



Dhirubhai Ambani
University
Technology

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IT314 - Software Engineering
Group - 20

Blackbox Testing



KRUSHISETU
PATH TO PROSPERITY

Assigned by :
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Login:**Equivalence class partitioning:**

Class	Description	Type
EC1	Regular Email Format	Valid
EC2	Email field empty	Invalid
EC3	No “@” symbol	Invalid
EC4	No “.” after domain	Invalid
EC5	Multiple “@” symbols	Invalid
EC6	Special characters (spaces, !, %, etc.)	Invalid
EC7	Domain missing (e.g., abc@)	Invalid
EC8	Username part missing (e.g., @gmail.com)	Invalid
EC9	Correct password	Valid
EC10	Empty password	Invalid
EC11	Wrong password	Invalid
EC12	A role selected	Valid
EC13	No role selected	Invalid
EC14	Remember me Checkbox checked or unchecked	Valid

Test Cases:

#	Test Data (Email, psw, role)	Expected Outcome	Observed Outcome	Classes Covered	Status
1	user@gm ail.com, correctPw d, Farmer	T	T	1,9,12	Pass
2	, corectPsw , Farmer	F	F	2	Pass
3	usergmail. com,corre ctPwd, Farmer	F	F	3	Pass
4	user@gm ailcom, correctPw d, Farmer	F	F	4	Pass
5	user@@g mail.com, correctPw d, Farmer	F	F	5	Pass
6	us!er@gm ail.com, correctPs w, Farmer	F	F	6	Pass
7	user@, correctPs w, Farmer	F	F	7	Pass
8	@gmail.co m,	F	F	8	Pass

	correctPsw, Farmer				
9	user@gmail.com,,Farmer	F	F	10	Pass
10	user@gmail.com, wrongPwd, Farmer	F	F	11	Pass
11	user@gmail.com, correctPwd	F	F	13	Pass
12	user@gmail.com, correctPsw, Farmer, RememberMe On	T	T	1,9,12,14	Pass
13	user@gmail.com, correctPsw, Farmer, RememberMe Off	T	T	1,9,12,14	Pass
14	user@domain, correctPwd, Farmer	F	F	4	Pass
15	user@.com,	F	F	7	Pass

SignUp Page:**Equivalence class partitioning:**

Class	Description	Type
EC1	Full Name contains only alphabets	Valid
EC2	Full Name is empty	Invalid
EC3	Full Name contains digits or special characters	Invalid
EC4	Email has valid format (abc@gmail.com)	Valid
EC5	Email is empty	Invalid
EC6	Email missing "@"	Invalid
EC7	Email missing "."	Invalid
EC8	Email contains invalid characters (spaces, !, %, etc.)	Invalid
EC9	Email username missing (@gmail.com)	Invalid
EC10	Email domain missing (abc@)	Invalid
EC11	Mobile number is valid 10-digit number	Valid
EC12	Mobile number empty	Invalid
EC13	Mobile number less than 10 digits	Invalid
EC14	Mobile number more than 10 digits	Invalid
EC15	Mobile number contains alphabets or symbols	Invalid
EC16	Password meets ALL rules: ≥8 chars, 1 letter, 1 digit, 1 special char	Valid

EC17	Password empty	Invalid
EC18	Password < 8 characters	Invalid
EC19	Password missing a letter	Invalid
EC20	Password missing a digit	Invalid
EC21	Password missing a special character	Invalid
EC22	Confirm Password matches Password	Valid
EC23	Confirm Password does not match Password	Invalid
EC24	Terms & Conditions checkbox checked	Valid
EC25	Terms & Conditions checkbox not checked	Invalid

Test-Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Full Name: Jainil Patel Email:jainil@gmail.com Mobile: 9876543210 Password: Abc@1234 Confirm Password: Abc@1234 T&C: Checked	T	T	1,4,11,16,22,24	Pass
2	Full Name empty	F	F	2	Pass
3	Full Name = "Jainil123"	F	F	3	Pass
4	Email empty	F	F	5	Pass

5	Email missing @ (jainilgmail.com)	F	F	6	Pass
6	Email missing dot (jainil@gmailcom)	F	F	7	Pass
7	Email contains space (jai nil@gmail.com)	F	F	8	Pass
8	Username missing (@gmail.com)	F	F	9	Pass
9	Domain missing (jainil@)	F	F	10	Pass
10	Mobile empty	F	F	12	Pass
11	Mobile < 10 digits (12345)	F	F	13	Pass
12	Mobile > 10 digits (1234567890123)	F	F	14	Pass
13	Mobile contains alphabets (98ab56@210)	F	F	15	Pass
14	Password empty	F	F	17	Pass
15	Password = "Ab1@" (less than 8 chars)	F	F	18	Pass
16	Password = "12345678@" (no letter)	F	F	19	Pass
17	Password = "Abcdefgh@" (no digit)	F	F	20	Pass
18	Password = "Abc12345" (no special character)	F	F	21	Pass

