Sharing structured data on the Web allows machines to access and process data for reuse, integration, and analysis. This shared data provides means to create new software applications and richer websites.

The amount of structured data on the Web has increased within the years. However, different mechanisms and formats have been used to share the data, making it hard to reuse and integrate data from different sources. Finding and choosing a mechanism to share structured data so that it can be easily accessed, processed and integrated can be a challenge. At the moment, there are two mechanisms for sharing structured data on the Web that are gaining popularity: Web API and Linked Data.

In this work, Web API and Linked Data are examined to identify differences and similarities between them, and find advantages and disadvantages when using them. This is done by studying each mechanism separately, building applications that use data from Web APIs and Linked Data datasets, and finally indicating how implementation, discoverability, accessibility, security, usage, privacy and copyright issues are being handled in these mechanisms.

In addition, this study provides a better understanding of the approaches, technologies, formats and standards that Web API and Linked Data offer to share structured data on the Web.

Keywords: Web APIs, Linked Data, Sharing structured data, Mechanisms for sharing data, Semantic Web, Web Services.