

# Watcher: Chrome Extension Time

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# Watcher: Chrome Extension Time

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Abstract— The internet is brimming with information on any topic you can think of. When you go online, on the other hand, you're standing on a narrow ridge, with the work at hand on one side and time-consuming pastimes on the other. It's all too easy to become engrossed in mindless scrolling on Facebook or Twitter, or in kitten videos. The original concept proposes displaying the amount of time spent on various websites on a given day, month, and year. In order for people to be able to manage their habit. It has more of a decorative value than it does in terms of assisting us in accomplishing our aim. So we're going to make a Browser Extension for this so that users can monitor their daily use or hours invested on certain sites with a single click. We'll also use Machine Learning and Algorithmic to try to estimate how much time the user will spend on such sites in the future. As a youth we have faced this issue earlier a lot- spending unusual or unproductive time on internet which led to time waste like browsing on some social site then remaining on it for long hours also it affect to our brain and eyes too also due to which there are many things that are delayed. So we thought to make something which remind us and keep us aware of time usage on internet on particular site. Also, developing Chrome extension is unique idea as rarely people choose to make project on this. So this was the reason we have choose this project in chrome extension "WATCHER".

Keywords- watcher, extension, social websites

### I. INTRODUCTION

Over the last couple of decades the internet has changed how we work, how we shop, how we communicate, and how we burn-through media. In most regards it has made life quicker and easier, but it has also brought challenges and after-effects. Innovation might have simplified many errands, yet it has additionally expanded interruptions and shepherded in more ways to procrastinate. You've most likely seen that while you can finish numerous things quicker than at any other time, You waste a lot of time and effort on things that aren't worthwhile. Sites, in any event, aren't the only source of disruption.Research observed that only 14% of emails are significant to work, and 62 percent of individuals observed that managing superfluous messages was one of the drawbacks of using email as a means of communication. There's a lot that you can do on the internet, As a result, it's quite simple for you to end up squandering a lot of time online. Web habit is an apparent and growing problem, but anybody, not only netizens, may spend too much time on the internet and not enough time in real life (reality).

So our project is based on to help people controlling their time on internet browsing and surfing. So that they can use maximum time on internet productive and utilizing for good and control their habit of wasting long time on particular website. We will be using HTML5, CSS3,Vanilla JAVASCRIPT for this project and Bootstrap for the front end part.

#### II.. LITERATURE SURVEY

Teens are the most common on social social networks (SNS). Today's young are growing up in a social environment in which webbased media will impact many aspects of their life, and their devotion to social media will shape many of their interactions and opportunities.

As a result of how integrated their lives are in online media, issues and disagreements arise concerning the effects SNS have had on young adult growth.

When you install our Chrome extension "watcher," it keeps track of how much time you spend on the web and displays the statistics in a helpful and clear manner.

You spend a significant amount of your time on the Internet and may wish to recognise how fascinating this time is to you. Your life is much too valuable a treasure to be squandered irresponsibly. The person who makes the first step toward change is aware of the present situation. WATCHER is an unbiased judge who will monitor your internet activities. You'll be able to tell how much time you spend on social media or instructional websites.

You own a company and need to make your employees more aware of how much time they spend on the Internet. WATCHER installation improves their web use efficiency.

You work as a self-employed individual. As a result, WATCHER will assist you in compiling a complete report on how you spent your work time online.

#### 1. HOW INTERNET DESTROY FOCUS?

What is internet? In basic language web is one such medium that permits any individual to get to the world, it is one such incredible weapon with which one can do nearly everything. There is web for everything from shopping, to doing schoolwork, to arrange food, to get to banking offices, to booking tickets, to buying protection, everything should be possible in only a single tick. Truth be told, today web significantly affects everyone that one absolutely becomes impeded if he/she can't get to it in any event, for a day. I think web is no under a medication which has made everybody dependent on it. The Internet is incredible for enabling its clients to work from anyplace. However, you may be expected to be available to work at any time of the day, even if you had not previously agreed to be available.

For example, you may be at home and get a notification of an important work-related e-mail and end up working without getting paid.

Mental Health: The Impact of Social Media on Young People Ranking of social media platforms according to impact on youth mental health



#### A. Internet as a communication tool

It is one in all the biggest sector and contributor to the economy and generates an enormous range of jobs. net includes a nice impact on everybody's life. From a baby to an adulthood person, net includes a impact on all of their lives. Apps like whatsapp and facebook area unit the foremost illustrious and socially acceptable style of net and most used additionally. net permits North American country to grasp what is happening within the world and offers North American country the access to that.

