Web page designer

Objective:

The intent of the challenge is to build a visual web page designer. This designer should allow users to build and publish web pages using the designer. The published web pages should be accessible in the browser by the user

Description:

The web designer should have a toolbox with the following

- Layout
- Label
- Button
- Text box
- Dropdown
- Check box
- Radio button
- Table
- Navigation link
- Image

Important:

Design view

1. The user should be able to define the layout using the layout element (e.g. when the user click layout the design mode should allow the user to define columns and rows, merged columns and rows in order to achieve the required design layout)
2. The user should be able to drag and drop the UI elements from the toolbar into the content area on the right-hand side
3. The settings icon ⠿ shows up when the user hover over the element. Users can click on the setting icon to open a modal window to define settings for each element defined using designer
4. Every element created using the designer should have a name and a unique id for the element. Use the settings icon to define the name and ID
5. For label elements the user should be able to define the font size, font style (Bold, Italic, Underline) and Color. Use the settings icon to define these settings
6. For Dropdown, Radio button, Checkbox allow user to define the value list (i.e. A dropdown to show a list of days (Monday to Sunday)). Use the setting icon to define the values list and default value
7. For tables, allow the user to define the number of columns. For each column the user should be able to define the header name. Also allow users to define the table data (e.g.

Data source for table from a JSON file or CSV file). Use the setting icons to configure table properties

8. For both button and navigation links, the user should be able to define the action (e.g. When the user clicks the button or link redirect to another page or save entered data to file on the web page). Use the settings icon to define the name, id and action properties

9. Users should be able define image control with height and width, upload images as well. Use the setting icon upload the image and define size of the image

Preview

- User should be able to click preview to view the output of the designed page in a separate tab on the browser
- Designed web pages needs to be responsive (i.e. Deployed pages should be rendering properly in Mobile, Tablet or Desktop views)

Publish

- Users should be able to publish the design. This action should create a new web page and store it in a file. The user should be able to open the file it should show the elements as per the design
- Ideally the new page should be deployed to a web server and user should have a URL to access the page in the browser

Form designer initial page

Form designer

- Layout
- T Label
- Text box
- Button
- ▽ Text box
- Check box
- ● Radio button
- Table
- Link Navigation
- Image

Publish   Preview

Form designer - Design mode, defining layout

Form designer

- Layout
- T Label
- Text box
- Button
- ▽ Text box
- Check box
- ● Radio button
- Table
- Link Navigation
- Image

Design mode

Publish   Preview

Form designer - with form elements and content

Form designer

- Layout
- T Label
- Text box
- Button
- Text box
- Check box
- Radio button
- Table
- Link Navigation
- Image

Design mode

Publish   Preview

Contact form

Name	
Title	☐ Mr. ☐ Ms. ☐ Miss.
Gender	○ Male ○ Female ○ Prefer not to say
Food choice	Vegetarian meal ▽

Menu

Starter	Main	Desert
Paneer fry	Mushroom fried rice	Ice cream

Location   🗺 100 Gandhi Nagar, Coimbatore, TN 641010

*We wish to see you everyone at the event coming **November 15, 2023***

Have a wonderful day!

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Clear   Save

Preview mode - sample page developed using designer

Contact form

Name	
Title	☐ Mr. ☐ Ms. ☐ Miss.
Gender	○ Male ○ Female ○ Prefer not to say
Food choice	Vegetarian meal ▽

Menu

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Clear   Save

Note:

Required technologies

- JavaScript
- Node JS
- HTML 5
- CSS

Browser
- Chrome or IE Edge