

Unit V	MOBILE WEB DEVELOPMENT	( 06 hrs )
<p><b>Mobile-First:</b> What is Mobile-First? What is Mobile Web? Understanding Mobile Devices and Desktop.</p> <p><b>JQuery Mobile:</b> Introduction to the jQuery Mobile Framework, Set-up jQuery Mobile, Pages, Icons, Transitions, Layouts Widgets, Events, Forms, Themes, Formatting Lists, Header and Footer, CSS Classes, Data Attributes, Building a Simple Mobile Webpage.</p>		

**Q5) a)** What is navigation? Write a code to navigate from one page to another page in jQuery mobile. **[9]**

**b)** What is jQuery mobile? Explain layout in jQuery Mobile design with its types. **[9]**

OR

**Q6) a)** Why CSS is important in designing mobile websites? Give an example of CSS class used for mobile website design. **[9]**

**b)** List any five widgets in jQuery mobile and explain any two in brief. **[9]**

- Q5)** a) Explain the mobile devices and desktop devices in detail. [6]  
b) What is j Query? Explain its architecture in detail. [6]  
c) What is CDN? How it is powerful in web development? [6]

OR

- Q6)** a) Explain the mobile devices and desktop devices in detail. [6]  
b) What is j Query? Is j Query a mobile framework? If yes. explain in brief [6]  
c) What is a page? Write a code to create a page in j Query mobile. [6]

- Q5)** a) What is jQuery Mobile? Explain Mobile jQuery framework in detail. [6]  
b) Explain the mobile devices and desktop devices in detail ? [6]  
c) Write a code to create a header and footer in jQuery Mobile. [6]

OR

- Q6)** a) Explain any 3 events in jQuery Mobile with example? [6]  
b) Compare jQuery with jQuery Mobile. [6]  
c) Explain the concept of Mobile-First design in web development. Explain its significance and benefits in creating responsive and user-friendly websites. [6]

- Q5)** a) What is navigation? Write a code to navigate from one page to another page in jQuery mobile. [9]
- b) What is jQuery mobile? Explain layout in jQuery Mobile design with its types. [9]

*P.T.O.*

OR

- Q6)** a) Why CSS is important in designing mobile websites? Give an example of CSS class used for mobile website design. [9]
- b) List any five widgets in jQuery mobile and explain any two in brief. [9]

- Q5)** a) What is Mobile-First and Mobile Web? List different Mobile Devices. [6]  
b) What is jQuery Mobile? Explain Mobile jQuery Framework in detail. [6]  
c) Explain any 3 events in jQuery Mobile with example? [6]

OR

- Q6)** a) Compare jQuery with jQuery Mobile. [6]  
b) What is jQuery Mobile? What are the advantages and disadvantages of jQuery Mobile? [6]  
c) Write a code to create a header and footer in jQuery Mobile. [6]

## **Mobile-First**

- **What is Mobile-First?**
- **What is Mobile Web?**
- **Understanding Mobile Devices and Desktop**

## Mobile-First Approach

### Mobile-First kya hai?

Mobile-First ek web design technique hai jisme website ya app ko **pehle mobile devices** ke liye design kiya jata hai (jaise smartphones), phir usko bade screens (tablets, desktops) ke liye upgrade kiya jata hai.

### Key Points:

- Design pehle choti screen ke liye hota hai.
- Simple aur fast content focus hota hai.
- Responsive design banane ke liye best approach hai.



## ✓ **Mobile Web kya hota hai?**

Mobile Web ka matlab hai mobile devices (smartphones, tablets) se web pages ko access karna — jaise Chrome ya Safari browser se.

### **Features:**

- Choti screen ke liye optimized layout.
- Touch-based navigation.
- Screen size ke hisab se auto adjust hone wala layout (responsive/adaptive).

## Mobile Devices aur Desktop Devices ka Comparison

### ✓ Mobile Devices kya hote hain?

Mobile devices choti, portable devices hoti hain jo wireless hoti hain aur mostly touch screen use karti hain.

### Examples:

- Smartphones
- Tablets
- Smartwatches
- E-Readers (e.g., Kindle)
- Fitness Bands

### Features:

- Small screen (4–7 inch)
- Touch input
- Battery se chalte hain
- Mobile OS (Android, iOS)
- Mobile data/Wi-Fi

## ✓ Desktop Devices kya hote hain?

Desktop devices fixed hoti hain, zyada powerful hoti hain aur bada screen provide karti hain.

