A functional requirement defines a system or its component.	A non-functional requirement defines the quality attribute of a software system.
It specifies "What should the software system do?"	It places constraints on "How should the software system fulfill the functional requirements?"
Functional requirement is specified by User.	Non-functional requirement is specified by technical peoples e.g. Architect, Technical leaders and software developers.
It is mandatory.	It is not mandatory.
Helps you verify the functionality of the software.	Helps you to verify the performance of the software.
Functional Testing like System, Integration, End to End, API testing, etc are done.	Non-Functional Testing like Performance, Stress, Usability, Security testing, etc are done.
Usually easy to define.	Usually more difficult to define.
 Example Authentication of user whenever he/she logs into the system. System shutdown in case of a cyber attack. A Verification email is sent to user whenever he/she registers for the first time on some software system. 	 Example Emails should be sent with a latency of no greater than 12 hours from such an activity. The processing of each request should be done within 10 seconds The site should load in 3 seconds when the number of simultaneous users are > 10000