Functional Requirements:

- Registration: Users should be able to register by providing a username and password.
- Login: Registered users should be able to log in using their username and password.
- Post a Message: Logged-in users should be able to post a message, with a maximum character limit of 300.
- Post a Reply: Logged-in users should be able to post a reply to a specific message, with a maximum character limit of 300.
- View Dashboard: Logged-in users should be able to view the last 10 messages along with their replies.
- Logout: Logged-in users should be able to log out from their session.
- Event Tracking: The system should track and record events such as creating a tweet or replying to a tweet.
- Reports: The system should provide reports such as the user with the most events, the most commented tweet, and the number of unique users who opened the application.

Non-functional Requirements:

- Usability: The user interface should be intuitive and user-friendly.
- Performance: The system should perform efficiently, with minimal delays in loading and processing data.
- Reliability: The system should be stable and reliable, handling errors gracefully.
- Security: User passwords should be securely stored and transmitted.
- Maintainability: The code should be well-structured, modular, and easy to maintain.
- Scalability: The system should be able to handle an increasing number of users and messages without significant performance degradation.
- Testability: The code should be written in a way that allows for easy testing and verification of the functionality.