



# STORIFY: Protecting Privacy of Social Media Post with Hash-based Anonymity

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## ABSTRACT

In the year 2020, the number of users using social networking has exceeded 3.6 billion out of 7.6 billion people, which is 47% of the populations. There are some famous social media applications that are widely used worldwide, which are Facebook, Twitter, Snapchat and many more. However, social media has some negative effect which has been labelled as a "likely culprit" that leads youngsters to depression, social isolation and have suicidal thoughts. The lack of anonymous features of recent social media apps that allow users to express their feelings without getting hurt by cyberbullying has urged recently to protect user's privacy. This project proposes a social media application, called as "Storify", that aimed to protect the privacy of social media post with hash-based anonymity algorithm. The objectives of this project are: (i) to investigate a lightweight hash-based anonymity algorithm in protecting the privacy of social media post, in terms of computation speed and ciphertext size, (ii) to design and develop the proposed Storify mobile social media application by using prototype development approach, and (iii) to evaluate the performance of the developed Storify mobile social media application by using System Usability Scale (SUS) approach. Questionnaire and quantitative survey will be used to gather user requirements. The investigation of suitable hash-based algorithm is conducted through quantitative literature review and experiment testing in Java Android running environment. The expected outcome of this proposed project is Storify social media application with a lightweight hash-based anonymity algorithm with the fastest computation speed and greater ciphertext size, that allows campus students to share their problems and challenges anonymously.

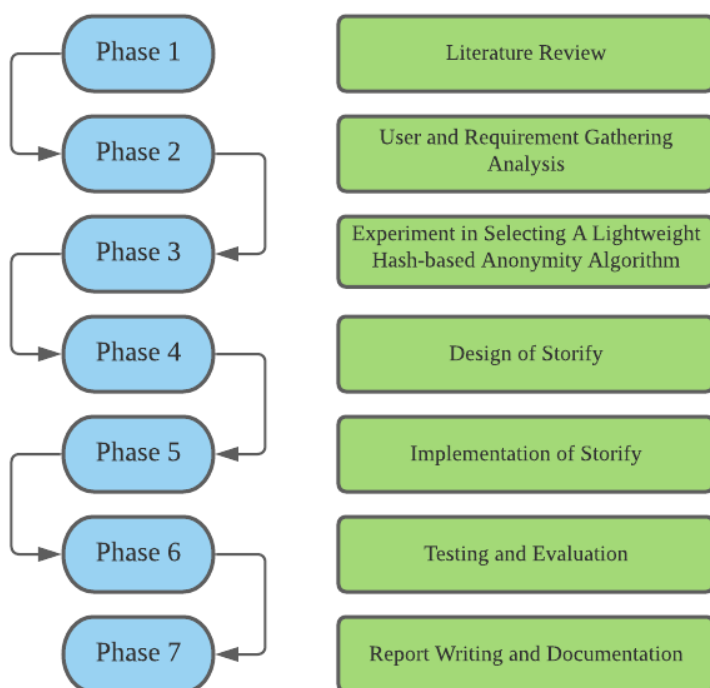
## PROBLEM STATEMENT

- Lack of Anonymity Properties in Protecting Social Media Posts
- Lack of Lightweight Hashing Algorithm

## OBJECTIVES

- I. To investigate a lightweight hash-based anonymity algorithm in protecting the privacy of social media posts in terms of computation speed and ciphertext size.
- II. To design and develop the proposed Storify mobile social media application with a lightweight hash-based anonymity algorithm by using a prototype development approach.
- III. To evaluate the usability performance of the developed Storify mobile social media application by using the System Usability Scale (SUS) approach.

## METHODOLOGY



## CONCLUSION

- A social media application that protecting privacy of social media posts with hash-based anonymity is provided
- The application will able to hide users' identity while interacting with the social media posts

## IMPLEMENTATION

<b>Registration</b>	<b>Login</b>	<b>Profile</b>	<b>Profile Modification</b>
<b>OTP Verification</b>	<b>Password Modification</b>	<b>Main Page</b>	<b>Post Detail</b>
<b>Add Post</b>	<b>Global Chat</b>	<b>Notification</b>	<b>Post Validation</b>