# Task 1 - UAT Test Report

1. Bug title:

Max date can't be set beyond one year by selecting from date picker.

Description:

Date from the form page can only be set up to one year from current date by using date picker.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* From Date input box, click on Date picker icon
* Navigate to 2023 April month

## Actual result:

From Date picker the dates from April 13th 2023 (Exactly 1year + 1day from current date) have been greyed out.

## Expected result:

Date picker should allow to select any future dates.

1. Bug title:

Allows to set 'Due Date' to previous day

Description:

Date from the form page can be set to previous day whereas created 'ToDO' is today.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* From Date input box, click on Date picker icon
* Check the dates before current date

## Actual result:

Previous day’s date is not greyed out.

## Expected result:

Should allow you to set the minimum date to current date.

1. Bug title:

Create ToDo button is active even when Date input field is cleared

Description:

When the Date input filed is cleared then it allows you to add a new ToDo sets with Due Date set to empty.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* Populate valid details for ‘ToDo content’ input field
* From Date input box, clear the existing current date

## Actual result:

Create ToDo button is active and allows you to add a new ToDo sets with Due Date set to empty.

## Expected result:

Create ToDo button should be inactive.

1. Bug title:

ToDo content is accepting 101 chars whereas max is 100

Description:

The max char length allowed to enter for ToDo content is 100, but MAX is set to 110, for 111th char it’s not accepting.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* From ToDO Content input field, populate 101 characters

## Actual result:

It allows to populate 101th character.

## Expected result:

Max char length allowed to populate for ToDO Content input field should be 100.

1. Bug title:

ToDo list items is not considering sorting by ToDo content alphabetically

Description:

ToDo list items is not ordered as per AC, not getting Order by ToDo content alphabetically. It only orders by Due date ascending.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* Add a new ToDo with content ‘wxy’ for the current date
* Add another ToDo with content ‘abc’ for the current date

## Actual result:

ToDo list is getting sorted by Due date ascending but not by ToDo content alphabetically.

## Expected result:

ToDo list sorting should consider both, Due date ascending and ToDo content alphabetically.

1. Bug title:

UX issue - When number of ToDo's increases in the list then from the Form page cannot access 'Clear Completed' button

Description: This is an user experience issue, the ‘Clear Completed’ button becomes inaccessible when number of ToDo's increases in the list.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* Add 10 or more ToDo’s for the current or different dates
* Observe ‘Clear Completed’ button

## Actual result:

‘Clear Completed’ button becomes inaccessible.

## Expected result:

‘Clear Completed’ button should be accessible all the time.

1. Bug title:

UX issue - Form page resolution changes when a ToDo content is longer

## Description:

When user types in longer ToDo content then form page resolution changes and it becomes difficult to access '3 dots’ for delete/archive.

## Steps to reproduce:

* Open Todolist application using the following URL:

http://nbs-todolist-interview-389909.s3-website.eu-west-2.amazonaws.com/

* Add a new ToDO with the content longer than 40 char for any date
* Observe the form page

## Actual result:

Form page resolution changes and it becomes difficult for user to access 3 dots for deleting or achieving the ToDo.

## Expected result:

User should have easy access to 3 dots for deleting or achieving the ToDo.

# Task 2 Automation Approach

I would prefer automating these tests using Cypress tool as it is a purely JavaScript-based front end testing tool built for the modern web, this tool is designed to meet the needs of front-end developers in particular.

* *To build non-flaky tests or consistent tests and to bring stability into the system, cypress does not support switching tabs. But there is workaround to open a child tab in the same tab (by interacting with DOM element to remove the 'target')*
* *Easy installation - With Cypress NPM, you can simply install a single command and get all the screenshots and video by default on every CI, on every platform.*
* *Debugging is easy with readable errors and stack traces.*
* *Built-in retries - Cypress automatically waits for elements to exist or wait until DOM elements is visible. Can get rid of selenium exceptions like: NoSuchElelmentException/ElementNotVisibleException/StaleElementReferenceException/TimeoutException.*
* *Runs much faster because all cypress test scripts are executed within the browser by interacting with DOM events. No network lags.*

# Task 3 Cypress Tests

I’ve written tests for the first 5 bugs raised while performing UAT.

## NBS UI E2E Tests

#### Max date can not be set beyond one year by selecting from date pickerfailed

#### Allows to set Due Date to previous dayprocessing

#### Create ToDo button is active even when Date input field is clearedprocessing

#### ToDo content is accepting 101 chars whereas max is 100processing

#### ToDo list items is not considering sorting by ToDo content alphabetically

I’ve not written tests for the last 2 bugs as they are mostly suggestions for UX improvements.