Response codes of the Hypertext Transfer Protocol This is a list of Hypertext Transfer Protocol (HTTP) response status codes. Status codes are issued by a server in response to a client's request made to the server. It includes codes from IETF Request for Comments (RFCs), other specifications, and some additional codes used in some common applications of the HTTP. The first digit of the status code specifies one of five standard classes of responses. The optional message phrases shown are typical, but any human-readable alternative may be provided, or none at all. Unless otherwise stated, the status code is part of the HTTP standard.[1] The Internet Assigned Numbers Authority (IANA) maintains the official registry of HTTP status codes.[2] All HTTP response status codes are separated into five classes or categories. The first digit of the status code defines the class of response, while the last two digits do not have any classifying or categorization role. There are five classes defined by the standard: 1xx informational response – the request was received, continuing process 2xx successful – the request was successfully received, understood, and accepted 3xx redirection – further action needs to be taken in order to complete the request 4xx client error – the request contains bad syntax or cannot be fulfilled 5xx server error – the server failed to fulfil an apparently valid request 1xx informational response An informational response indicates that the request was received and understood. It is issued on a provisional basis while request processing continues. It alerts the client to wait for a final response. The message consists only of the status line and optional header fields, and is terminated by an empty line. As the HTTP/1.0 standard did not define any 1xx status codes, servers must not[note 1] send a 1xx response to an HTTP/1.0 compliant client except under experimental conditions. 5xx server errors The server failed to fulfil a request. Response status codes beginning with the digit "5" indicate cases in which the server is aware that it has encountered an error or is otherwise incapable of performing the request. Except when responding to a HEAD request, the server should include an entity containing an explanation of the error situation, and indicate whether it is a temporary or permanent condition. Likewise, user agents should display any included entity to the user. These response codes are applicable to any request method. 500 Internal Server Error A generic error message, given when an unexpected condition was encountered and no more specific message is suitable. 501 Not Implemented The server either does not recognize the request method, or it lacks the ability to fulfil the request. Usually this implies future availability (e.g., a new feature of a web-service API). 502 Bad Gateway The server was acting as a gateway or proxy and received an invalid response from the upstream server. 503 Service Unavailable The server cannot handle the request (because it is overloaded or down for maintenance). Generally, this is a temporary state.[27] 504 Gateway Timeout The

server was acting as a gateway or proxy and did not receive a timely response from the upstream server. 505 HTTP Version Not Supported The server does not support the HTTP version used in the request. 506 Variant Also Negotiates (RFC 2295) Transparent content negotiation for the request results in a circular reference.[28] 507 Insufficient Storage (WebDAV; RFC 4918) The server is unable to store the representation needed to complete the request.[7] 508 Loop Detected (WebDAV; RFC 5842) The server detected an infinite loop while processing the request (sent instead of 208 Already Reported). 510 Not Extended (RFC 2774) Further extensions to the request are required for the server to fulfil it.[29] 511 Network Authentication Required (RFC 6585) The client needs to authenticate to gain network access. Intended for use by intercepting proxies used to control access to the network (e.g., "captive portals" used to require agreement to Terms of Service before granting full Internet access via a Wi-Fi hotspot).[25] Unofficial codes