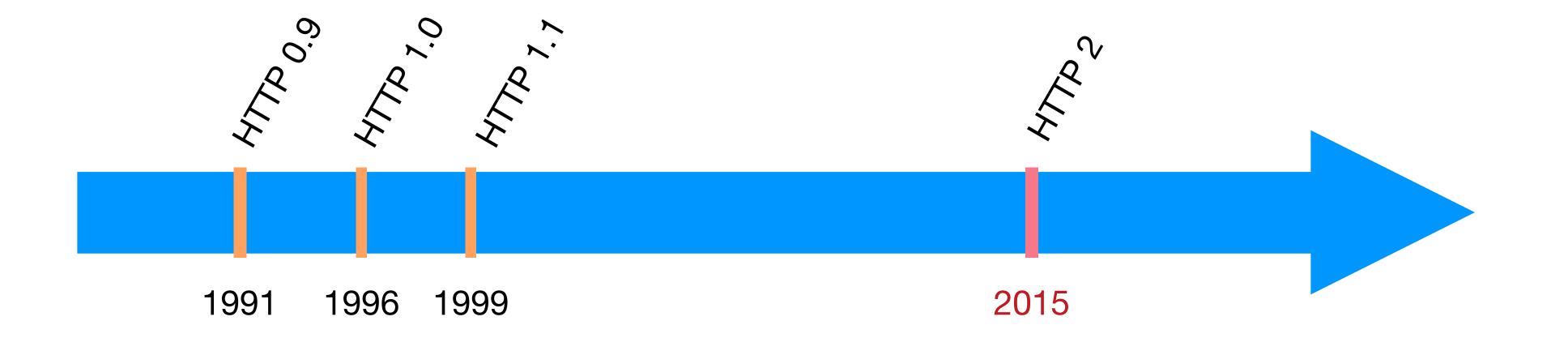
互联网常用协议

HTTP

HTTP版本

- HTTP 0.9
- HTTP 1.0
- HTTP 1.1
- HTTP 2.0



HTTP通讯

客户端 Web服务器 GET / HTTP/1.1 Host: www.domain.com Connection: close HTTP/1.1 200 OK Date: Wed, 04 Jul 2018 01:48:49 GMT Content-Type: text/html Content-Length: 67 Connection: close <!DOCTYPE html><html><head></ head><body>hello, world</body></ html>

HttpServer例子

```
ServerSocket serverSocket = new ServerSocket(8090);
while (true) {
    Socket client = serverSocket.accept();
    BufferedReader in = new BufferedReader(new InputStreamReader(client.getInputStream()));
    PrintWriter out = new PrintWriter(new BufferedWriter(
                                           new OutputStreamWriter(client.getOutputStream())), true);
    String action = in.readLine();
    StringBuffer clientHeaders = new StringBuffer();
    for (String s = in.readLine(); s != null && s.length() > 0; s = in.readLine()) {
        clientHeaders.append(s).append("\r\n");
   if (action.startsWith("GET ")) {
        String html = "<!DOCTYPE html>\r\n" + "<html><head><title>hello,world</title><body><h1>Hello, World!</h1></body></html>";
     1 out.print("HTTP/1.1 200 OK\r\n");
     2 out.print("Context-Type: text/html\r\n");
       out.print("Content-Length:" + html.length() + "\r\n");
       out.print("Connection:close\r\n");
       out.print("\r\n");
       out.print(html);
   out.close();
   in.close();
   client.close();
```

HttpClient例子

```
Socket socket = new Socket("www.baidu.com", 80));
  OutputStream output = socket.getOutputStream();
  PrintWriter writer = new PrintWriter(output, true);
1 writer.print("GET / HTTP/1.1\r\n");
② writer.print("Host: www.baidu.com\r\n");
3 writer.print("User-Agent: MSIE\r\n");
4 writer.print("Connection: close\r\n");

  writer.print("\r\n");
  InputStream input = socket.getInputStream();
  BufferedReader reader = new BufferedReader(new InputStreamReader(input));
  String line;
  while ((line = reader.readLine()) != null) {
      System.out.println(line);
  reader.close();
  input.close();
  output.close();
  writer.close();
  socket.close();
```

Server中获得的哪些信息是绝对可信的?

IP request.getRemoteAddr()

• Header cookie, user-agent, ...

• Body POST传递过来的数据

URL query string