



**KTH Computer Science
and Communication**

Modular responsive web design

Allowing responsive web modules to respond to custom criterias instead of only
viewport size by implementing *element queries*

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Abstract

Abstract goes here.

Referat

Modulär responsiv webbutveckling

Sammanfattning ska vara här.

Contents

1	Introduction	1
1.1	Targeted audience	1
1.2	Problem statement	1
1.3	Objective	1
1.4	Methodology	1
1.5	Delimitations	1
1.6	Outline	1
I	Background	3
2	Browsers	5
2.1	The origin of the web	5
3	Web development	7
3.1	From documents to applications	7
3.2	Responsive web design	7
4	Modular development	9
4.1	Web Components	9
II	Theory	11
5	Rendering engines	13
6	Element queries	15
III	Third-party framework	17
7	Analysis of approaches	19
7.1	Current implementations	19
8	API design	21

9	Implementation	23
IV	Result	25
10	Discussion	27
	Bibliography	29
	Appendices	29
A	RDF	31

Chapter 1

Introduction

- 1.1 Targeted audience**
- 1.2 Problem statement**
- 1.3 Objective**
- 1.4 Methodology**
- 1.5 Delimitations**
- 1.6 Outline**

Part I

Background

Chapter 2

Browsers

Browsers and the Internet is something that many people today take for granted. It is not longer the case that only computer scientists are browsing the web. Today the web is becoming increasingly important in both our personal and professional lives. This chapter will give a brief history of browsers and the rise of the web. It will also cover the role of browsers today, and what can be expected in the future. [2]

2.1 The origin of the web

Before addressing the birth of the web, lets define the meaning of the the concepets of the *Internet*, *Web* and *World Wide Web*. The word internet can be translated to *something between networks*. When referring to *the Internet* (capitalized) it is usually the global decentralized internet used for communication between millions of networks using TCP/IP. Since the Internet is decentralized, there is no owner. Or in other words, the owners are all the network end-points which means all users of the Internet. One can argue that the owners of the Internet are the ISP's, providing the services and infrastructure making the Internet possible. On the other hand, the backbones of the Internet are usually co-founded by countries and companies. Or is it the ICANN organization which has the responsibility for managing the IP addresses in the Internet namespace? Clearly, the Internet wouldn't be what it is today without all the actors. The Internet lays the ground for many systems and applications, including the World Wide Web, file sharing and telephony. In 2014 the number of Internet users was measured to just below 3 billions, and estimations shows that we have surpassed 3 billions users today (no report for 2015 has been made yet) [3]. Users are here defined as humans having unrestricted access to the Internet [3]. If one instead measures the number of connected entities (electronic devices that communicates through the Internet) the numbers are much higher. An estimation for 2015 of 25 billions connected entities has been made, and the estimation for 2020 is 50 billions [1].

As already stated, the Word Wide Web (abbreviated WWW or W3) is

Chapter 3

Web development

3.1 From documents to applications

3.2 Responsive web design

Chapter 4

Modular development

4.1 Web Components

Part II

Theory

Chapter 5

Rendering engines

Chapter 6

Element queries

Part III

Third-party framework

Chapter 7

Analysis of approaches

7.1 Current implementations

Chapter 8

API design

Chapter 9

Implementation

Part IV

Result

Chapter 10

Discussion

Bibliography

- [1] Dave Evans. “The Internet of Things”. In: (Apr. 2011). URL: http://www.cisco.com/web/about/ac79/docs/innov/IoT_IBSG_0411FINAL.pdf (visited on 02/12/2015).
- [2] Barry Leiner et al. “Brief History of the Internet”. In: (Oct. 2012). URL: http://www.internetsociety.org/sites/default/files/Brief_History_of_the_Internet.pdf (visited on 02/11/2015).
- [3] internet live stats. *Internet Users*. Feb. 2015. URL: <http://www.internetlivestats.com/internet-users/> (visited on 02/12/2015).

Appendix A

RDF

And here is a figure

Figure A.1. Several statements describing the same resource.

that we refer to here: A.1