Role:
<u>Ordinary user</u>. Generally inexperienced with cryptography. Curious about purpose of page, but probably will try one or two transformations before leave the site. He/she will not register, log in, or enter any data.

Role:

<u>Registered user</u>. Experienced with cryptography or willing to learn. He/she will register, log in, try to enter some data and experiment with algorithm.

Role:

<u>Logged user</u>. Experienced with cryptography or willing to learn. After registration and logging in, he/she will have access to protected content and will have rights to enter or change test vectors, meta-transformations and to experiment with algorithm.

Story title: User Registration

Tests: UserRegValid, UserRegInvalid

As a ordinary user I should be able to register with the site so that I can access protected content as a registered user.

Acceptance tests: UserRegValid, UserRegInvalid

Ordinary user should be able to register only with unique user name/password.

Test name	Characteristics	User Name	Password	Name	E-mail Address	Expected Result
UserRegValid	Valid	boris	boki	Boris Damjanovic	dboris@poen.net	Welcome back, Boris Damjanovic
UserRegInvalid	Invalid (duplicated User Name/pass)	boris	boki	abcd	abcd	"Invalid user name or password."

Story title: User Login
Tests: ValidLogIn, InvalidLogIn

As a Registered user, I should be able to Log In with site and access protected content.

Acceptance tests: ValidLogIn, InvalidLogIn

Registered user should be able to log in only with correct user name and password.

Test name	Characteristics	User Name	Password	Expected Result
ValidLogIn	Valid	boris	boki	Welcome back, Boris Damjanovic
InvalidLogIn	Invalid (wrong User Name/pass)	boris	boki	"Invalid user name or password."

Story title: Entering test vectors

Tests: ValidTestVectors, InvalidTestVectors

As a logged user, I have to be able to enter some test vectors for specific transformations.

Acceptance tests: ValidTestVectors, InvalidTestVectors

Logged user should be able enter only valid test vectors. If the logged user enters a wrong value, he must have some indication of where the problem is originated.

Test name	Characteristics	Vector	Expected Result
ValidTestVectors	Valid subBytes	10112233445566778899aabbccddeeff	Exists in grid
ValidTestVectors	Valid mixColumns	20112233445566778899aabbccddeeff	Exists in grid
ValidTestVectors	Valid shiftRows	30112233445566778899aabbccddeeff	Exists in grid
…	…	…	…
InvalidTestVectors	Invalid subBytes	1M112233445566778899aabbccddeeff (not a hex number)	"Invalid SubBytes test vector value."
InvalidTestVectors	Invalid mixColumns	2M112233445566778899aabbccddeeff (not a hex number)	"Invalid MixColumns test vector value."
…	…	…	…

Story title: Delete test vectors
Tests: DeleteTestVectors

As a logged user, I have to be able to delete my test vectors when they are not needed anymore.

Acceptance tests: DeleteTestVectors

Logged user should be able enter only valid test vectors. If the logged user enters a wrong value, he must have some indication of where the problem is originated.

Test name	Characteristics	Vector	Expected Result
DeleteTestVectors	Valid	3925841D02DC09FBDC118597196A0B32	Not Exists in grid

Story title: Executing transformation

Tests: testSubBytesPG, testShiftRowsPG, testMixColumnsPG, testAddRoundKeyPG, testInvSubBytesPG, testInvShiftRowsPG, testInvMixColumnsPG

As a ordinary user, I have to be able to execute transformation to see its results.

Acceptance tests: testSubBytesPG, testShiftRowsPG, testMixColumnsPG, testAddRoundKeyPG, testInvSubBytesPG, testInvShiftRowsPG, testInvMixColumnsPG

Ordinary user should see only test vectors that belong to selected transformation. He/she have to see correct results for selected test vector and transformation.

Test name	Characteristics	Value	Expected Result
testSubBytesPG	Valid	Sub Bytes Test Value	Exists on page
testSubBytesPG	Valid	193de3bea0f4e22b9ac68d2ae9f84808	d4 e0 b8 1e 27 bf b4 41 11 98 5d 52 ae f1 e5 30
testSubBytesPG	Invalid	Shift Rows Test Value	Not exists on page
testSubBytesPG	Invalid	Mix Columns Test Value	Not exists on page
…	…	…	…

Story title: Add meta transformation
Tests: testEnterMetaTransformation

As a logged user, I have to be able to add new meta transformations in experimental purphoses.

Acceptance tests: testEnterMetaTransformation

After Logged user enter new meta transformation, that new meta transformation should appear in grid.

Test name	Characteristics	Code	Expected Result
testEnterMetaTransformation	Valid	New meta transformation code	Exists in grid

Story title: Update meta transformation
Tests: testUpdateMetaTransformation

As a logged user, I have to be able to update existing meta transformations in experimental purphoses.

Acceptance tests: testUpdateMetaTransformation

After Logged user update some existing meta transformation, that meta transformation should appear in grid.

Test name	Characteristics	Code	Expected Result
testUpdateMetaTransformation	Valid	Updated meta transformation code	Exists in grid

Story title: Delete meta transformation

Tests: testDeleteMetaTransformation

As a logged user, I have to be able to delete existing meta transformations if it is not needed anymore.

Acceptance tests: testDeleteMetaTransformation

After Logged user delete some existing meta transformation, that meta transformation should disappear from grid.

Test name	Characteristics	Code	Expected Result
testDeleteMetaTransformation	Valid	Deleted meta transformation code	Not Exists in grid

Story title: Executing meta transformation

Tests: testMetaTransformationPG

As a logged user, I have to be able to execute meta transformation to see its results.

Acceptance tests: testMetaTransformationPG

Logged user have to see correct results for selected test vector and meta transformation.

Test name	Characteristics	Value	Expected Result
testMetaTransformationPG	Valid	3243f6a8885a308d313198a2e0370734	39 02 dc 19 25 dc 11 6a 84 09 85 0b 1d fb 97 32