Formal Requirements

Goal and Non-Goal for Launching User Studies on SnickerSync:

Goal:

- Conduct effective user studies in order to collect meaningful feedback/data on different "snicker" sync methods. This can be done by presenting users with various interface treatments – control and variants – and analyzing user reactions and preferences.

Non-Goal:

- The goal is not to fully develop or completely optimize the SnickerSync interface for production but to gather initial information in regards to its snickering concepts and sync mechanisms

Non-Functional Requirements:

Non-Functional Requirement 1: Random User Assignment

 Users participating in the study must be randomly selected and randomly assigned to different groups – control or variant – in order to achieve unbiased and statistically accurate results.

Non-Functional Requirement 2: Data Security and Anonymity

- All user feedback and data collected during said study will be secure and confidential (anonymized) in order to ensure that personal information can not be traced back to the participants of the study.

Functional Requirements for Non-Functional Requirement 1:

- **1.1** User Group Assignment System
 - Implement a system that automatically assigns participants into control or variant groups based on some defined percentages for example 50% control, 50% variant.
- **1.2** Group Balancing Algorithm
 - Ensure the user assignment algorithm maintains a balanced grouping in terms of user demographics such that across all groups there is no disproportionate representation.

Functional Requirements for Non-Functional Requirement 2:

- **2.1** Data Encryption
 - Implement end-to-end encryption for all user data being propagated and stored during the study to prevent unauthorized access or data breaches.
- **2.2** Anonymous User IDs
 - Assign anonymized IDs to all participants so that their personal data is detached from feedback data, ensuring data security and anonymity.