

SOFTWARE TESTING

Fields and their inputs

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Contact-

Name

Phone number

Email

LinkedIn

Education-

Institution

Degree

Year

Skills-

Domains

Skill names

Qualifications-

Qualification string

Achievements-

Achievement string

Contacts

Black Box Testing

Field	Accepted Value	Received Value	Expected Result	Received Result	Verdict
Name	Alphabetical String	Numeric Value	Error Message Toast	Error message Toast saying 'name cannot have number'	Pass
Phone Number	10 digit number	More than 10 digits	Error message toast	Error message Toast saying 'Phone number must have 10 digits'	Pass
Email	String with characters '@' and '.' present and in that sequence	Absence of '@'	Error Message Toast	Error message Toast saying 'Enter valid Email'	Pass
LinkedIn	Link to existing linkedIn profile	Non existing LinkedIn account Link	Error message pop up on connection page	Error message saying 'No account found'	Pass

Boundary value analysis

Field	Limit	Breaking of Limit expected result	Received result	Verdict
Name	60 characters	Cursor stops noting	Cursor stops noting	Pass
Email	20 characters	Cursor stops noting	Cursor stops noting	Pass
Phone number	10 characters	Cursor stops noting	Cursor stops noting	Pass
LinkedIn	80 characters	Cursor stops noting	Cursor stops noting	Pass

Equivalence Class Partitioning

Name

Invalid	Invalid	Invalid	Invalid	Valid
Numeric	Alphanumeric	Special Character	Blank	Alphabetical characters
23552	john123	john@lol		John Titor

Phone Number

Invalid	Invalid	Invalid	Invalid	Valid
Less than 10 digits	More than 10 digits	Special Character	Blank	10 digits
87239664	872396640912	8743@42		8723966409

Email

Invalid	Invalid	Invalid	Invalid	Valid
Neumeric	Does not contain @	Space character	Blank	valid
87239664	johntitor.future.com	John titor@future.com		johntitor@future.com

Education-

Black box testing

Field	Accepted value	Received Value	Expected result	Received Result	Verdict
Institution	Typed or selected institute from the list of recognized institutes Or New institute	blank	Error Message Toast	Error message saying 'Enter valid institute'	Pass

Degree	Typed or selected institute from the list of recognized institutes Or New institute	blank	Error Message Toast	Error message saying 'Enter valid degree'	Pass
Year	4 digit number	5 digit number	Error toast message	Error message saying 'Enter valid year'	Pass

Boundary Value Analysis

Field	Limit	Breaking of Limit expected result	Received result	Verdict
Institution	One of the recognized institutions	No institute selected	No institute selected	Pass
Degree	One of the recognized degrees	No degree selected	No degree selected	Pass
Year	4 digit number from range 1950 to 2050	Error toast message	Error toast message	Pass

Equivalence Class Partitioning

Institute

Invalid	Invalid	Invalid	Invalid	Valid
blank	Does not belong in list	Special characters	Numeric starting	Typed or selected institute name
	Xyz institute	@%\$ institute	123school	IITJ

Degree

Invalid	Invalid	Invalid	Invalid	Valid
blank	Does not belong in list	Special characters	Numeric starting	Typed or selected institute name
	Afkaga degree	@#\$ degree	123 in science	Bachelor of technology

Year

Invalid	Invalid	Invalid	Invalid	Valid
blank	More than 4 digits	Less than 4 digits	Less than 1950	4 digit between 1950 and 2050
	12345	123	1947	2061

Skills-

Black box testing

Field	Accepted value	Received Value	Expected result	Received Result	Verdict
Domains.count() ()	Typed or selected domain from the list of recognized skill Or New skill	0	Error message Toast	Error Message saying 'Please enter atleast 1 domain'	Pass
Domains.is_in_list()	Typed skill from the list of recognized skill Or New skill	False	Error message Toast	Error Message saying 'Please enter valid domain'	Pass
Skill.count()	Typed or selected skill from the list of recognized skill Or New skill	0	Error Message Toast	Error message saying 'Enter atleast 1 skill'	Pass
Skill.is_in_list()	Typed skill from the list of recognized skill Or New skill	False	Error Message Toast	Error message saying 'Enter valid skill'	Pass

Boundary Value Analysis

Field	Limit	Breaking of Limit expected result	Received result	Verdict
Skill	One of the recognized skill	No skill selected	No skill selected	Pass

Domain	One of the recognized domains	No domain selected	No domain selected	Pass
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Equivalence Class Partitioning

Skill

Invalid	Invalid	Invalid	Invalid	Valid
blank	Does not belong in list	Special characters	Numeric starting	Typed or selected skill name
—	Dancing	@%\$	bhai_lang	C++

Domain

Invalid	Invalid	Invalid	Invalid	Valid
blank	Does not belong in list	Special characters	Numeric starting	Typed or selected domain name
—	Dancing	@%\$	Shallow learning	Deep Learning

