Test Design techniques Advanced

Part I: Equivalence classes

Equivalence class	Test input example	Expected result
State		
one-character abbreviation	A	Input is rejected: too short
2-character - one lowercase	Az	Input is rejected
2-character - one is a special symbol	A~	Input is rejected
2-character - one is a number	A1	Input is rejected
two-character abbreviation	AZ	Input is accepted
three-character abbreviation	AZV	Input is rejected: too long
Last Name		
0 characters		Input is rejected: too short
Length one to fifteen characters and can contain alphabetic characters, periods, hyphens, apostrophes, spaces, and numbers	Ivanov-12	Input is accepted
Length of more than 15 characters(15+)	Pavluichenkoevna	Input is rejected: too long
USER ID		
Length 0-7 characters	User1	Input is rejected: too short

8 characters, minimum 2 of which are not letters	User7896	Input is rejected: missing special characters
8 characters, minimum 2 of which are special, nonprinting, numeric	User78~#	Input is accepted
8 characters, one of which are not letters	Userrrr7	Input is rejected:minimum 2 characters - not letters
8 characters, all letters	Userinyo	Input is rejected:minimum 2 characters - not letters
Length of more than 8 characters (8+)	User78968865555	Input is rejected: too long
Student ID		
Length 0-7 characters	WE123	Input is rejected: too short
class "8-character - valid campus + last six are a unique six-digit number	LC856357	Input is accepted
Length 8 characters, excluding characters representing home campus,	12345678	Input is rejected: Student ID is not correct
8 characters, the first 2 are different from the data: AN, LC, RW, SM, TA, WE, WN, the last six are a unique six-digit number	JN123456	Input is rejected: This is not a valid abbreviation
class "8-character - valid campus + letters"	RWhhggdf	Input is rejected: number must be 6 unique digits
Length 8 characters, last six are a not unique six-digit number	LCStud77	Input is rejected: The number is not unique
Length of more than 8 characters (8+)	SM1234567890	Input is rejected: too long

Part II: Boundary values

Boundary value	Test input example	Expected result
ZIP Code		
0999 value (4 digits)	0999	Input is rejected: too short
01000 value (5 digits)	01000	Input is accepted
99999 value (5 digits)	99999	Input is accepted
100000 value (6 digits)	100000	Input is rejected: too long
Last Name		
0 characters		Input is rejected: too short
1 characters	G	Input is accepted
15 characters	Rddhddddddddddd	Input is accepted
16 characters	Rddddddddd.dddd1	Input is rejected: too long
USER ID		
7 characters and one is not alphabetic	Kolyan7	Input is rejected: too short
8 characters, two of which are not alphabetic	Koliun18	Input is accepted
9 characters, three of which are not alphabetic	Koliun777	Input is rejected: too long
Course ID		
two alpha characters, a five-digit integer	EN12345	Input is rejected: too short
three alpha characters, a six-digit integer	ENG123456	Input is accepted
four alpha characters, a seven-digit integer	ENGL1234567	Input is rejected: too long