### **Examples:**

- Personal Computers (PCs)
- Laptops (kabhi kabhi portable hote hain, par mostly desktop ke jaise hi use hote hain)

### **Features:**

- Large screen (19+ inch)
- Keyboard + Mouse input
- High performance (RAM, CPU)
- Desktop OS (Windows, macOS)
- Mostly Wi-Fi ya Ethernet se connected

Explain the concept of Mobile-First design in web development. Explain its significance and benefits in creating responsive and user-friendly websites.

[6]

## Mobile-First Design in Web Development

### Mobile-First Design kya hota hai?

**Mobile-First Design** ek web design approach hai jisme website ko **pehle mobile devices (choti screen)** ke liye design kiya jata hai, fir usi design ko **badi screens** (tablet, desktop) ke liye gradually enhance kiya jata hai.

Iska matlab hai ki tum sabse pehle website ka basic layout mobile phone ke liye ready karte ho — jahan space kam hota hai, aur user ka focus content par hota hai. Uske baad extra features aur styling larger screens ke liye add ki jaati hai.

## 🎯 Significance (Importance) of Mobile-First Approach

**1. Zyada Mobile Users** – Aaj kal log zyadatar websites ko mobile pe hi access karte hain, isliye pehle mobile pe focus karna logical hai.

**2. Better Performance** – Mobile-first websites lightweight hoti hain, jisse fast loading hoti hai — especially on slow networks.

**3. User-Centered Design** – Mobile-first approach user ki basic needs ko priority deti hai, jisse usability improve hoti hai.

**4. Progressive Enhancement** – Tum ek solid foundation build karte ho mobile ke liye, fir gradually features add karte ho badi screen ke liye.

Benefit	Explanation
<b>Fast Loading</b>	Kam resources use karne ki wajah se website jaldi load hoti hai.
<b>Better UX (User Experience)</b>	Clear content aur simple navigation mobile users ke liye helpful hoti hai.
<b>SEO Friendly</b>	Google mobile-friendly websites ko ranking mein preference deta hai.
<b>Responsive by Default</b>	Design naturally responsive banta hai, jo har screen size par sahi dikhta hai.
<b>Focus on Essentials</b>	Sirf important features aur content pe dhyan diya jata hai.

 **Why CSS is Important in Designing Mobile Websites?**



## ✦✦ Importance of CSS in Mobile Website Design:

### **1.Responsive Layout**

- CSS ke through hum different screen sizes ke liye layout adjust kar sakte hain.  
(Using media queries)

### **2.Consistent Design**

- Same CSS classes use karke uniform styling hoti hai across all pages and devices.

### **3.Touch-Friendly UI**

- Buttons, forms, menus wagaira ko mobile touch ke liye optimize kiya ja sakta hai using padding, margin, font-size, etc.

### **4.Faster Loading**

- CSS lightweight hota hai, jisse mobile site fast load hoti hai.

### **5.Visibility Control**

- CSS se hum content ko chhoti ya badi screen ke according show/hide kar sakte hain.

## □ Example: CSS Class for Mobile Design

```
/* Example: Mobile-only content using media query */
```

```
.mobile-box {  
  background-color: #f0f0f0;  
  padding: 15px;  
  font-size: 14px;  
  text-align: center;  
}
```

```
/* Mobile responsive behavior */
```

```
@media (max-width: 600px) {  
  .mobile-box {  
    font-size: 12px;  
    background-color: #e0f7fa;  
  }  
}
```

## 🔍 Explanation:

- .mobile-box ek custom CSS class hai.
- Usme @media (max-width: 600px) likhne ka matlab hai:

Jab screen choti ho (jaise mobile), tab font-size aur background color change ho jaye.

## ◆ 1. What is jQuery?

**jQuery** ek fast, small, aur feature-rich **JavaScript library** hai. Ye JavaScript code ko simple banata hai — especially DOM manipulation, event handling, animations, and AJAX ke liye.

