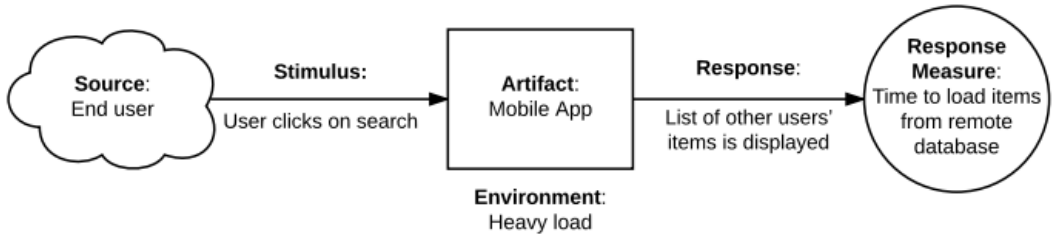
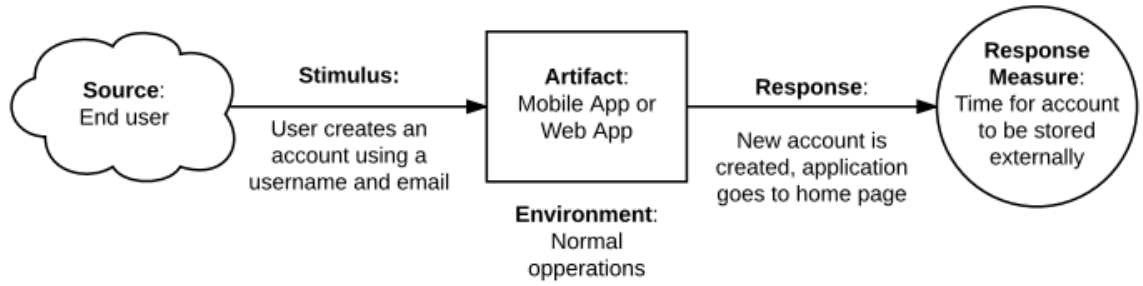
Capstone assignment: architecture analysis and evaluation

1.



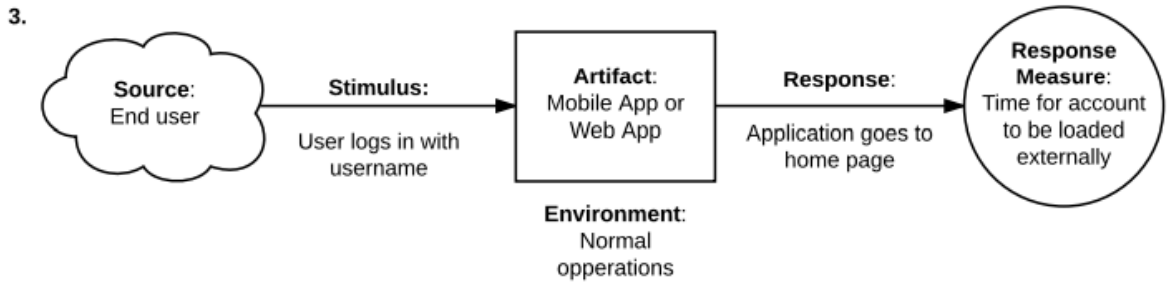
Search is a **risk** scenario, as a result of testing the app we found that the search feature is not able to allocate an already existing item giving **"No Match"**. Time to respond in case of heavy load was more than 2 seconds.

2.



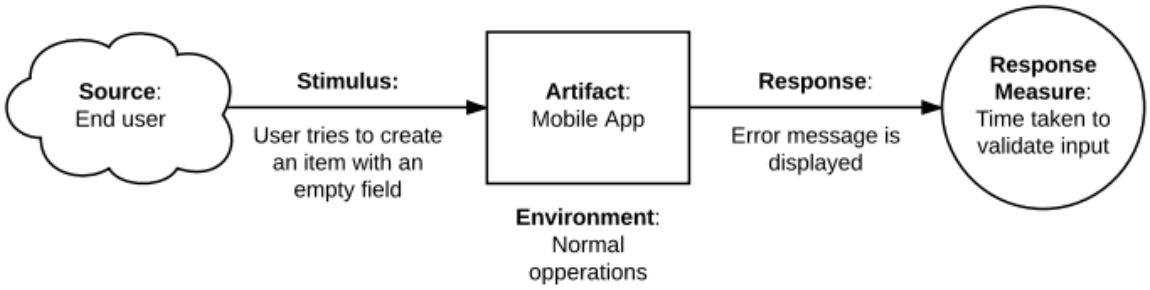
New account is a **risk** scenario, as it does not acquire password from the user, only username and email. Also, it assumes that the user is already registered and does not display register option for newbies.

