**2.d. Design interactive UI elements using jQuery (sliders, modals, tabs)**

**Aim:**  
To design interactive UI components such as sliders, modals, and tabs using jQuery UI.

**Tools Required:**

* Web browser (Chrome/Firefox)
* Text editor (VS Code/Notepad++)
* jQuery + jQuery UI (CDN)

**Procedure:**

1. Create a folder named **jquery\_ui**.
2. Inside the folder, create:
   * index.html
   * ui.js
3. Add markup for tabs, slider, and modal.
4. Include jQuery & jQuery UI libraries.
5. Initialize slider, modal, and tabs in ui.js.
6. Run index.html in the browser.

**Source Code:**

index.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>jQuery UI Demo</title>

<link rel="stylesheet" href="https://code.jquery.com/ui/1.13.2/themes/base/jquery-ui.css">

</head>

<body>

<h1>jQuery UI Elements</h1>

<div id="tabs">

<ul>

<li><a href="#tab-1">Home</a></li>

<li><a href="#tab-2">More</a></li>

</ul>

<div id="tab-1">

<p>Slider Value: <span id="sliderVal">50</span></p>

<div id="slider"></div>

<button id="openModal">Open Modal</button>

</div>

<div id="tab-2">

<p>Welcome to the second tab!</p>

</div>

</div>

<div id="dialog" title="Modal Window" style="display:none;">

<p>This is a modal dialog using jQuery UI.</p>

</div>

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

<script src="https://code.jquery.com/ui/1.13.2/jquery-ui.min.js"></script>

<script src="ui.js"></script>

</body>

</html>

ui.js

$(function(){

// Tabs

$("#tabs").tabs();

// Slider

$("#slider").slider({

value: 50,

min: 0,

max: 100,

slide: function(event, ui){

$("#sliderVal").text(ui.value);

}

});

// Modal

$("#openModal").on("click", function(){

$("#dialog").dialog({ modal: true });

});

});

**Expected Output:**

* A tabbed interface appears.
* Slider updates displayed value dynamically.
* Clicking "Open Modal" shows a popup dialog.

**Result:**  
The interactive UI elements (tabs, slider, modal) were successfully implemented using jQuery UI.