

Assignment

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General Test Cases

- 1. All the required/mandatory field should be validated and marked with the asterisk (*) symbol.
- 2. A proper error message should appear on the screen if any mandatory field is not filled.
- 3. Entering blank spaces on the mandatory field leads to a validation error.
- 4. Verify text for spelling and grammatical error.
- 5. The user should not be able to submit page twice by pressing the OK button in quick succession.
- 6. Verify numeric input field and character input values. A proper error message should appear.
- 7. Application Crash or Unavailable pages should be redirected to an error message.
- 8. Leading and trailing spaces should be trimmed.
- 9. A Confirmation message should appear for successful submission.
- 10. Check the text box is blank or not by default.
- 11. Input can be typed or pasted.

Test Cases for 'Add' button

- 1. The user should be able to add a new employee using the 'Add' button on the screen. This action would open Screen 2 appropriately.
- 2. Add button should start the form for fresh input.
- 3. Add button should not open an existing record.
- 4. ID, Name, Address Line 1, Zip Code, Gender, Telephone(Mobile), Email ID, Department, Reporting Manager, Date of Joining, Photo should be the mandatory field on Screen 2.
- 5. 'Date of leaving' text box should be inactive and blank.
- 6. State and City should be a non-editable field and should be automatically filled according to a valid Zip Code.
- 7. Address Line 2, Landmark, Telephone (Landline) should be optional.
- 8. On pressing the OK button after entering all mandatory field, the database should be updated on server with a new employee entry and necessary changes should be made to the employee table.
- 9. On pressing Cancel button, the control should return to Screen 1. Changes made (if any) should not update the database and should not reflect in the employee table.

Test Cases for 'Modify' Button

- 1. The user should be able to modify any detail of an existing employee by selecting any given employee (exactly one employee) and using 'Modify' button the screen. This would open Screen 2 appropriately.
- 2. 'Modify' button should open the record of the selected employee.
- 3. Exactly one employee should be selected to modify operation. Radio button should be used for it.
- 4. ID, Name, Address Line 1, Zip Code, Gender, Telephone(Mobile), Email ID, Department, Reporting Manager, Date of Joining, Photo should be the mandatory field on Screen 2.
- 5. State and City should be a non-editable field and should be automatically filled according to a valid Zip Code.
- 6. 'Date of leaving' text box should be inactive and blank.
- 7. Address Line 2, Landmark, Telephone (Landline) should be optional.
- 8. On pressing the OK button after entering all mandatory field, the database should be updated on server and necessary changes should be made to the employee table.
- 9. On pressing Cancel button, the control should return to Screen 1. Changes made (if any) should not update the database and should not reflect in the employee table.

Test Cases for 'Delete' Button

- 1. The user should be able to use the 'Delete' button on the screen to inactivate an existing employee. This action should open Screen 2 appropriately.
- 2. Exactly one employee should be selected for delete operation. Radio button should be used for it.
- 3. Delete button should open the record of the selected employee.
- 4. The user should not be able to change other information except Date of Leaving.
- 5. Date of leaving should be filled.
- 6. On pressing the OK button after entering all mandatory field, the database should be updated on the server and necessary changes should be made to the employee table.
- 7. On pressing Cancel button, the control should return to Screen 1. Changes made (if any) should not update the database and should not reflect in the employee table.

Test Cases for Filter

- 1. The user should be able to filter this list using filters at the top of the table.
- 2. Possible filters can be ID, Name, Gender, Date of Joining, Active, Department and Reporting Manager.
- 3. Check if clicking on the filter button opens the filter option.
- 4. Check if all filter options are available.
- 5. Check if filtering is responsive for every filter.
- 6. Check if the filter option can be used for an empty search query.
- 7. Check if filtering is allowed to edit.
- 8. Check if filtering leads to the wrong result.

Test Cases for ID Field

- 1. ID field can be generated by the system or entered by the user manually.
- 2. ID field should not be null.
- 3. ID field should be of its specified length.
- 4. ID field should be unique.
- 5. ID field should only allow numeric input (digits only 0-9).
- 6. Negative number should not be allowed for numeric field.
- 7. Verify that the validation of numeric field by entering alphabets, special characters, and negative number.
- 8. Verify that the validation of a specific length by entering a random length.
- 9. Verify that the validation of uniqueness by entering an existing ID.

201478	Valid id (length 6)
-201678	Invalid – negative number
12#a&9	Invalid – field contain alphabet and special
	symbol.
201478	Invalid – already existing

Test Cases for Name Field

- 1. Name field should accept text data only.
- 2. Name field should accept both lowercase and uppercase input.
- 3. All lowercase letter should be converted into uppercase letter automatically.
- 4. Minimum and maximum length should be specified for Name field.
- 5. Name should not accept any numeric data.
- 6. Verify that the validation of text data by entering any form of special character and numbers.
- 7. Verify that the validation of length of the name by entering length less than minimum length and length greater than maximum length.

ARPIT GUPTA	Valid name
A9p2 h	Invalid – numeric data is not allowed
A#21 A	Invalid – special character is not allowed

Test Cases for Address Line Field

- 1. Address Line 1 a mandatory field and Address Line 2 is an optional field.
- 2. Minimum and maximum length should be specified for Address field.
- 3. It should accept characters, numbers and a few special characters like #, -, (,).
 - # to be used for giving flat no. like #101
- 4. Verify that the validation of length of the name by entering length less than minimum length and length greater than maximum length.
- 5. Verify that the validation of the field by entering any form of special character except (#, -, (,)).

