

Black Box Testing
GROUP 34



Profile Page

Constraints

Name

1. Must be a string.
2. Must not be empty.
3. Should only contain alphabets and spaces.
4. Maximum length is 50 characters.

Age

1. Must be a positive integer.
2. Should be a realistic age (e.g., 0–120 years).
3. Optionally, the field might be read-only, depending on its calculation.

Email

1. Must be a string.
2. Must contain "@" and "." (e.g., example@gmail.com).
3. Must have characters before "@" and after the last ".".
4. No spaces allowed.
5. Length must be between 5 and 320 characters (per RFC 5321)

Phone

1. Must follow a valid phone number format
2. Maximum length of 13 characters.

Address

1. Street:
 - Must not be empty.
 - Maximum length of 100 characters.
2. City:
 - Must not be empty.
 - Maximum length of 50 characters.
3. State:
 - Must not be empty.
 - Maximum length of 50 characters.
4. Postal code:
 - Must not be empty
 - Must be in a valid postal code format (e.g., Indian Postal code of 6 digits only)

- Maximum length of 10 characters
5. Country:
- Must not be empty.
 - Must be a valid country name.
 - Maximum length of 50 characters.

Emergency Contact

1. Name:
 - Must not be empty.
 - Should only contain alphabets and spaces.
 - Maximum length of 50 characters.
2. Relationship:
 - Must not be empty.
 - Should only contain alphabets and spaces.
 - Maximum length of 50 characters.
3. Contact Number:
 - Must follow a valid phone number format.
 - Maximum length of 15 characters.

Medical History

1. Must be a string
2. Maximum length of 250 characters

Equivalence Classes:

Name Equivalence Classes

1. N1: Non-empty string of alphabets (max 50 characters)
2. N2: Empty string
3. N3: Contains numbers or special characters
4. N4: Exceeds 50 characters

Age Equivalence Classes

1. A1: Positive integer between 0 and 120
2. A2: Negative number
3. A3: Greater than 120
4. A4: Non-numeric value

Email Equivalence Classes

1. E1: Valid email that meets all constraints (e.g., user@example.com).
2. E2: Missing the @ symbol (e.g., examplegmail.com).
3. E3: Missing the . symbol (e.g., user@examplecom).
4. E4: Contains spaces (e.g., user @example.com).
5. E5: Too short (< 5 characters, e.g., a@b.c).
6. E6: Too long (> 320 characters, e.g., repeated 321 times followed by @example.com).
7. E7: Invalid characters in the email (e.g., user#example.com).

Phone Equivalence Classes

1. P1: Starts with +91 and is exactly 10 digits
2. P2: Missing "+91"
3. P3: Contains non-numeric characters
4. P4: Fewer or more than 10 digits after +91

Address Equivalence Classes

1. Street:
 - S1: Non-empty string
 - S2: Empty string
 - S3: Exceeds 100 characters
2. City:
 - CT1: Non-empty string

- CT2: Empty string
- CT3: Exceeds 50 characters
- 3. State:
 - ST1: Full name state
 - ST2: Empty string
 - ST3: Exceeds 50 characters
- 4. Postal Code:
 - PC1: Non-empty string with valid format
 - PC2: Empty string
 - PC3: Invalid format of the postal code
 - PC4: Exceeds 10 characters
- 5. Country:
 - C1: Non-empty string with a valid country name
 - C2: Empty string
 - C3: Exceeds 50 characters

Emergency Contact Equivalence Classes

1. Name:
 - EN1: Non-empty string of alphabets
 - EN2: Empty string
 - EN3: Contains numbers or special characters
 - EN4: Exceeds 50 characters
2. Relationship:
 - ER1: Non-empty string of alphabets
 - ER2: Empty string
 - ER3: Contains numbers or special characters
 - ER4: Exceeds 50 characters
3. Contact Number:
 - EP1: Starts with +91 and is exactly 10 digits
 - EP2: Missing "+91"
 - EP3: Contains non-numeric characters
 - EP4: Fewer or more than 10 digits after +91

Medical History Equivalence Classes

1. MH1: It is a non-empty string.
2. MH2: Empty string.
3. MH3: Exceeds 250 characters.

Test Cases :

Test Case ID	Input Values	Equivalence Class	Expected Result
TC1	Name: "Aarav Malhotra" Age: 30 Email: "aaravmalhotra@gmail.com" Phone: "+919876543210" Address: Street: "5 MG Road" City: "Mumbai" State: "Maharashtra" Postal Code: "400001" Country: "India" Emergency Contact: Name: "Ramesh Malhotra" Relationship: "Father" Contact Number: "+919876543211" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Accepted
TC2	Name: "" Age: 30 Email: "aaravmalhotra@gmail.com" Phone: "+919876543210" Address: Street: "5 MG Road" City: "Mumbai" State: "Maharashtra" Postal Code: "400001" Country: "India" Emergency Contact: Name: "Ramesh Malhotra" Relationship: "Father" Contact Number: "+919876543211" Medical History: "Asthma"	N2, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Name cannot be empty

