 返回页面代码或返回其他

```
▼ <html>
  ▶ #shadow-root
  ▶ <head>...</head>
  ▼ <body link="#0000cc">
    ▶ <div data-for="result" id="swfEveryCookieWrap" style="width: 0px; height: 0px; overflow: hidden;">...</div>
    ▶ <div data-for="result" style="height:0;width:0;overflow:hidden;" id="swfsocketdiv">...</div>
    ▶ <script>...</script>
    ▶ <div id="wrapper" style="display: block;">...</div>
      <div class="c-tips-container" id="c-tips-container"></div>
      <script>window.__async_strategy=2;</script>
    ▶ <script>...</script>
    ▶ <script>...</script>
    <script type="text/javascript" src="https://ss1.bdstatic.com/5eN1bjq8AAUYm2zgoY3K/r/www/cache/static/prot...>
    <script>...</script>
    <script type="text/javascript">...</script>
    <script src="https://ss1.bdstatic.com/5eN1bjq8AAUYm2zgoY3K/r/www/cache/static/protocol/https/global/js/al...>
    <script>...</script>
    <script>...</script>
  </body>
</html>
```

浏览网页发生了什么

- 6 显示页面



浏览网页发生了什么

- 餐馆就餐

1. 想起一个餐馆名称
2. 查找餐馆的地址
3. 前往餐馆坐下
4. 呼叫服务员
5. 服务员走过来取出菜单或告知没有餐单
6. 你浏览到菜单

- 浏览网页

1. 打开浏览器、输入网址
2. 解析域名，找到主机IP
3. 浏览器与网站建立连接
4. 浏览器发起**GET**请求
5. 返回页面代码或返回其他
6. 显示页面

网站（静态网站vs动态网站）

- 静态：页面供用户浏览，一般采用html语言编写
- 动态：网页与服务器进行数据交互，一般执行在服务端的程序
- 我们着重讲得是动态网页开发，当然静态是其基础

问题

- 建一个网站需要什么支撑环境？
- 建一个网站需要学什么？
- 谁在制订标准？

开发涉及的环境

- 前端
 - 浏览器程序
<http://www.w3school.com.cn/browsers/index.asp>
- 传输
 - 通讯协议支持
- 后端
 - 操作系统+Web服务器软件+数据库+服务器脚本
 - WAMP（Windows Apache Mysql PHP）
- 数据库
 - 数据库软件支持

开发涉及的技术

- 前端
 - W3C
 - HTML(5), CSS(3), Javascript(Jquery)
- 后端
 - Php, asp, jsp, aspx
- 传输
 - JSON, XML
- 数据库
 - MySQL, SQL Server, Oracle

我们的课程涉及

- 前端开发语言
 - HTML(5), CSS(3), Javascript(Jquery)
- 后端服务器脚本
 - PHP
- 传输语言
 - JSON、XML
- 数据库
 - MySQL

作业

- 1. 课堂反馈（想听什么，听得懂吗）
- 2. 提出一个自己准备要做的网站功能需求
- 3. 建一个网站需要什么支撑？建一个网站需要学什么？

推荐资源

- www.w3school.com.cn

谢谢！ 欢迎骚扰！

