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Research Project Proposal

Research Title: Characterizing the Role of Link in Tweets by npm Maintainers: Source, Purpose and Decay

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Abstract/Summary (Optional): Twitter is a popular platform for the JavaScript community to share opinions and knowledge via Tweets. Links are an example of such knowledge. In this context, investigating the role of links within tweets can reveal important patterns and trends in information dissemination. The goal of this research is to investigate the prevalence, targets, purposes, categories, and decay aspects of links contained in tweets shared by npm maintainers. We conducted a study involving links using a mixed-methods approach.

Introduction: The JavaScript community uses Twitter as a platform to share resources and express their ideas. However, the role of links in tweets by npm maintainers has not been analyzed. This study conducts an empirical analysis of sharing links in tweets by npm maintainers related to the software ecosystem to understand their source, purpose, and decay. To guide the study, we formulate the following research questions with their motivations:

| (RQ1) prevalence of links | (RQ2) Target of links | (RQ3) Purpose of links |
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| (RQ4) Main topics of Tweet | (RQ5) repeatedly shared links | (RQ6) dead links |

Related Literature Review: Several recent studies have examined the importance of link sharing. In a series of empirical studies, we examined the link sharing related to the software ecosystem by developers on Twitter. On the other hand, the software developer community heavily relies on Twitter's features for communication and sharing links. However, no study has been conducted that examines the links with Tweets shared by developers to determine the challenges they face, including the topic of discussion, source, purpose, and decay of links in tweets.

Research Methodology: Our study's focus is on quantitative coding to capture prevelane and decay of links in tweets. On the other hand, qualitative coding capture the targets of links, purposes of sharing links, and tweets category. In detail, we present the data set used in this work, describing the rationale for this particular choice, along with the procedure performed to collect the dataset from the primary sources. Furthermore, we state that all the methods will be carried out in accordance with the relevant GitHub and Twitter guidelines and regulations.

Expected Results: We will be able to understand the roles of links in tweets shared by the maintainers. Also, the results of our study may find that links contains useful information for the npm community.

Significance and Implications of the Study: This case study is expected to provide valuable insights from the sharing links by the npm maintainers regarding the software ecosystem and can inform future development and decision making. However, we will not explicitly compare the results with question-and-answer sites due to limitation of generalizability of dataset.

| Signature of the Board Members: (Use for presentation's Board) | Supervisor Signature and Seal |
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