TC3	Name: "Aarav@Malhotra" Age: 30 Email: "aaravmalhotra@gmail.com" Phone: "+919876543210" Address: Street: "5 MG Road" City: "Mumbai" State: "Maharashtra" Postal Code: "400001" Country: "India" Emergency Contact: Name: "Ramesh Malhotra" Relationship: "Father" Contact Number: "+919876543211" Medical History: "Asthma"	N3, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Invalid characters.
TC4	Name: "Aarav"*12 Age: 30 Email: "aaravmalhotra@gmail.com" Phone: "+919876543210" Address: Street: "5 MG Road" City: "Mumbai" State: "Maharashtra" Postal Code: "400001" Country: "India" Emergency Contact: Name: "Ramesh Malhotra" Relationship: "Father" Contact Number: "+919876543211" Medical History: "Asthma"	N4, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 50 characters.

TC5	Name: "Aditi Sharma" Age: -20 Email: "aditisharma@example.com" Phone: "+919876543214" Address: Street: "1 Green Park" City: "Delhi" State: "Delhi" Postal Code: "110016" Country: "India" Emergency Contact: Name: "Anil Sharma" Relationship: "Brother" Contact Number: "+919876543215" Medical History: "Hypertension"	N1, A2, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Age cannot be negative
TC6	Name: "Aditi Sharma" Age: 125 Email: "aditisharma@example.com" Phone: "+919876543214" Address: Street: "1 Green Park" City: "Delhi" State: "Delhi" Postal Code: "110016" Country: "India" Emergency Contact: Name: "Anil Sharma" Relationship: "Brother" Contact Number: "+919876543215" Medical History: "Hypertension"	N1, A3, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Age exceeds maximum limit.
TC7	Name: "Aditi Sharma" Age: "Twenty-two" Email: "aditisharma@example.com" Phone: "+919876543214" Address: Street: "1 Green Park"	N1, A4, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Non-numeric value.

	City: "Delhi" State: "Delhi" Postal Code: "110016" Country: "India" Emergency Contact: Name: "Anil Sharma" Relationship: "Brother" Contact Number: "+919876543215" Medical History: "None"		
TC8	Name: "Lakshmi Rao" Age: 35 Email: "lakshmiraogmail.com" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao" Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"	N1, A1, E2, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Missing '@' symbol.
TC9	Name: "Lakshmi Rao" Age: 35 Email: "lakshmirao@gmailcom" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao"	N1, A1, E3, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Missing '.' symbol

	Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"		
TC10	Name: "Lakshmi Rao" Age: 35 Email: "lakshmi rao@gmail.com" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao" Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"	N1, A1, E4, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Contains spaces.
TC11	Name: "Lakshmi Rao" Age: 35 Email: "l@a.c" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao" Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"	N1, A1, E5, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Too short.

TC12	Name: "Lakshmi Rao" Age: 35 Email: "l"*321+"@gmail.com" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao" Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"	N1, A1, E6, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 320 characters.
TC13	Name: "Lakshmi Rao" Age: 35 Email: "<lakshmi#rao>@gmail.com" Phone: "+919876543216" Address: Street: "10 MG Road" City: "Pune" State: "Maharashtra" Postal Code: "411001" Country: "India" Emergency Contact: Name: "Siddharth Rao" Relationship: "Husband" Contact Number: "+919876543217" Medical History: "Diabetes"	N1, A1, E7, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Invalid characters.
TC14	Name: "Niharika Sen" Age: 45 Email: "niharikasen19@gmail.com" Phone: "9876543218" Address: Street: "12 MG Road"	N1, A1, E1, P2, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Missing country code.

	City: "Kolkata" State: "West Bengal" Postal Code: "700001" Country: "India" Emergency Contact: Name: "Rajesh Sen" Relationship: "Brother" Contact Number: "+919876543219" Medical History: "Heart Disease"		
TC15	Name: "Niharika Sen" Age: 45 Email: "niharikasen19@gmail.com" Phone: "+91987AJ543218" Address: Street: "12 MG Road" City: "Kolkata" State: "West Bengal" Postal Code: "700001" Country: "India" Emergency Contact: Name: "Rajesh Sen" Relationship: "Brother" Contact Number: "+919876543219" Medical History: "Heart Disease"	N1, A1, E1, P3, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Contains non-numeric characters.
TC16	Name: "Niharika Sen" Age: 45 Email: "niharikasen19@gmail.com" Phone: "+91987654218" Address: Street: "12 MG Road" City: "Kolkata" State: "West Bengal" Postal Code: "700001" Country: "India" Emergency Contact: Name: "Rajesh Sen"	N1, A1, E1, P4, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Incorrect number of digits.

