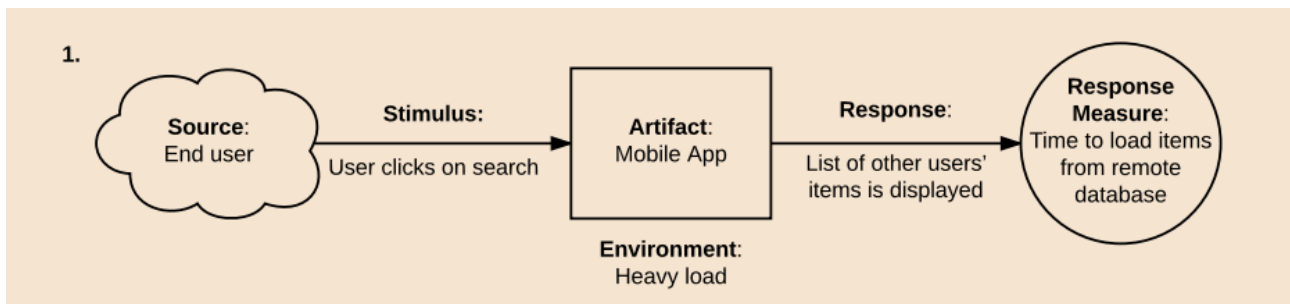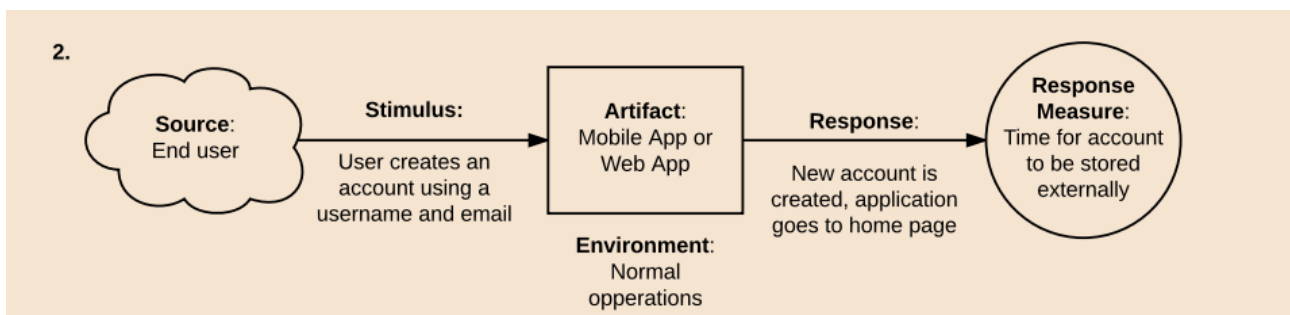# Concrete Quality Attribute Scenarios Evaluation
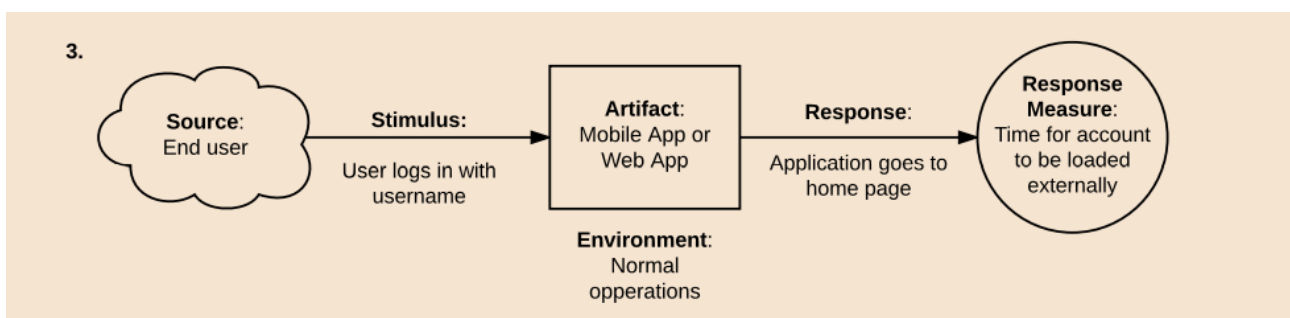
By Rasool Hashemi on 7-Jan-2023

There is only one risk in this case. As required by ASR, the system might not be able to execute a task in less than one second. Response times for the test ranged from 2 to 5 seconds.


The second scenario presents another security concern. The system is more vulnerable because a password is not necessary for the user to log in.


Performance and security are sacrificed in this third situation. Because only the username is utilized for logging in, security is breached when a person logs into the system using a username, yet the account loads relatively quickly. While adding an email address to the login process boosts security, it also slows down performance because it takes longer for the account to load.