Test Cases for Zip Code Field

- 1. It is a mandatory field.
- 2. It should accept numeric digit only.
- 3. Zip Code should be of 6 digit length exactly. Assuming for India.
- 4. Zip code should be valid. The first digit of Zip Code can't be 0.
- 5. State and City should be filled automatically according to a valid Zip Code.
- 6. Input could be either typed or pasted.
- 7. Verify that the length of the zip code by entering a length not equal to 6.
- 8. Verify that the validation of numeric digit by entering any form of alphabets and special character.

326513	Valid Zip code
3367	Invalid – length is less than exact length
85274123	Invalid – length is greater than exact length
032546	Invalid – first digit can't be zero
23@#a1	Invalid – alphabet and special character is
	not allowed

Test Cases for State and City

1. State and City fields should be non-editable and automatically filled by a valid Zip Code.

Test Cases for Gender

- 1. It is a required/mandatory field.
- 2. Gender field should be a radio button.
- 3. It should have two options Male and Female only.
- 4. Exactly one option should be selected.

✓ Male Female	Valid – two option Male and Female one
	of them is checked
Male Female	Invalid – two option but none of them is
	selected
Male Female Other	Invalid – more than two option

Test Cases for Telephone (Mobile) and Telephone (Landline)

- 1. Telephone (Mobile) is a required/mandatory field and Telephone (Landline) is an optional field.
- 2. It should accept numerical input only.
- 3. Verify that the validation of numeric input by entering any form of alphabets and special character.
- 4. Length of no. should be exactly 10 (assuming for India) and it should be a valid mobile number. In case of Landline the STD code and number both should be valid.
- 5. It should not start with zero.
- 6. Verify that the validation of the length of the mobile number by entering a length less/greater than 10.

9571538393	Valid
0714785236	Invalid – should not start with zero. We
	have considered length 10
7413#\$%a90	Invalid – only numeric digits are
	allowed
125957	Invalid – length is less than 10
123654789369	Invalid – length is greater than 10

Test cases for Email id

- 1. It is a mandatory field.
- Email address field should accept characters, numbers, special characters like (. + ""
 @ []).

Different emails and their validation

Valid Email Address	Reason
email@domain.com	Valid Email
abc.xyz@domain.com	Email contain . in the address field
email@subdomain.domain.com	Email contain dot with subdomain
email@100.100.100.100	Domain can be a valid IP address
email@[100.100.100.100]	Square bracket around IP address is
	considered valid
"email"@domain.com	Quotes around email is considered valid.
123@domain.com	Digits in address are valid
email@domain-one.com	Dash in domain name is valid
a123@domain.com	Underscore in the address field is valid
email@domain.name	.name is valid top level Domain name
email@domain.ac.in	Dot in top level Domain name considered
- arpitg.cs.16@nitj.ac.in	valid
abc-xyz@domain.com	Dash in address field is valid

Invalid Email Address	Reason
hello	Missing @sign and domain
*&^\$%#@.com	Garbage
@domain.com	Missing username
hello.domain.com	Missing @
Email@domain@domain.com	Two @ sign
.email@domain.com	Leading . in address is not allowed
email.@domain.com	Trailing . in address is not allowed
emailemail@domain.com	Multiple dots not allowed
email@domain.com (xyz)	Text followed email is not allowed
email@domain	Missing top level domain (.com/.in)
email@-domain.com	Leading dash in front of domain is invalid
email@domain.web	Top level domain should be valid
	.web is not a top level domain
email@1000.2.10000.3567	Invalid IP format
email@domaincom	Multiple dot in domain portion is invalid

Test Cases for Department Field

- 1. It is a mandatory field.
- 2. Department field should accept department present within the company.
- 3. The department field should provide a drop down list for the department present within the company.

Test Cases for Reporting Manager Field

- 1. It is a mandatory field.
- 2. Reporting Manager Field accept name present within company database.
- 3. It should follow all naming convention defined above in Name field section.

Test Cases for Date of Joining/Leaving

- 1. 'Date of Joining' is a mandatory field for all operation and 'Date of Leaving' is mandatory only for 'delete' operation. 'Date of leaving' column should be inactive for Add and Modify operation.
- 2. A calendar widget should open on clicking the date field.
- 3. The user can select a date in the calendar and after selecting a date the same date should be displayed in the date field.
- 4. The user should not be able to select the date before the current date.
- 5. Default current month's calendar should be displayed.
- 6. The user should be able to move previous and next month's calendar by choosing the left and right icon over the calendar.
- 7. The user should be able to select a specific calendar year.
- 8. The user should be able to enter date manually also in specified date format.
- 9. Date field should accept the month, year, date in dd/mm//yy format.

- 10. Verify the date for wrong format (yy/dd/mm).
- 11. User should be able to edit a date set by choosing the one selected from the calendar.
- 12. Values other than numeric should not be allowed in date field other than /.
- 13. Invalid dates are not allowed in the field (date exceeding 31 and month exceeding 12).
- 14. Verify the date for the month of February. 30 and 31 are not acceptable and 29 is acceptable in the case leap year only.

12/02/19	Valid
32/12/19	Invalid because date exceed 31
31/04/19	Invalid-Date cannot exceed 30 in the
	month of Feb, April, June, Sep, Nov.
29/02/19	Invalid-Date can't exceed 28 in the
	month of Feb and non-leap year.
12/12/2019	Invalid – format is wrong

Test Cases for Upload Photo Field

- 1. Image upload path should be valid.
- 2. Only jpg/png image will be accepted.
- 3. Verify the size of the image. Image size greater than a maximum size should not be accepted.
- 4. Verify image upload functionality with images having space or any other allowed special character in the file name.
- 5. Check for images of specified height and width (if defined) are accepted otherwise rejected.
- 6. The image upload progress bar should appear for large size images.
- 7. The user can only select a single image at a time. Multiple images can't be selected.
- 8. Check if the user is able to see the view the uploaded image.