#### **Related work**

There are already some softwares that are devloped to self control from Digital world. some of them are-

**clockify**-Clockify clock for Chrome works a piece of the time global positioning framework and further develops execution at work. It permits to monitor work hours, identifies inactive time, incorporates updates, and has a Pomodoro clock intended for chipping away at usefulness and overcoming interruptions. Programmed start/stop and updates assist with lessening mistake of time logs.

**selfControl Application**- utilizes a direct methodology of obstructing admittance to the assets considered habit-forming. A client chooses the ideal (or rather undesired) sites

what's more, sets a hindering time span. This approach relates to the separating based poise. Regardless of its profoundly prohibitive nature, the application is exceptionally well known.

**actiTime**- This is a free software where user has to add this extension and make an account and set the timer to track the web pages and web application they use and can sync to the account which helps them to track and maintain the time at work.

#### Analysis

In our models, we try to execute two discretion models. The first (called here a hard selfcontrol) requires the client to establish a point in time limit prior to utilizing the real time feature. When the time is finished, all open tabs are killed in a program (we use Google Chrome in the current execution). The following one (soft selfcontrol) counts the number of times a client successfully survives own enslavement and finds out if the client will beat the accomplished record. So the essential objective of our investigations is to figure out which strategy assists individuals with controlling their conduct better: either severe impeding, or losing their fruitful "speculation".

#### **Observation Method**

Appropriate assessment of the created expansion isn't yet complete, so here we will just layout the technique we are following.

Since we need to examine whether our presumptions are valid, we need to think about the two situations of poise (hard also, soft selfcontrol. To contrast them we want with acquire some evaluations of the accompanying qualities:

1) what number clients introduced and uninstalled the program expansion?

2) How frequently they switched it off (to watch)?

3) what number of them truly do keep utilizing the browser extension after extended period of time?

The analytics.js 10 is a JavaScript library we use for analyzing how clients cooperate with the extension. To do as such, "JavaScript tracking snippet" will be added to the program extension code. Adding such snippets to the extension permits sending depictions of the visited pages to the analytics framework.

With Google Analytics we could get reports containing the following information:

- absolute time a client spends utilizing the extension;
- time spent on each page;
- the request for extension pages visits;
- the rundown of interior connections clicked.

Inserting such a "spy" part would tell us how

clients control a watching plan. In its turn, it permits to be aware how frequently clients depended on the dependence control extension, and regardless of whether this extension was truly useful.

#### POPULAR SOCIAL MEDIA SITES:

This is the biggest web-based media network on the Internet, both as far as absolute number of clients and name acknowledgment. Facebook appeared on February 4, 2004, Facebook has inside 12 years figured out how to gather more than 1.59 billion month to month dynamic clients and this consequently makes it probably the best mechanism for associating individuals from everywhere the world with your business.[3] It is unsurprising that more than 1 million little and medium-sized organizations utilize the stage to advertise their business.

#### Twitter

We may be believing that prohibitive our presents on 140 characters is no real way to publicize our business, yet we will be stunned to realize that this online media stage has beyond what 320 million dynamic month to month clients who can assemble utilization of the 140 person breaking point to give information.[3] Businesses can utilize Twitter to interface with imminent customers, answer questions, discharge most recent news and simultaneously utilize the designated promotions with explicit crowds. Twitter was established on March 21, 2006, and has its base camp in San Francisco, California.

#### YouTube

YouTube the in biggest and mostl known video-based online networking site — was established on February 14, 2005, by three previous PayPal workers. It was subsequently bought by Google in November two thousand six for \$1.65000 billion. YouTube has more than 1 billion website visitors for consistently and is the second most notable web searcher behind Google.

#### Instagram

Instagram is a visual online networking stage. The platform has in excess of 400.0000 million powerful customers and is moved by Facebook. Countless its customers use it to post information about movement, structure, food, workmanship and equivalent subjects.[2] The stage is moreover perceived by its astounding channels along with video and photo adjusting features. Close to 95 percent of Instagram customers furthermore use Facebook.

# WhatsApp

Whatsapp is a chat app that works on cellphones, PCs, and tablets. This software requires an Internet connection to send photos, messages, recordings, sound, and video communications to clients who have the app loaded on their devices. [5] WhatsApp Inc., formed in Jan 2010, was acquired by Facebook on Feb 19, 2004, for about \$19.3000 billion. Today, more than 1 billion people utilize the organization to talk with their partners, loved ones and even customers.

#### IV. PROPOSED SYSTEM

The most important steps that have been taking to build this chrome extension are:









Fig3..Layout 3

A. Initial Stage:

Identify the problem.

Search for similar research on problem.

- B. Design stage:
- The suggested system's appearance and functionality will be established and created using the required specifications that were studied and built.

