

WebSockets, WebRTC

Andrey Kolesnik



kolesnik (Andrey Kolesnik)

github.com/kolesnik

Reader

Ororo.tv - a...earn english Saved Tabs ▾ Developing process ▾ Web Slice Gallery Suggested Sites

github

Search or type a command


Explore Gist Blog Help

kolesnik

+ ▾

✕

📄



Andrey Kolesnik

kolesnik

🏢 EPAM Systems

📍 Ukraine

✉ andreas.kolesnik@gmail.com

🕒 Joined on May 17, 2011

5

Followers



25

Starred

13

Following

Organizations




Contributions

Repositories


Public activity

Edit profile


Popular repositories

 [angular-multiselect](#) 0 ★

Native AngularJS multiselect directive


 [grunt-karma](#) 0 ★

Grunt plugin for Karma.


 [ng-grid](#) 0 ★

Angular Data Grid


Repositories contributed to

 [DebtDomain/LTS](#) 1 ★


Loan Trade Settlement

 [amitava82/angular-multiselect](#) 63 ★


Native AngularJS multiselect directive

 [angular-ui/ng-grid](#) 1,257 ★

UI Grid: an Angular Data Grid

 [karma-runner/grunt-karma](#) 265 ★

Grunt plugin for Karma.

 [karma-runner/karma-html2js-pr...](#) 23 ★

A Karma plugin. Convert HTML files into ...

Contributions


Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul

M

W

F

Summary of Pull Requests, issues opened, and commits. [Learn more.](#)

Less  More

Year of contributions

1,169 total

Aug 04 2013 - Aug 04 2014

Longest streak

12 days

October 06 - October 17

Current streak

0 days

Rock - Hard Place

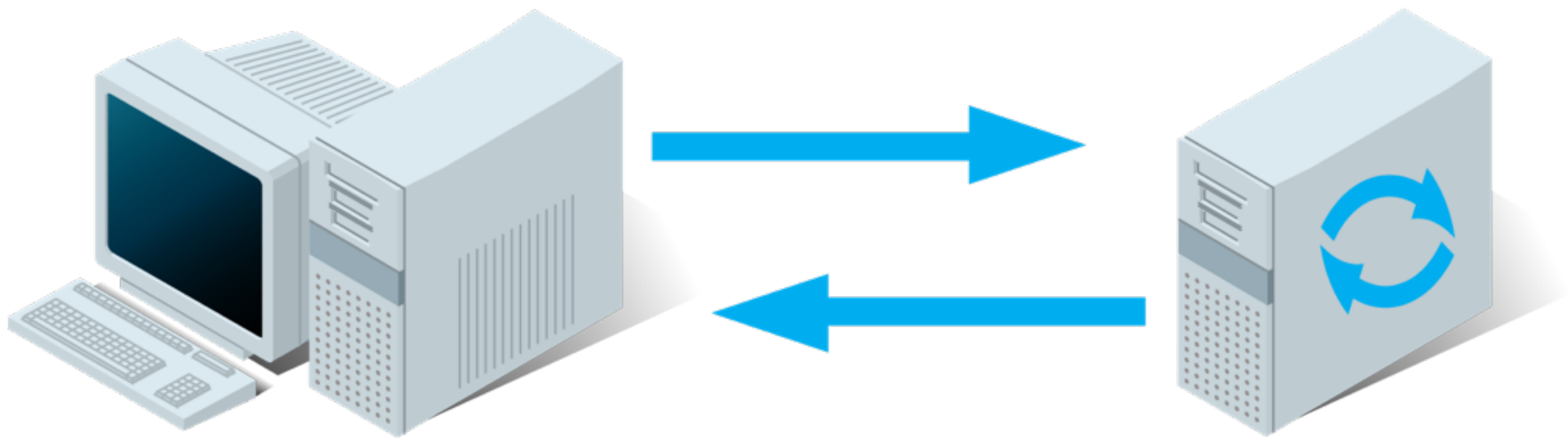
Agenda

- WebSocket protocol
- WebSocket API
- WebSocket examples from real project
- Practice
- WebRTC overview