Qualifications

Black Box Testing

Field	Accepted Value	Received Value	Expected Result	Received Result	Verdict
Qualification	Alphabetical String	Numeric Value	Error Message Toast	Error message Toast saying 'qualification cannot have number'	Pass
Qualification.count()	Non-zero value	0	Error Message Toast	"Atleast 1 qualification needed"	Pass

Boundary value analysis

Field	Limit	Breaking of Limit expected result	Received result	Verdict
Qualifications	120 characters	Cursor stops noting	Cursor stops noting	Pass

Equivalence Class Partitioning

Qualifications[]

Invalid	Invalid	Valid
Numeric	Blank	Alphabetical characters
23552	–	Got distinction in PSSP

Achievements

Black Box Testing

Field	Accepted Value	Received Value	Expected Result	Received Result	Verdict
Achievements	Alphabetical String	Numeric Value	Error Message Toast	Error message Toast saying 'qualification cannot have number'	Pass

Boundary value analysis

Field	Limit	Breaking of Limit expected result	Received result	Verdict
Achievement	120 characters	Cursor stops noting	Cursor stops noting	Pass

Equivalence Class Partitioning

Achievements[...]

Invalid	Invalid	Valid
Numeric	Blank	Alphabetical characters
23552	–	Took part in inter-IIT tech meet 10.0 and worked on ISRO Mid Prep problem

Integration Test Cases

Contact

Method of sending data: A button that the user presses after entering contact fields which sends the data to the backend

Result of sending data-

Field	Necessary	Expected response on blank submission	Received Result	Verdict
Name	Yes	Error Toast Message	Error toast saying 'cannot have blank Name''	Pass
Email	Yes	Error Toast Message	Error toast saying 'cannot have blank Email'	Pass
Phone number	Yes	Error Toast Message	Error toast saying 'cannot have blank phone number'	Pass
LinkedIn	Yes	Error Toast Message	Error toast saying 'cannot have blank linkedIn acc''	Pass

Education

Method of sending data: A button that the user presses after entering contact fields which sends the data to the backend

Result of sending data-

Field	Necessary	Expected response on blank	Received Result	Verdict
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		submission		
Institution	Yes	Error Toast Message	Error toast saying 'cannot have blank Institution'	Pass
Degree	Yes	Error Toast Message	Error toast saying 'cannot have blank Degree'	Pass
Year	Yes	Error Toast Message	Error toast saying 'cannot have blank Year'	Pass

Skills

Method of sending data: A button that the user presses after entering contact fields which sends the data to the backend

Result of sending data-

Field	Necessary	Expected response on blank submission	Received Result	Verdict
Domains	Yes	Error Toast Message	Error toast saying 'one domain input necessary'	Pass
Skill	Yes	Error Toast Message	Error toast saying 'one skill necessary'	Pass

Qualifications

Method of sending data: A button that the user presses after entering contact fields which sends the data to the backend

Result of sending data-

Field	Necessary	Expected response on blank submission	Received Result	Verdict
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Qualifications	Yes	Error Toast Message	Error toast saying 'one qualification input necessary'	Pass
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Achievements

Method of sending data: A button that the user presses after entering contact fields which sends the data to the backend

Result of sending data-

Field	Necessary	Expected response on blank submission	Received Result	Verdict
Achievements	Yes	Error Toast Message	Error toast saying 'one achievement input necessary'	Pass

Testing Script

Contacts

To test contacts, we will generate a bag of different strings and numbers and test out each one.

Test for Name

```
Apha_strings = generate_alpha_strings()
Numeric_strings = generate_neumeric_strings()
Special_strings = generate_special_strings()

String_bag = shuffle([alpha_strings,Neumeric_strings,Special_strings,' '])
For object in string_bag:
    Test_result = test_namefield(object)
    Expected_result = get_expected_result(object)
    Verdict = check(Test_result,Expected_result)
    Store(verdict)
```

Similarly we can test for all fields like phone number, email etc.

Education

We can test for various fields by generating different names

Test for Institution

```
Recognized_ins = get_institution_list()
New_institutes = generate_Institute_names()
Bag = shuffle([Recognized_ins,New_institutes,' '])
For object in Bag:
    if object.is_recognized:
        verdict=check_for_match(object)
        store(verdict)
    Else:
        Verdict = check_if_valid(object)
        store(verdict)
```

Similarly we can test for all fields.

Skills

To test skills, we will generate a bag of different strings and numbers and test out each one.

Test for Name

```
Apha_strings = generate_alpha_strings()
Numeric_strings = generate_neumeric_strings()
Special_strings = generate_special_strings()

String_bag = shuffle([alpha_strings, Neumeric_strings, Special_strings, ' '],
rand.domain_list(), rand.skill_list())
For object in string_bag:
    Test_result = test_namefield(object)
    Expected_result = get_expected_result(object)
    Verdict = check(Test_result, Expected_result)
    Store(verdict)
```

Achievements & Qualifications

We can test for the validity of the string that the user enters

```
Len = generate_random_length()
For len:
    Word = generate_random_word()

    Test_string += word

Verdict = check(Test_string)
Store(Verdict)
```