#### C.Implementation Stage:

Implementation is the phase of implementing and it will helpin putting all the planned activities into action and moving the project to service provision. Lang/Technologies used to implement Watcher chrome extension are as follows:

#### HTML

HTML is the standard markup language for reports that are designed to be seen in an internet browser. CSS and prearrangement languages such as JavaScript may be useful. Internet browsers get HTML reports from a web server or a nearby capacity and convert them into sight and sound site pages. HTML, which originally featured prompts for the presence of the archive, represents the design of a site page in a semantic way. The structure squares of HTML pages are called HTML components and modules. Images and other elements, such as intelligent structures, can be put into a provided page using HTML development. HTML allows for the creation of well-organized records by defining primary semantics for text such as headers, passages, records, connections, quotes, and other elements. Labels define HTML components, which are made up of point parts. Labels, for example, are a simple way to add content to a page. Different labels, for example, may include different labels as sub-components and cover and provide data about report content. The HTML labels are not displayed by programmes, but they are used to decode the page's content. HTML can be used to install programmes written in a preprogramming language, such as JavaScript has an effect on the behaviour and content of web pages. CSS is used to determine the look and feel of content. The World Wide Web Consortium (W3C), the previous custodian of HTML and the present maintainer of CSS principles, has been in existence since 1997., has advocated for the use of CSS over unambiguous presentational HTML.

#### CSS

CSS, or Cascading Style Sheets, is a simple plan language that is used to work on the approach for creating satisfying web sites. CSS is in charge of how a website's page looks and feels. You can control the colour of the text, the style of text styles, the spacing between parts, how segments are measured and spread out, what foundation photographs or tones are used, format designs, present versions for different gadgets and screen sizes, and a variety of other effects using CSS.

CSS is simple to understand and apply, but it provides you a lot of control over how an HTML record is presented. CSS is frequently combined with HTML or XHTML as a markup language.

### **Benefits of CSS**

**CSS saves time** – You can create CSS once and then reuse the same sheet in other HTML pages. You can characterize a style for every HTML component and apply it to as many Web pages as you need.

**Pages load quicker** – If you are utilizing CSS, you don't have to compose HTML label credits without fail. Simply think of one CSS rule of a tag and apply it to every one of the events of that tag. So less code implies quicker download times.

Simple support - To roll out a worldwide improvement, basically change the style, and all components in all the website pages will be refreshed consequently.

**Better styles than HTML** – CSS has a lot more extensive cluster of qualities than HTML, so you can give a far superior look to your HTML page in contrast with HTML credits.

**Various Device Compatibility** – Style sheets permit content to be advanced for more than one sort of gadget. By utilizing a similar HTML archive, various forms of a site can be introduced for handheld gadgets, for example, PDAs and phones or for printing.

**Worldwide web norms** – Now HTML ascribes are being expostulated and it is being prescribed to utilize CSS. As a result, it's a good idea to start using CSS in all HTML sites to make them compatible with future applications.

#### **JSON**

JSON is an abbreviation for JavaScript Object Notation, is an open standard arrangement, which is lightweight and text-based, planned expressly for intelligible information trade. It is a language-free information design. It upholds pretty much every sort of language, structure, and library.

JSON is an open norm for trading information on the web. It upholds information structures like items and clusters. Along these lines, it is not difficult to compose and peruse information from JSON.

In JSON, information is addressed in key-esteem sets, and wavy supports hold objects, where a colon is trailed each name. The comma is utilized to isolate key-esteem sets. Square sections are utilized to hold exhibits, where each worth is comma-isolated. For what reason do we utilize JSON?

Since JSON is a simple to-utilize, lightweight language information exchange design in contrast with other accessible choices, it tends to be utilized for API coordination. Following are the benefits of JSON:

Less Verbose: as opposed to XML, JSON follows a minimized style to work on its clients' clarity. While working with a complicated framework, JSON will in general make generous improvements.

Quicker: The JSON parsing process is quicker than that of the XML on the grounds that the DOM control library in XML requires additional memory for taking care of huge XML documents. Notwithstanding, JSON requires less information that at last outcomes in decreasing the expense and speeding up.

Decipherable: The JSON structure is effectively clear and direct. Despite the programming language that you are utilizing, you can without much of a stretch guide the space objects.

Organized Data: In JSON, a guide information structure is utilized, though XML follows a tree structure. The key-esteem sets limit the errand yet work with the prescient and effectively justifiable model.

### JavaScript

JavaScript is a lightweight, interpreted programming language. It is intended for making network-driven applications. It is free to and coordinated with Java. JavaScript is extremely simple to execute on the grounds that it is incorporated with HTML. It is open and cross-stage.