### ✓ **Features of jQuery:**

- Easy HTML element selection (`$(selector)`)
- Cross-browser compatibility
- Animation effects
- AJAX support
- Lightweight and open-source

## ◆ 2. Is jQuery a Mobile Framework?

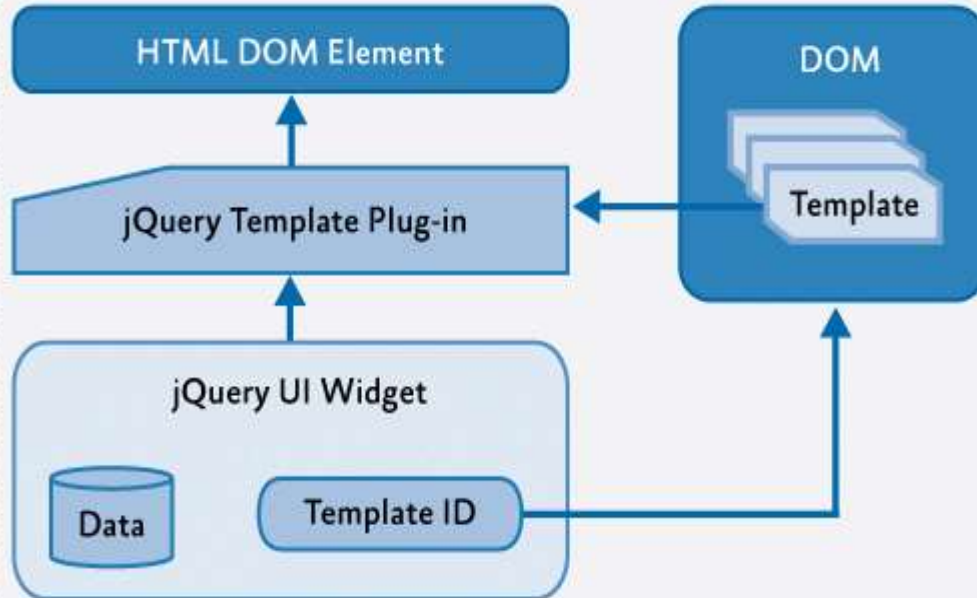
**No**, jQuery itself **ek mobile framework nahi** hai.  
But, **jQuery Mobile** is a separate framework **built on top of jQuery** that is specifically designed for **mobile devices**.

## □ jQuery Architecture in Detail

jQuery ka architecture modular hota hai:

Component	Role
Core Module	Basic functionality like DOM traversal, event binding, chaining
Selector Engine	jQuery ke powerful CSS-style selectors (based on Sizzle engine)
Event Handling	Click, hover, keypress jaise events ko handle karna easy banata hai
Effects/Animation	Show/hide, fade, slide etc. built-in animations
AJAX Module	Server se data fetch karne ke liye (GET, POST requests)
Utilities	Helper functions (like \$.each(), \$.trim())

## Web Page



## □ **Explanation of jQuery Architecture Diagram:**

### **1. Web Page**

- Ye pura process ek web page ke andar hota hai.

### **2. HTML DOM Element**

- Web page ke HTML elements (like <div>, <ul>, <p>) ko **jQuery** use karke manipulate kiya jata hai.
- jQuery is HTML structure ko change, hide, show, animate, etc. kar sakta hai.



### 3. DOM (Document Object Model)

- Ye pura HTML structure hota hai jo browser samajhta hai.
- Isme **Templates** store hote hain — jinko baad me use kiya jata hai data ke sath.

### 4. Template

- Template ek predefined HTML block hota hai jisme placeholders hote hain.
- For example:

```
<script type="text/x-jquery-tmpl" id="myTemplate">  
  <li>${name}</li>  
</script>
```

## 5. jQuery UI Widget

- Ye ek **component** hota hai jisme:
  - **Data** hota hai (jaise name, email etc.)
  - **Template ID** refer kiya jata hai (kaunsa template use karna hai)

## 6. jQuery Template Plug-in

- Ye ek tool hai jQuery ka jo:
  - Template aur data ko combine karta hai
  - Final HTML generate karta hai

## 7. Flow of Data (How it works):

### →□ **Step 1:**

Data aur Template ID milta hai jQuery UI Widget ko.

### →□ **Step 2:**

Template ID ke through DOM se Template fetch hota hai.