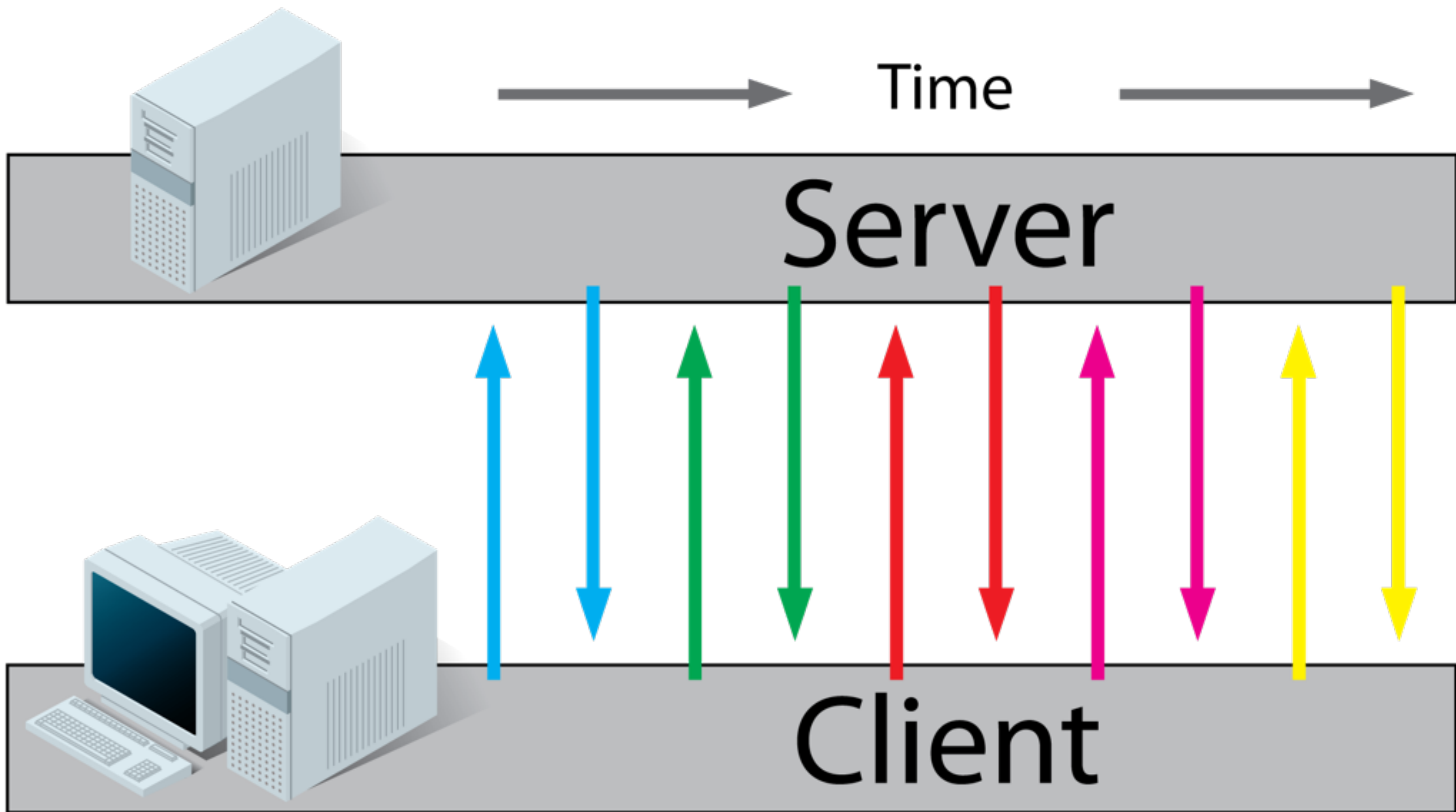
The WebSocket Protocol

RFC6455

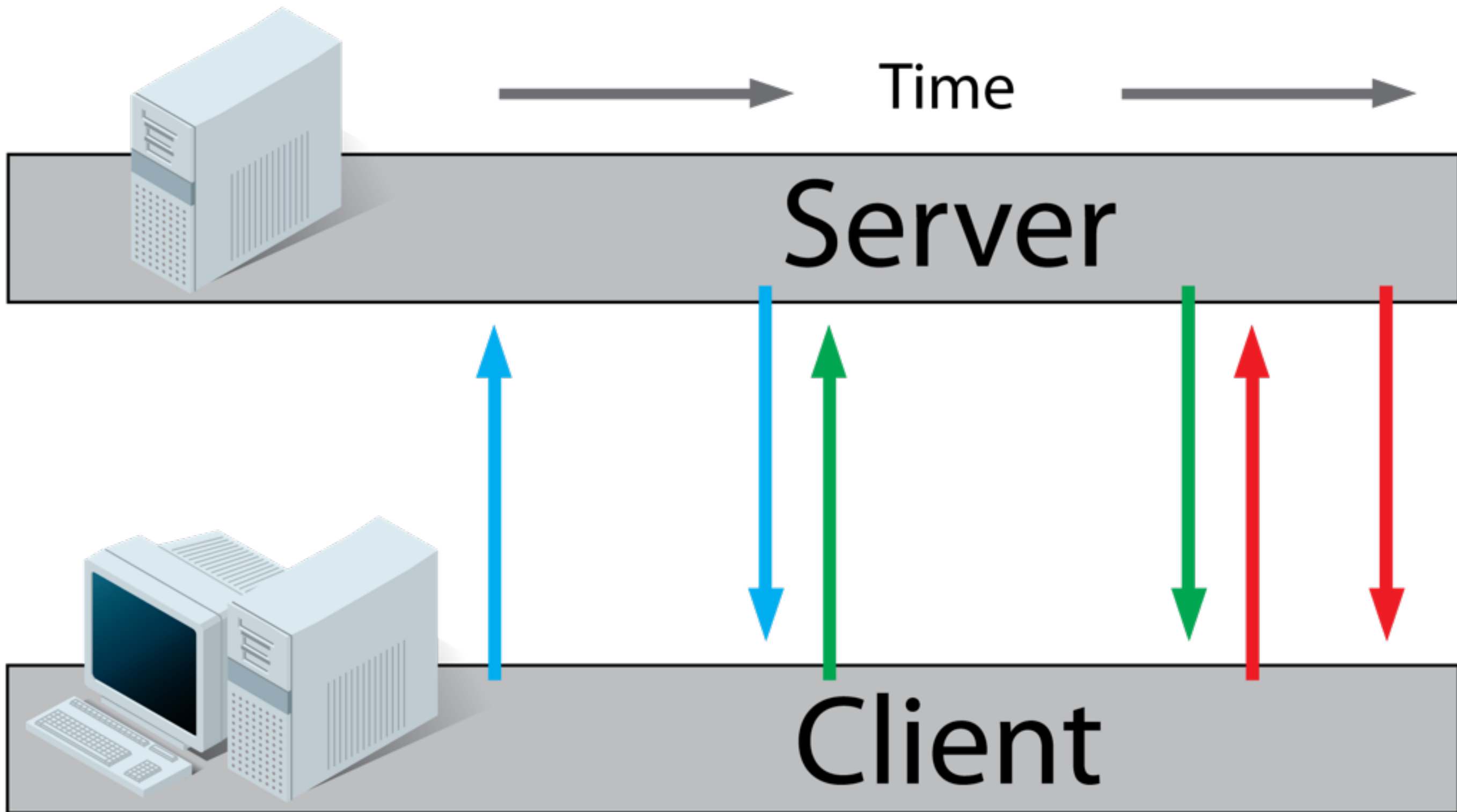
Regular HTTP



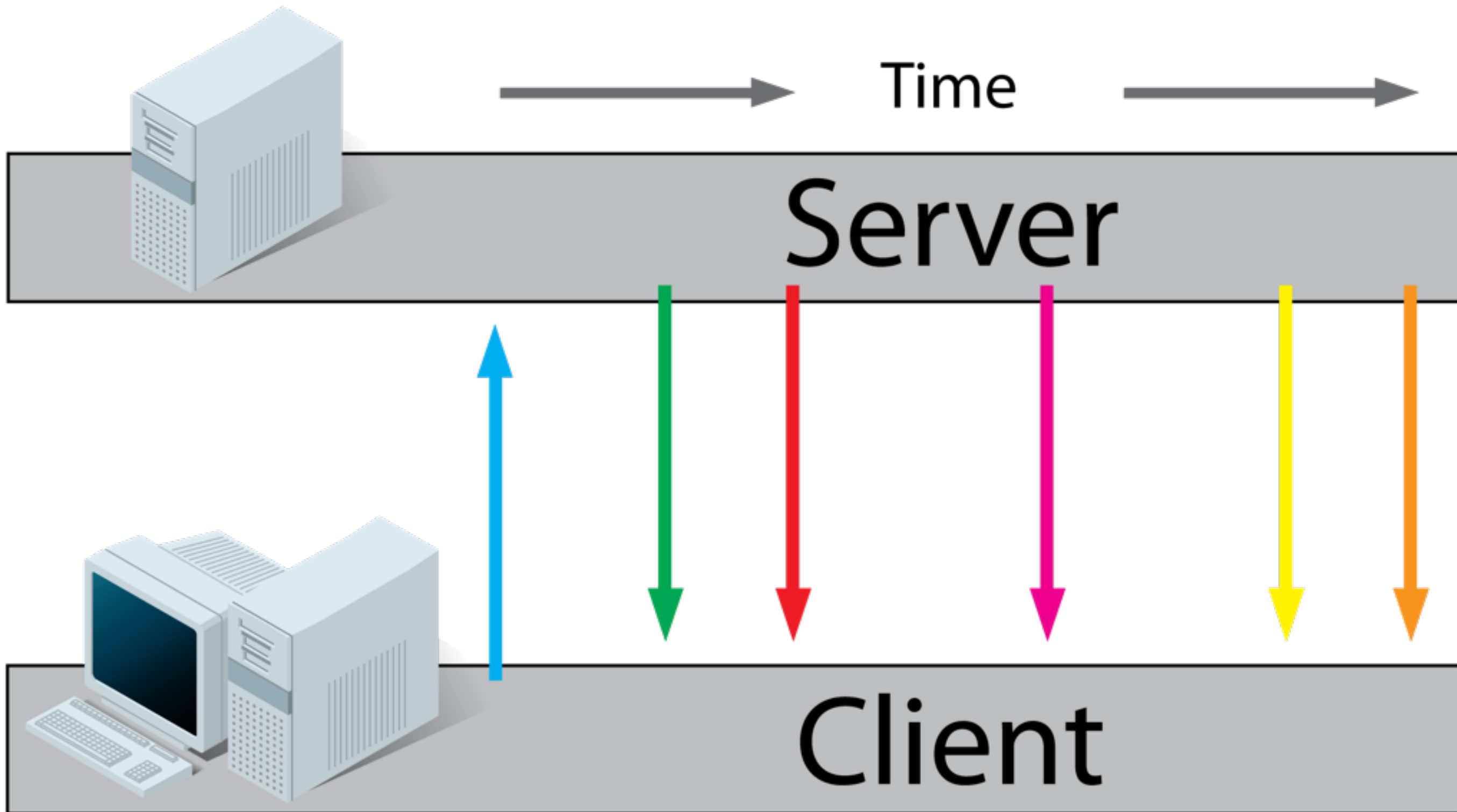
AJAX Polling



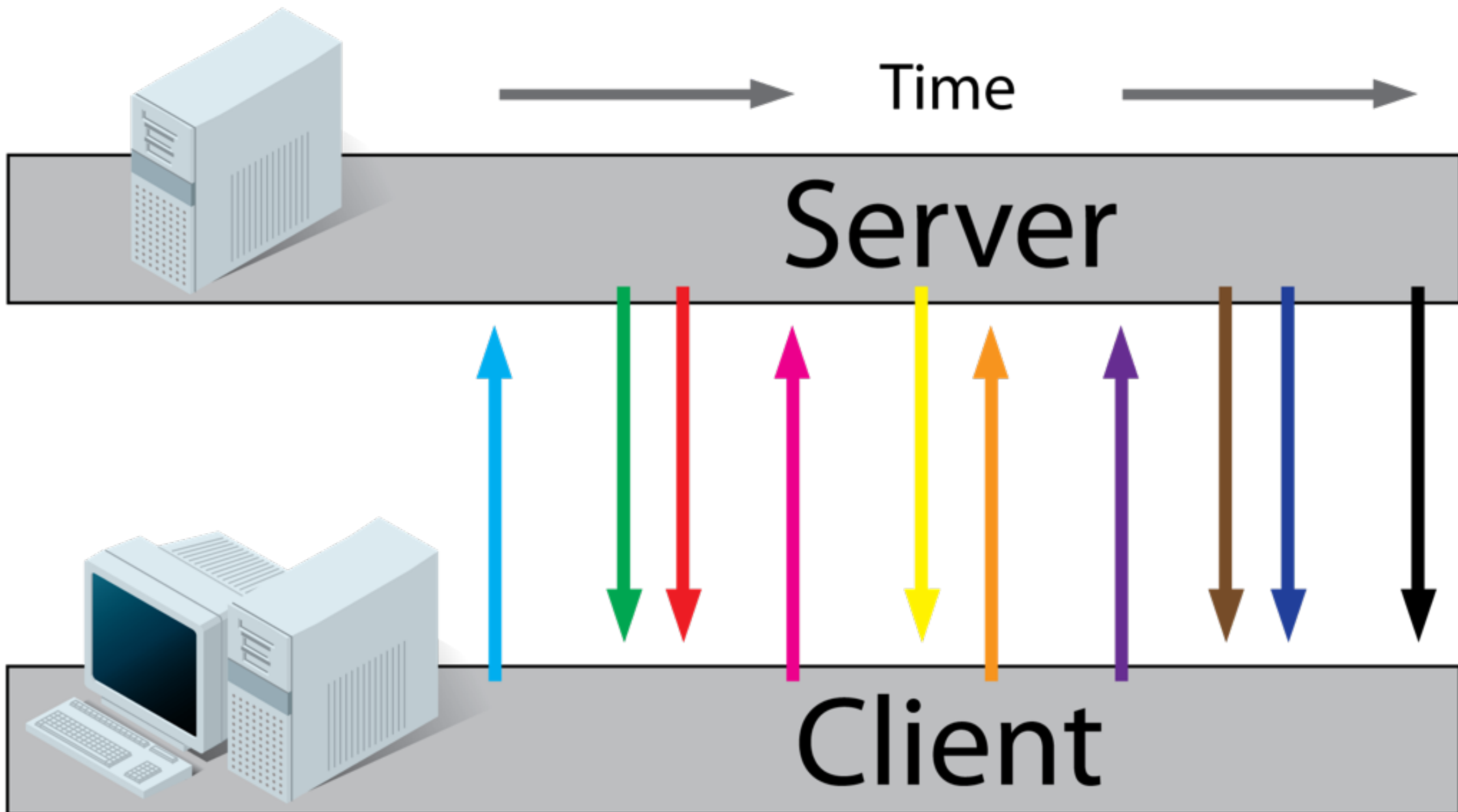
AJAX Long-Polling



HTML5 Server Sent Events



HTML5 WebSockets



WebSocket client request

```
new WebSocket("ws://server.example.com/chat")
```

GET /chat HTTP/1.1

Host: server.example.com

Upgrade: websocket

Connection: Upgrade

Origin: http://javascript.ru

Sec-WebSocket-Key: Iv8io/9s+lYFgZWcXczP8Q==

Sec-WebSocket-Version: 13

WebSocket server response

HTTP/1.1 101 Switching Protocols

Upgrade: websocket

Connection: Upgrade

Sec-WebSocket-Accept: hsB1buDTkk24srzEOTBU1ZA1C2g=

WebSockets Security

Examples

- LTS Project Tools
- <http://demo.kaazing.com/livefeed/>
- <http://www.totaljs.com/>