	Relationship: "Brother" Contact Number: "+919876543219" Medical History: "Heart Disease"		
TC17	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "" City: "Hyderabad" State: "Telangana" Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S2, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Street cannot be empty
TC18	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "Ahail"*25 City: "Hyderabad" State: "Telangana" Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S3, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 100 characters

TC19	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "" State: "Telangana" Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S1, CT2, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: City cannot be empty
TC20	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyd"*25 State: "Telangana" Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S1, CT3, ST1, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 50 characters
TC21	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220"	N1, A1, E1, P1, S1, CT1, ST2, PC1, C1, EN1, ER1, EP1, MH1	Rejected: State cannot be empty

	Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "" Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"		
TC22	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Tel"*25 Postal Code: "500001" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S1, CT1, ST3, PC1, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 50 characters
TC23	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Telangana"	N1, A1, E1, P1, S1, CT1, ST1, PC2, C1, EN1, ER1, EP1, MH1	Rejected: Postal code cannot be empty

	Postal Code: "" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"		
TC24	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Telangana" Postal Code: "50A01Z" Country: "India" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S1, CT1, ST1, PC3, C1, EN1, ER1, EP1, MH1	Rejected: Invalid format
TC25	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Telangana" Postal Code: "50000156372" Country: "India" Emergency Contact: Name: "Pallavi Anand"	N1, A1, E1, P1, S1, CT1, ST1, PC4, C1, EN1, ER1, EP1, MH1	Rejected: Exceeds 10 digits

	Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"		
TC26	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Telangana" Postal Code: "500001" Country: "" Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221" Medical History: "Diabetes", "HyperTension"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C2, EN1, ER1, EP1, MH1	Rejected: Country cannot be empty
TC27	Name: "Vikram Anand" Age: 42 Email: "vikramanand@gmail.com" Phone: "+919876543220" Address: Street: "14 Jubilee Hills Road" City: "Hyderabad" State: "Telangana" Postal Code: "500001" Country: "India"*15 Emergency Contact: Name: "Pallavi Anand" Relationship: "Wife" Contact Number: "+919876543221"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C3, EN1, ER1, EP1, MH1	Rejected: Exceeds 50 characters

	Medical History: "Diabetes", "HyperTension"		
TC28	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "" Relationship: "Sister" Contact Number: "+919998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN2, ER1, EP1, MH1	Rejected: Name cannot be empty
TC29	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya@Singh" Relationship: "Sister" Contact Number: "+919998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN3, ER1, EP1, MH1	Rejected: Invalid characters
TC30	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN4, ER1, EP1, MH1	Rejected: Exceeds 50 characters

	Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya"*10 Relationship: "Sister" Contact Number: "+919998877665" Medical History: "Asthma"		
TC31	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "" Contact Number: "+919998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER2, EP1, MH1	Rejected: Relationship cannot be empty
TC32	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER3, EP1, MH1	Rejected: Contains invalid characters

	Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "\$Sister276" Contact Number: "+919998877665" Medical History: "Asthma"		
TC33	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "Sister"*15 Contact Number: "+919998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER4, EP1, MH1	Rejected: Exceeds 50 characters
TC34	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "Sister" Contact Number: "9998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP2, MH1	Rejected: Missing country code

TC35	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "Sister" Contact Number: "+9199887E665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP3, MH1	Rejected: Contains non-numeric characters
TC36	Name: "Priya Sharma" Age: 42 Email: "priya2937@gmail.com" Phone: "+919876543220" Address: Street: "23 Sarojini Nagar" City: "New Delhi" State: "Delhi" Postal Code: "110023" Country: "India" Emergency Contact: Name: "Ananya Singh" Relationship: "Sister" Contact Number: "+91998877665" Medical History: "Asthma"	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP4, MH1	Rejected: Insufficient number of digits

TC37	Name: "Arjun Ahlawat" Age: 42 Email: "arjunahlawat@gmail.com" Phone: "+91123456789" Address: Street: "21 Cantonment Road" City: " Lucknow" State: "Uttar Pradesh" Postal Code: "226001" Country: "India" Emergency Contact: Name: "Pranav Ahlawat" Relationship: "Son" Contact Number: "+91123456780" Medical History: ""	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH2	Rejected: Medical history cannot be empty
TC38	Name: "Arjun Ahlawat" Age: 42 Email: "arjunahlawat@gmail.com" Phone: "+91123456789" Address: Street: "21 Cantonment Road" City: " Lucknow" State: "Uttar Pradesh" Postal Code: "226001" Country: "India" Emergency Contact: Name: "Pranav Ahlawat" Relationship: "Son" Contact Number: "+91123456780" Medical History: "High cholesterol"*25	N1, A1, E1, P1, S1, CT1, ST1, PC1, C1, EN1, ER1, EP1, MH3	Rejected: Exceeds 250 characters