19	Confirm password mismatch: Pass = "Abc@1234", Confirm = "Abc@123"	F	F	23	Pass
20	T&C not checked	F	F	25	Pass

Subsidy Application Form:
Step-1 Personal Information

Equivalence class partitioning:

Class	Description	Type
EC1	Full Name contains only alphabets and spaces	Valid
EC2	Full Name empty	Invalid
EC3	Full Name contains digits or special characters	Invalid
EC4	Mobile number exactly 10 digits	Valid
EC5	Mobile number empty	Invalid
EC6	Mobile number less than 10 digits	Invalid
EC7	Mobile number more than 10 digits	Invalid
EC8	Mobile contains letters or symbols	Invalid
EC9	Email in valid format	Valid
EC10	Email empty	Invalid
EC11	Email missing "@"	Invalid

EC12	Email missing “.”	Invalid
EC13	Email contains invalid characters	Invalid
EC14	Aadhar number exactly 12 digits	Valid
EC15	Aadhar empty	Invalid
EC16	Aadhar less than 12 digits	Invalid
EC17	Aadhar more than 12 digits	Invalid
EC18	Aadhar contains alphabets or symbols	Invalid
EC19	State selected	Valid
EC20	State not selected	Invalid
EC21	District selected	Valid
EC22	District not selected	Invalid
EC23	Taluka selected	Valid
EC24	Taluka not selected	Invalid
EC25	Village selected	Valid
EC26	Village not selected	Invalid
EC27	Address non-empty	Valid
EC28	Address empty	Invalid

Test Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Full Name: Rajesh Patel Mobile: 9876543210 Email: rajesh@gmail.com Aadhar: 123412341234 State: Gujarat District: Vadodara; Taluka: Padra; Village: Bhandu; Address: 12 Patel Vas	T	T	1,4,9,14,19,21,23,25,27	Pass
2	Full Name empty	F	F	2	Pass
3	Full Name = Raj123	F	F	3	Pass
4	Mobile empty	F	F	5	Pass
5	Mobile = 12345	F	F	6	Pass
6	Mobile = 123456789012	F	F	7	Pass
7	Mobile = 98ab56c210	F	F	8	Pass
8	Email empty	F	F	10	Pass
9	Email missing @ = rajgmail.com	F	F	11	Pass
10	Email missing . = raj@gmailcom	F	F	12	Pass
11	Email with invalid char = raj patel@gmail.com	F	F	13	Pass
12	Aadhar empty	F	F	15	Pass

13	Aadhar = 12345	F	F	16	Pass
14	Aadhar = 1234567890123456	F	F	17	Pass
15	Aadhar = 12ab56c9123@	F	F	18	Pass
16	State not selected	F	F	20	Pass
17	District not selected	F	F	22	Pass
18	Taluka not selected	F	F	24	Pass
19	Village not selected	F	F	26	Pass
20	Address empty	F	F	28	Pass

Subsidy Application Form:

Step-2 Land Information

Equivalence class partitioning:

Class	Description	Type
EC21	Land Area is numeric and > 0	Valid
EC22	Land Area empty	Invalid
EC23	Land Area = 0	Invalid
EC24	Land Area is negative (< 0)	Invalid
EC25	Land Area contains alphabets/symbols (non-numeric)	Invalid
EC26	Unit selected	Valid
EC27	Unit not selected	Invalid

EC28	Soil Type selected	Valid
EC29	Soil Type not selected	Invalid
EC30	Ownership selected	Valid
EC31	Ownership not selected	Invalid

Test Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Land Area: 5; Unit: Acre; Soil Type: Black Soil; Ownership: Owned	T	T	EC21, EC26, EC28, EC30	Pass
2	Land Area empty	F	F	EC22	Pass
3	Land Area = 0	F	F	EC23	Pass
4	Land Area = -3	F	F	EC24	Pass
5	Land Area contains letters/symbols ("10a", "@2")	F	F	EC25	Pass
6	Unit not selected	F	F	EC27	Pass
7	Soil Type not selected	F	F	EC29	Pass
8	Ownership not selected	F	F	EC31	Pass

Subsidy Application Form: Step-3

Equivalence class partitioning:

