

Industrial Internship Report on

"URL_Shortner"

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Executive Summary

This report provides details of the Industrial Internship provided by upskill Campus and The IoT Academy in collaboration with Industrial Partner UniConverge Technologies Pvt Ltd (UCT).

This internship was focused on a project/problem statement provided by UCT. We had to finish the project including the report in 6 weeks' time.

My project was - URL shortener is a web service that takes a long URL (Uniform Resource Locator) and generates a shorter, more manageable version of it. The primary purpose of a URL shortener is to make long links easier to share, especially on platforms with character limitations, like social media. These services are commonly used to condense URLs for better aesthetics, tracking, and analytics.

Here's how a URL shortener typically works:

Input: Users provide the long URL they want to shorten.

Shortening Algorithm: The URL shortener uses an algorithm to generate a unique, shorter code (often consisting of a combination of letters and numbers).

Storage: The original long URL and the shortened code are stored in a database or some form of data storage.

Redirection: When someone clicks on the shortened link, the URL shortener service looks up the

corresponding long URL in its database.

Redirect: The user is then redirected to the original long URL.

Some benefits of using URL shorteners include:

Space Efficiency: Shortened URLs take up less space, which is important when character count is limited, such as on social media platforms.

Tracking: URL shorteners can provide analytics about how many times the link has been clicked, the geographic location of the clicks, and more.

Cleaner Appearance: Long, complex URLs can be visually unappealing, while shortened links look neater.

Easy Sharing: Shortened URLs are easier to share in printed material or verbally.

It's worth noting that while URL shorteners can be very useful, they also come with some potential drawbacks:

Link Rot: If the URL shortening service shuts down or experiences issues, the shortened links may no longer work, leading to "link rot."

Lack of Transparency: Some users might be hesitant to click on shortened links because they can't see the full URL and are unsure where the link will take them.

Security Concerns: Shortened URLs can be used to hide malicious or phishing links, making it difficult for users to discern their destination.

Overall, URL shorteners can be valuable tools for sharing and tracking links, but users should exercise caution and only click on shortened links from reputable sources to ensure their security.)

This internship gave me a very good opportunity to get exposure to Industrial problems and design/implement solution for that. It was an overall great experience to have this internship.