Javascript is the most well known programming language on the planet and that settles on it a software engineer's extraordinary decision. When you study Javascript, you may create amazing front-end and back-end programming projects by leveraging various Javascript-based structures such as jQuery, Node.JS, and so on.

Javascript is all over the place, it comes introduced on each cutting edge internet browser thus to learn Javascript you truly needn't bother with any uncommon climate arrangement. Javascript is supported by browsers such Google Chrome, Mozilla Firefox, Safari, and every software you use today.

Javascript enables you to create stunningly gorgeous and lightning-fast websites. You may enhance your site with a control center-like style and feel to provide your consumers with the greatest Graphical User Experience.

JavaScript use has now reached out to portable application advancement, work area application improvement, and game turn of events. This opens numerous chances for you as Javascript Programmer.

Because of popularity, there is huge loads of occupation development and significant salary for the individuals who know JavaScript. You can explore over to various places of work to see what having JavaScript abilities resembles in the work market.

Incredible thing about Javascript is that you will observe huge loads of structures and Libraries previously created which can be utilized straightforwardly in your product advancement to lessen your opportunity to advertise.

### **Uses of Javascript Programming**

**Customer side approval -** This is truly essential to check any client input prior to submitting it to the server, and Javascript plays a crucial role in verifying those contributions at the front end.

Controlling HTML Pages - Javascript enables for on-the-fly administration of HTML pages. This assists in properly introducing and eliminating any HTML element using javascript, as well as changing your HTML to modify its look and feel based on various gadgets and requirements.

Client Notifications - You may use Javascript to build dynamic pop-ups on your website's pages to deliver various sorts of notifications to your users.

Javascript offers an Ajax library that facilitates in stacking backend data while executing other operations. This undoubtedly delivers a terrific experience for your website visitors.

Presentations - JavaScript also provides the capability of creating introductions, which contribute to the overall appearance and feel of the site. Google Chrome extensions are programmes that may be installed in Chrome to modify the program's functionality. This involves incorporating new features. elements to Chrome or altering the current behaviour of the actual program to make it more helpful for the user.

Google Chrome expansion can add to Chrome incorporates:

- Obstructing advertisements from being shown
- Improving memory use so that Chrome runs all the more proficiently
- Adding plans for the day or notes to Chrome
- Secret phrase the board
- Making it easier to copy and paste content from a website
- Ensure your protection and making web perusing safer.

# V. EXISTING SYSTEM

There are a number of tools and systems specialised to tracking website visitor behaviour. Use software with online traffic tracking and web analytics features to get the most out of your website activity tracking efforts.

There are several existing system extensions and software on the market and in the Chrome Web Store, but they are well compensated for their services.

There are a lot of pop-up adverts in this so they can make money. They don't have sufficient user interface and platform to display users' data so that they can quickly access it and evaluate it so that they may reduce their hackneyed of web browsing such as social media usage and online viewing on platforms such as Netflix and YouTube.

## Drawbacks of the Existing System

- More complexity to execute
- Bluetooth does not have the same range as Wi-Fi and hotspot.
- concept taking place of it
- It is less efficient
- Installing app on existing system is very hard process
- Through Bluetooth functions we can track oneuser at one time.
- Security can easily break.
- Limited to short distance

# VI. METHODOLOGY

Design: The extension works as a source of data that can be used in various types of research. The data taken from a user can be stored in a secure space, if the required consent is given by the users. With most of the world shifting online, it would be a good idea to understand where and how the we are spending our precious time. The extension can also be used in institutions to keep track of what the employees are doing and impose restrictions according to the requirement.and in the future scopes We are planning to adding some feature like limit, user can create the csv report and download it with excel.

Approach: When the extension is started it launches a background service that keeps a check on new tabs opened by the user and tracks the time spent on a tab. All of this data is by default stored locally on the user's device and is not accessible by outer sources.



Fig4. Internal working

### How you can use WATCHER chrome extension

The way you utilise a Google Chrome extension is dependent on the addon. A few extension work behind the scenes and perform specific assignments consequently. Different extension will add menu choices to the menu when you right-click on a page as displayed beneath.

# VII. CONCLUSION

The Internet is the best for work. The Internet is the worst for work. To avoid from such distraction you can use extension -Watcher. Watcher your time spent on distracting sites. Watcher is a browser addon that allows you to limit the amount of time you may spend on distracting websites.

When you limit your time spent on distracting websites, you'll discover that you have significantly more time to devote to the things that are most important to you.

Simply input the websites that you find distracting and set a daily time limit to begin using Watcher. You may, for example, set a daily restriction of ten minutes on Facebook or a half-hour on Duolingo. When you reach your limit, observer alerts you that your time is almost up, allowing you to finish your task.

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