Comparative analysis of performance using server-client protocols

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Abstract—These days most popular solutions for bi-directional communication in web applications are based on AJAX. Even though they are well documented solutions that are backed up by years of utilization, they have limitations imposed by the HTTP protocol. HTTP is a stateless protocol that requires each connection to be threated as a new connection, requiring unnecessary overhead to communicaty in both directions. Because of these limitations a new solution was developed, WebSockets, which are able to natively mantain a bi-directional channel, reducing the overhead needed for communication.

This paper proposes to exemplify the advantages and disadvantages between traditional HTTP implementations for bidirectional cummunication based on AJAX, and WebSockets. Also it proposes an arhitecture for a testing platform of different WebSockets implementations.

I. INTRODUCTION

Wireless communication is the transfer of information between two or more points that are not connected by an electrical conductor.

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II. RELATED WORK

The most common wireless technologies use electromagnetic wireless telecommunications, such as radio. [1]

A. Work 1

With radio waves distances can be short, such as a few meters for television or as far as thousands or even millions of kilometers for deep-space radio communications.

- 1) Subsection 1: It encompasses various types of fixed, mobile, and portable applications, including two-way radios, cellular telephones, personal digital assistants (PDAs), and wireless networking. Other examples of applications of radio wireless technology include GPS units, garage door openers, wireless computer mice, keyboards and headsets, headphones, radio receivers, satellite television, broadcast television and cordless telephones.
- 2) Subsection 2: It encompasses various types of fixed, mobile, and portable applications, including two-way radios, cellular telephones, personal digital assistants (PDAs), [2] and wireless networking. Other examples of applications of radio wireless technology include GPS units, garage door openers, wireless computer mice, keyboards and headsets, headphones,

radio receivers, satellite television, broadcast television and cordless telephones.

B. Work 2

Less common methods of achieving wireless communications include the use of light, sound, magnetic, or electric fields.

III. ARCHITECTURE/DESIGN

The most common wireless technologies use electromagnetic wireless telecommunications, such as radio.

A. Subsection

Less common methods of achieving wireless communications include the use of light, sound, magnetic, or electric fields.

IV. IMPLEMENTATION

The most common wireless technologies use electromagnetic wireless telecommunications, such as radio.

V. CONCLUSION

Wireless energy transfer is a process whereby electrical energy is transmitted from a power source to an electrical load that does not have a built-in power source, without the use of interconnecting wires.

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