3.



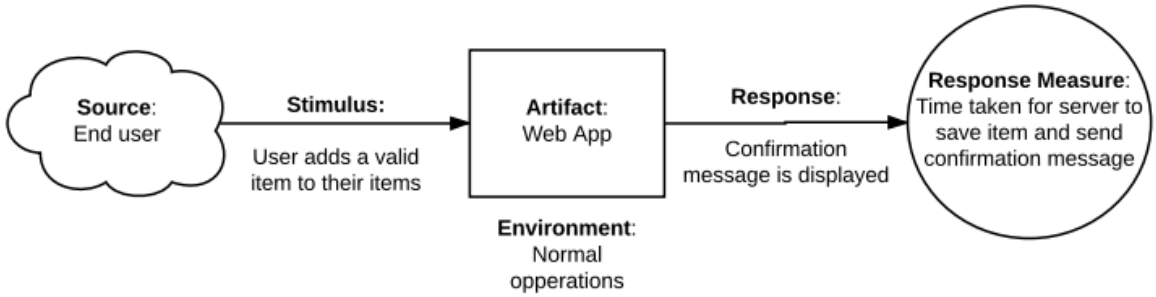
Login time is **non-risk**, as it takes less than one second to load an already existing account.

4.



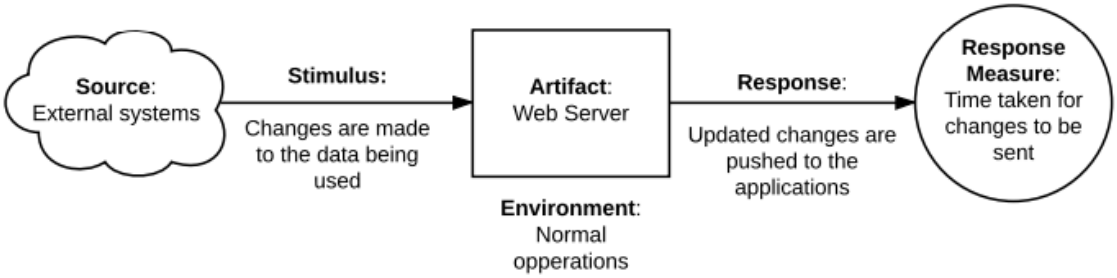
empty field error time is **non-risk** scenario, as it takes less than a second to display the error message to the user and accordingly, less time to validate the input.

5.



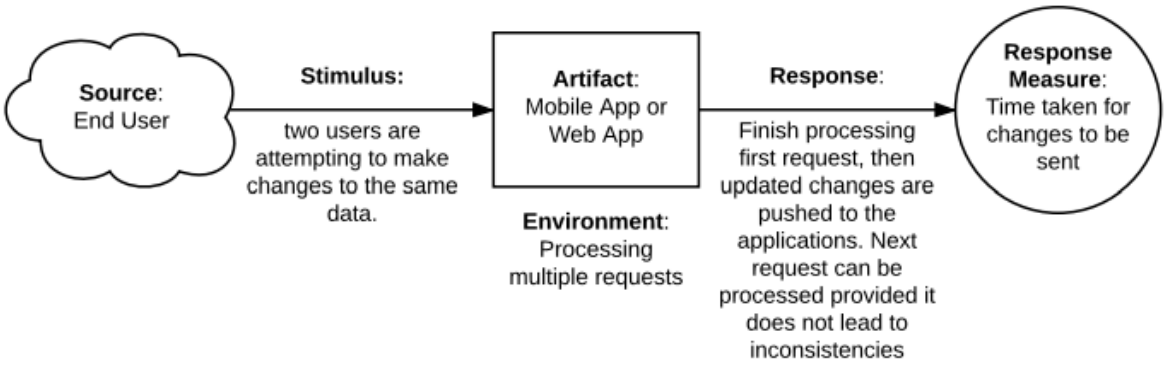
Confirmation message time is **non-risk** scenario, as it takes less than a second for saving the new item and displaying the confirmation.

6.



Updating data presents a **sensitivity point**, because there may a synchronization problem from external systems to the under-examination architecture. Means to refresh the app to sync the up to date data may be required with proper time intervals.

7.



Multiple requests time is **non-risk** scenario, architecture should support multiple events using semaphores but that may present some latency in case of heavy requests at the same time. Also, it could be a **trade-off** scenario, if we think about latency versus throughput.

Updated Utility Tree:

https://github.com/abdulmaguideissa/SoftwareArchitecture/blob/master/utility%20Tree%20(1).png?raw=true