### →□ **Step 3:**

jQuery Template Plug-in, Template aur Data ko combine karta hai.

### →□ **Step 4:**

Final HTML generate hota hai and wo **HTML DOM Element** me inject kar diya jata hai.

## **Component**

**Data**

**Template**

**jQuery Plug-in**

**DOM Element**

## **Function**

Real information like user name, price etc.

HTML structure jahan data fill hota hai

Template + Data = HTML banata hai

Jisme final HTML inject hota hai

### ◆ 3. What is jQuery Mobile?

**jQuery Mobile** ek **touch-optimized web framework** hai jo HTML5, CSS3, and jQuery par based hai. Iska main goal hai **mobile-friendly responsive websites and web apps** banana — that work across all devices like phones, tablets, and desktops.

## □ Layout in jQuery Mobile Design and Its Types

jQuery Mobile uses **multi-page layout system** using `<div data-role="page">`.

Basic Layout Structure:

```
<div data-role="page">  
  <div data-role="header">Header</div>  
  <div data-role="content">Main Content</div>  
  <div data-role="footer">Footer</div>  
</div>
```

### **Types of Layouts:**

- 1.Single Page Layout** – Ek hi HTML file me sab content hota hai.
- 2.Multi-Page Layout** – Ek HTML file me multiple pages using `<div data-role="page">`
- 3.Dialog Layout** – Popup style layout using `data-rel="dialog"`

### 👉 Advantages of jQuery Mobile

- ✓ Touch-friendly UI components
- ✓ Cross-platform (iOS, Android, Windows)
- ✓ Easy to integrate with jQuery
- ✓ Built-in themes and responsive design
- ✓ Reduces development time

### 👉 Disadvantages of jQuery Mobile

- ✗ Slower performance compared to modern frameworks
- ✗ Heavy for very basic apps
- ✗ Outdated compared to React Native, Flutter etc.
- ✗ Limited customization compared to CSS frameworks like Bootstrap



# Step-by-Step Setup of jQuery Mobile

### ◆ Step 1: HTML File Create Karo

Sabse pehle ek HTML file banao, jaise index.html.

### ◆ Step 2: HTML5 Basic Structure Likho

### ◆ Step 3: jQuery & jQuery Mobile ke CDN Add Karo

Head tag ke andar ye 3 links add karo:

```
<!-- jQuery Mobile CSS -->
```

```
<link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
```

```
<!-- jQuery Library -->
```

```
<script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
```

```
<!-- jQuery Mobile JS -->
```

```
<script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
```

## ◆ Step 4: Basic Page Layout Add Karo

```
<body>  
  <div data-role="page" id="home">  
  
    <div data-role="header">  
      <h1>Welcome</h1>  
    </div>  
  
    <div data-role="content">  
      <p>This is a simple jQuery Mobile page.</p>  
    </div>  
  
    <div data-role="footer">  
      <h4>Footer Section</h4>  
    </div>  
  
  </div>  
</body>
```

## ◆ Step 5: File Browser Mein Open Karo

- index.html file ko browser (Chrome/Firefox) mein open karo.
- Aapko ek clean, mobile-style web page dikhega with header, content, and footer.

### 📱 Output Layout:

- Header:** Top bar with title
- Content:** Text/message
- Footer:** Bottom bar

## ■ What is a Page in jQuery Mobile?

❖ **Page** ek full-screen **section** hota hai web app ka, jise mobile screen par as a screen ya view dikhaya jata hai.

❖ jQuery Mobile mein **ek page** banane ke liye hum use karte hain:

```
<div data-role="page" id="page-id">
```

```
...
```

```
</div>
```

★ Ek page = ek screen jisme header, content aur footer ho sakta hai.