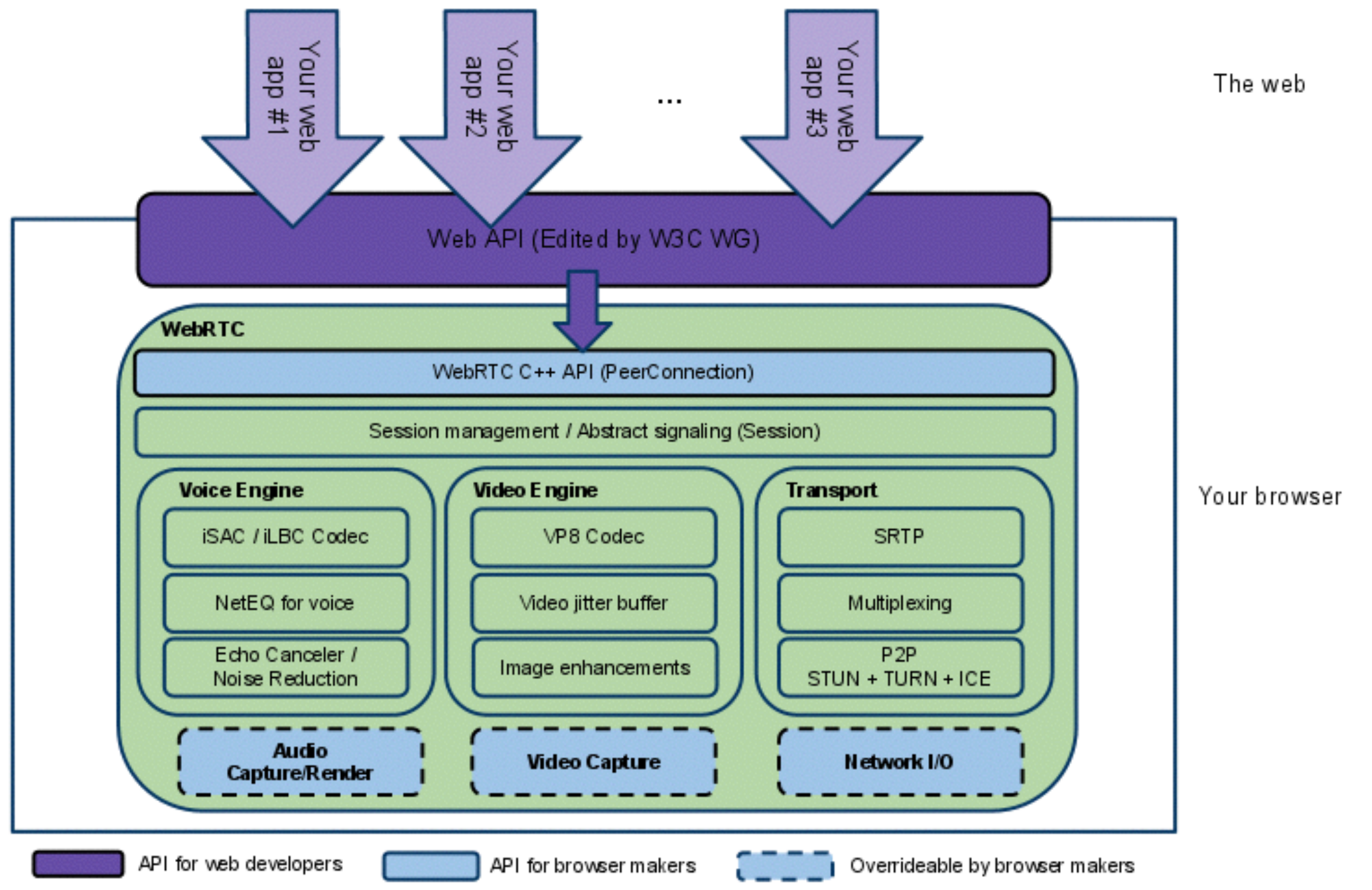
Practice

<http://socket.io/>

WebRTC



WebRTC Architecture



Example

<http://www.jamwithchrome.com/>

References

- <http://www.developerfusion.com/article/143158/an-introduction-to-websockets/>
- <http://learn.javascript.ru/websockets>
- <http://stackoverflow.com/questions/11077857/what-are-long-polling-websockets-server-sent-events-sse-and-comet>
- <http://tools.ietf.org/html/rfc6455>
- <https://developer.mozilla.org/en-US/docs/WebSockets>

Home Work

- Have a look and understand presentation:
Real-time communication with WebRTC: Google I/O
2013