Class	Description	Type
EC32	Bank Name contains letters and spaces	Valid
EC33	Bank Name empty	Invalid
EC34	Bank Name contains digits/symbols	Invalid
EC35	IFSC code valid: 11 chars, format = 4 letters + 0 + 6 alphanumeric	Valid
EC36	IFSC empty	Invalid
EC37	IFSC not 11 characters long	Invalid
EC38	IFSC format invalid (missing 0 or wrong pattern)	Invalid
EC39	Account Number numeric and 9–18 digits	Valid
EC40	Account Number empty	Invalid
EC41	Account Number contains letters or symbols	Invalid
EC42	Account Number too short (< 9 digits)	Invalid
EC43	Account Number too long (> 18 digits)	Invalid

Test Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Bank: Bank of Baroda; IFSC: BARB0SUREND; Account No: 123456789	T	T	EC32, EC35, EC39	Pass

2	Bank Name empty	F	F	EC33	Pass
3	Bank Name "Bank123"	F	F	EC34	Pass
4	IFSC empty	F	F	EC36	Pass
5	IFSC not 11 chars ("BARB0SUR")	F	F	EC37	Pass
6	IFSC wrong format ("BARBSUREND1", missing 0 at 5th position)	F	F	EC38	Pass
7	Account Number empty	F	F	EC40	Pass
8	Account Number contains letters ("1234AB789")	F	F	EC41	Pass
9	Account Number too short ("12345678" → 8 digits)	F	F	EC42	Pass
10	Account Number too long ("12345678901234567890 1")	F	F	EC43	Pass

Subsidy Recommendation: Basic Info.

Equivalence class partitioning:

Class	Description	Type
EC1	Annual Income is numeric and > 0	Valid
EC2	Annual Income empty	Invalid
EC3	Annual Income contains letters/symbols (non-numeric)	Invalid

EC4	Annual Income is 0 or negative	Invalid
EC5	Land Size (acres) numeric (int/decimal) and > 0	Valid
EC6	Land Size empty	Invalid
EC7	Land Size non-numeric (letters/symbols)	Invalid
EC8	Land Size = 0 or negative	Invalid
EC9	Farmer Type selected	Valid
EC10	Farmer Type not selected	Invalid
EC11	Past Subsidies text — any input allowed (optional field)	Valid

Test-Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Annual Income: 100000; Land Size: 25.0; Farmer Type: Small Farmer; Past Subsidies: PM-KISAN	T	T	EC1, EC5, EC9, EC11	Pass
2	Annual Income empty	F	F	EC2	Pass
3	Annual Income = “ABC100” (non-numeric)	F	F	EC3	Pass
4	Annual Income = 0 or negative	F	F	EC4	Pass
5	Land Size empty	F	F	EC6	Pass

6	Land Size = “10ac” (non-numeric)	F	F	EC7	Pass
7	Land Size = 0 or negative	F	F	EC8	Pass
8	Farmer Type not selected	F	F	EC10	Pass

Subsidy recommendation: Farm Details

Equivalence class partitioning:

Class	Description	Type
EC1	Primary Crop Type contains alphabets/commas (valid crop names)	Valid
EC2	Primary Crop Type empty	Invalid
EC3	Primary Crop Type contains numbers/symbols	Invalid
EC4	Season selected	Valid
EC5	Season not selected	Invalid
EC6	Soil Type selected	Valid
EC7	Soil Type not selected	Invalid
EC8	Water Source selected	Valid
EC9	Water Source not selected	Invalid
EC10	State selected	Valid
EC11	State not selected	Invalid
EC12	District selected	Valid

EC13	District not selected	Invalid
EC14	Rainfall Region selected	Valid
EC15	Rainfall Region not selected	Invalid
EC16	Temperature Zone selected	Valid
EC17	Temperature Zone not selected	Invalid

Test Cases:

#	Test Data	Expected Outcome	Observed Outcome	Classes Covered	Status
1	Crop: Wheat, Rice; Season: Kharif; Soil Type: Black Soil; Water Source: Canal; State: Gujarat; District: Surendranagar; Rainfall Region: Medium; Temperature Zone: Hot	T	T	EC1, EC4, EC6, EC8, EC10, EC12, EC14, EC16	Pass
2	Primary Crop Type empty	F	F	EC2	Pass
3	Primary Crop Type contains numbers (Crop: Wheat123)	F	F	EC3	Pass
4	Season not selected	F	F	EC5	Pass
5	Soil Type not selected	F	F	EC7	Pass
6	Water Source not selected	F	F	EC9	Pass
7	State not selected	F	F	EC11	Pass

8	District not selected	F	F	EC13	Pass
9	Rainfall Region not selected	F	F	EC15	Pass
10	Temperature Zone not selected	F	F	EC17	Pass