EXALTED BELTWAY

Presented by

PARAS MEHTA E17CSE007

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Introduction & Background

Torrent websites have become a cheaper way to download files(ebook, software, tv shows, movies, etc) for the young minds that lack the resources to purchase the original content. They help users get access to content that is unavailable in their country. But the problem with most torrent websites is that many of them are blocked by governments and institutions. People have to use low-speed VPNs to access these websites which absolutely destroys the download speed and consumes unnecessary data that could be used on other important downloads. When a user tries to download them directly from these torrent websites, they are bombarded with irrelevant ads that consume the time and energy of the user. Even downloading one file would require going through multiple ad pages and finding the right link frustrates and creates a horrible experience for the user. I've personally gone through this process and that frustration was the drive to create a platform that would be devoid of any Ads and people could download the files directly to their desktop without going through those horrible Ad pages that can even infuse the user's computer with nasty viruses.



Problem/Project Statement

There is an ongoing problem with most torrent websites that many of them are blocked by governments and institutions. People have to use low-speed VPNs to access these websites which absolutely destroys the download speed and consumes unnecessary data that could be used on other important downloads. When a user tries to download directly from these torrent websites, they are bombarded with irrelevant ads that consume the time and energy of the user. Even downloading one file would require going through multiple ad pages and finding the right link which would frustrate and create a horrible experience for the user. Many of these websites are also notorious for injecting viruses into the computer which downloaded the files.



Social Importance/ Relevance of the Problem

The project doesn't intend to solve any social problem as it is based on solving the frustration of the user with torrent websites that cause a number of problems for the user. Each year billions of files are downloaded from these websites but many people are forced to use these Ad and virus-infected websites because of no other alternatives. The target group of this project includes young people who can't afford the original resources and anyone with an internet connection who downloads files from torrents. They want an Ad-free webserver and a minimalist user interface that allows them to directly download the files to their computer. In the current market, torrent websites are at the top of the hierarchy. People can download their preferred files by going through these websites. The gaps in the market are mainly ad-free, virus-free websites with a seamless user interface.



Proposed Solution/ Idea/ Product/Contribution

The first step was to understand the objective and different possible solutions that could be achieved through some good research and critical feedback from potential users. The overall approach for this project includes me as the sole producer of this project and learning the ins and outs of javascript and Node.js to perform the various functions of this project (given that I have no prior experience creating a web server). After some research, I decided to use Node.js for the webserver and use the programming language Javascript to execute the idea. Node.js had a simple framework for hosting the server which makes it easier to execute the idea while only using javascript. Followed by the research was learning to implement javascript in Node.js through iterations of making mistakes and learning the right way. The following weeks are about implementing the dynamic functioning of the front-end search bar and the following download page. This also included creating a responsive web page for the user to have a seamless experience and enabling the connection with the seeded server of torrent files to be downloaded from the websites.

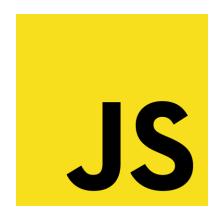


Experiment and Implementation

For building and hosting the webserver Node.js was used and to execute the idea the programming language javascript was used. This is the front end of the download page after pasting the magnet link.



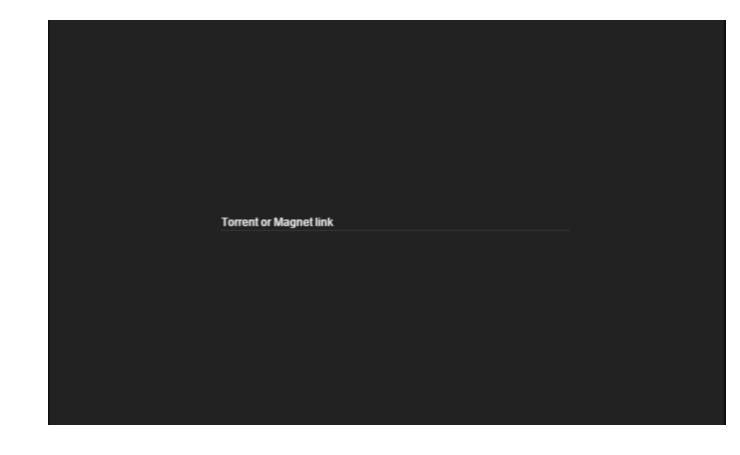






Results Analysis and Validation

After the initial testing phases of code and a number of trials and errors, I decided to implement an extremely simple web UI. The first page only has a torrent or magnet link hosted bar. This was the intial vision of this project to eliminate the unnecessary complexity in the process of downloading the files from torrents.





Results Analysis and Validation

Next came the testing of the page that appears after the magnet link has been pasted. Then I had to implement the code for connecting the seeders of torrent files to create a fast-turnaround time to download the files. The design was also implemented in a minimalist way that encompasses the vision of this project.





Conclusion and Future Work

The primary objective of this project was to build a webserver that is able to download the files directly from the torrent servers using only the magnet link and creating a seamless experience for the user without any Ads or threat of viruses. By using Node.js and Javascript I was able to fully implement the project. I was able to create the minimalist experience that was envisioned in the starting phase. With only two front-end pages the user can download the files. The implemented solution saves time and enables the user to download files at a faster speed.

This was truly a wonderful learning experience for me where I had to learn to implement javascript from scratch and use it in Node.js which helped me to learn different packages required to process the application.



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