4.
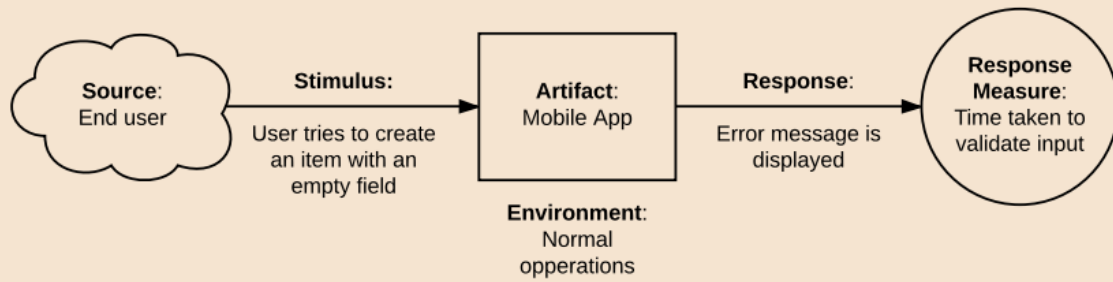
As the user is attempting to create an item without a name, and the system's response falls within expected behaviour, this scenario is an example of Non-risk.

5.
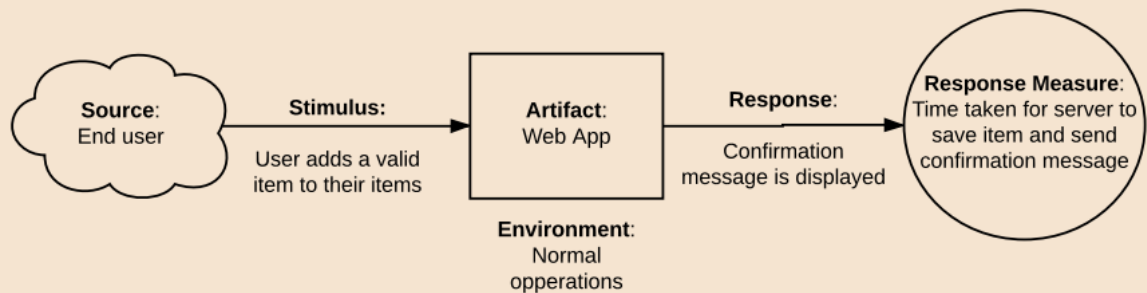
Another non-risk was as the user's action was successful, and the system's response time was quicker than anticipated.

6.
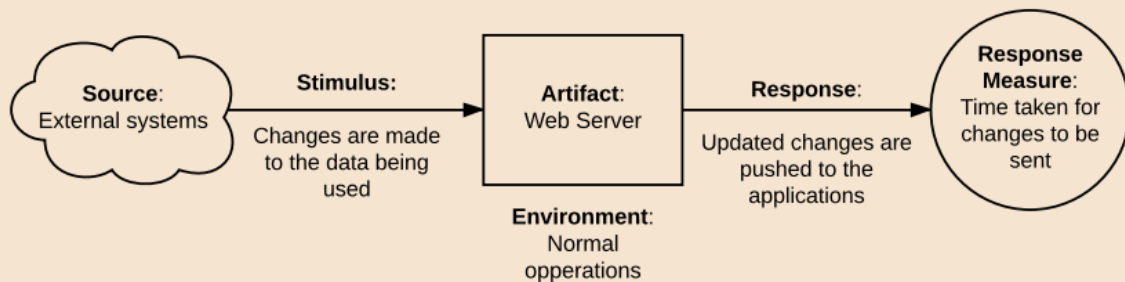
The sync of data in this circumstance creates a sensitive issue because the user might be using old data. The problem can be reduced by switching the data sync's push strategy to pull.

7.

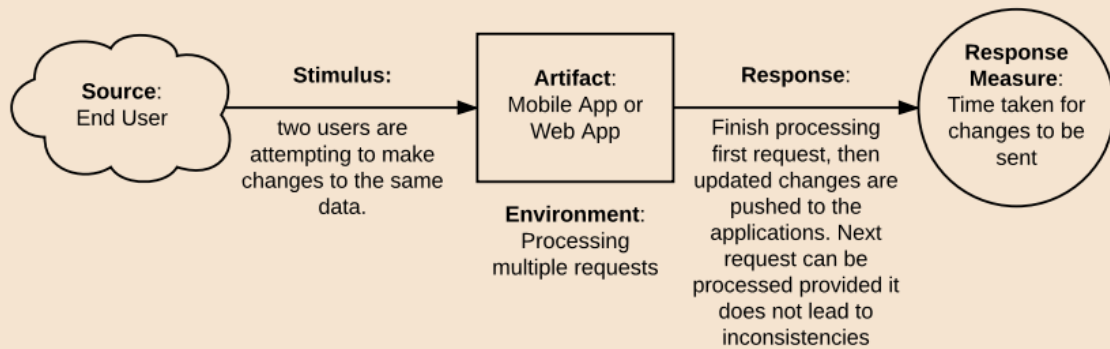It poses no risk because the system handles repeated attempts to modify the same data by locking the resources and simultaneously carrying out just one operation. This results in data consistency throughout the system and fault tolerance.

Updated Utility Tree
By Rasool Hashemi on 7-Jan-2023

Quality Attribute	Performance		Security			Interoperability	
Attribute Refinement	Latency		Authentication		Authorization	Shared Storage	Accessibility
Architecturally Specific Requirement	It takes around 1 second to complete any given task (H)	It takes up to 5 seconds to complete any given task during system heavy load (M)	A user must create or have an account to use the app (H)	A user must logins into the app using user name and password (M)	A user can only edit items they own (H) / A user cannot place a bid on their own items (M)	User data must be in shared storage (H)	User can access their data from a sharing mobile app (H) / User can access their data from a sharing web app (H)