

Requirements Analysis

- Functional Requirement

Priority: 1 to 5(low to high)

Images

ID	I1.01
Title	Image Reading
Description	System should able to read image provided by user. Display any error message
Priority	5
Risk	95%

ID	I1.02
Title	Image / Image Hash Generation
Description	The system should generate hash value accurately of image read by system in requirement I1.01.
Priority	5
Risk	95%

ID	I1.03
Title	Image / hash length
Description	The system should offer user to generate different length of hash value. Ex. 16 bytes,32 bytes,64 bytes.
Priority	3
Risk	30%

Digital Signature

ID	I2.01
Title	Image / Digital Signature
Description	System should be able to generate digital signature of hash computed in I1.03
Priority	5
Risk	95%

ID	I2.02
Title	Image / Digital Signature /Digital Signature verification
Description	The system should verify signature for authentication. The status is “bad signature” or good signature.
Priority	5
Risk	95%

Hash Comparison

ID	I3.01
Title	Image / Hash comparison
Description	Compare two hashes who's signatures are valid
Priority	5
Risk	95%

ID	I3.02
Title	Image / Hash Comparison/Image Attacks
Description	The System Should handle image attack like rotation,pixel loss etc. means System given result of two images are identical under those attacks.
Priority	3
Risk	90%

USER

ID	I4.01
Title	Users
Description	The kind of user that use this system <ul style="list-style-type: none"> Any people who want share image securely. Defense department
Priority	3
Risk	90%

ID	I4.02
Title	Users / hash length
Description	The user can select the different length for hash specified in requirement in I1.08.
Priority	3
Risk	60%

Display

ID	I5.01
Title	Image Reading / Status Message
Description	Display any error message related to invalid image format while reading image
Priority	4
Risk	95%

ID	I5.02
Title	Similarity of Image
Description	Display how much similar both images are
Priority	4
Risk	95%

- Non functional Requirements
 - Robust
 - Platform Independent
 - Efficient
 - Easy Operability

Stakeholders

1. Cloud based platform for image search (e.g. Cumulix)
2. Websites providing image as password feature
3. Similar images search using APP(e.g. Android App)
4. Defense department