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple Page</title>

  <!-- jQuery Mobile CSS -->
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">

  <!-- jQuery -->
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>

  <!-- jQuery Mobile JS -->
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
```

```
<body>
```

```
  <!-- Page Start -->
```

```
  <div data-role="page" id="mypage">
```

```
    <!-- Header -->
```

```
    <div data-role="header">
```

```
      <h1>My First Page</h1>
```

```
    </div>
```

```
    <!-- Content -->
```

```
    <div data-role="content">
```

```
      <p>Yeh ek simple jQuery Mobile page hai.</p>
```

```
    </div>
```

```
    <!-- Footer -->
```

```
    <div data-role="footer">
```

```
      <h4>Footer Text</h4>
```

```
    </div>
```

```
  </div>/#mypage
```

```
  <!-- Page End -->
```

```
</body>
```

```
</html>
```

## 📱 What is Navigation in jQuery Mobile?

**Navigation** ka matlab hota hai ek page se **dusre page par jaana**, bina puri website reload kiye.

jQuery Mobile me navigation smooth aur fast hota hai — jaise ek mobile app me hota hai.

💡 jQuery Mobile me **multi-page layout** ka use karke ek hi HTML file me multiple screens (pages) bana sakte hain,  
aur unke beech navigate kar sakte hain.



```
<body>
```

```
<!-- ✅ Page 1 -->
```

```
<div data-role="page" id="page1">
```

```
  <div data-role="header">
```

```
    <h1>Page 1</h1>
```

```
  </div>
```

```
  <div data-role="content">
```

```
    <p>Yeh pehla page hai.</p>
```

```
    <!-- Navigate to Page 2 -->
```

```
    <a href="#page2" class="ui-btn">Go to Page 2</a>
```

```
  </div>
```

```
  <div data-role="footer">
```

```
    <h4>Page 1 Footer</h4>
```

```
  </div>
```

```
</div>/#page1
```

```
<!-- ✅ Page 2 -->
```

```
<div data-role="page" id="page2">
```

```
  <div data-role="header">
```

```
    <h1>Page 2</h1>
```

```
  </div>
```

```
  <div data-role="content">
```

```
    <p>Yeh dusra page hai.</p>
```

```
    <!-- Navigate back to Page 1 -->
```

```
    <a href="#page1" class="ui-btn">Back to Page 1</a>
```

```
  </div>
```

```
  <div data-role="footer">
```

```
    <h4>Page 2 Footer</h4>
```

```
  </div>
```

```
</div>/#page2
```

```
</body>
```

```
</html>
```

## ◆ What are Icons in jQuery Mobile?


**Icons** chhoti chhoti graphic symbols hote hain (jaise 🏠 home, ⚙️ settings, ➡️ arrow) jo aap **buttons, links ya toolbars** mein use karte ho — taaki UI **zyada user-friendly aur smart dikhe**.

jQuery Mobile already **built-in icons** provide karta hai, so alag se image use karne ki zarurat nahi hoti.

Icon Name

Use / Matlab

home

Home icon 

arrow-r

Right arrow 


arrow-l

Left arrow 


plus

Add / Create 

delete

Trash / Remove 


gear

Settings 

star

Favorite / Like 

check

Confirm / Tick 

## Full Code: jQuery Mobile Buttons with Icons

```
<!DOCTYPE html>
<html>
<head>
  <title>Icon Demo</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page" id="demo">

  <div data-role="header">
    <h1>Icon Buttons</h1>
  </div>

  <div data-role="content">
    <a href="#" class="ui-btn ui-icon-home ui-btn-icon-left">Home</a>
    <a href="#" class="ui-btn ui-icon-gear ui-btn-icon-left">Settings</a>
    <a href="#" class="ui-btn ui-icon-arrow-r ui-btn-icon-right">Next</a>
  </div>

</div> /#demo

</body>
</html>
```

## Transitions in jQuery Mobile

### ◆ What is a Transition?

**Transition** ka matlab hota hai:

Jab aap ek page se **dusre page par jaate ho**, to jo **animation effect** dikhai deta hai, use hi **transition** kehte hain.

jQuery Mobile me transitions website ko **smooth aur mobile-app jaisa feel** dete hain.

## Common Transitions in jQuery Mobile:

Transition Type	Description (Matlab)
slide	Slide left/right effect (default)
fade	Dheere dheere gayab hona
pop	Zoom-in pop effect
flip	Page flip (jaise card)
turn	Book-style turning effect
flow	Flowing effect
slidefade	Slide + fade dono
none	Koi animation nahi

### ✓ Simple Code with Transition:

```
<a href="#page2" data-transition="fade" class="ui-btn"> Go to Page 2 (Fade Effect) </a>
```

◆ data-transition="fade": Yeh bataata hai ki page transition me **fade effect** lagega.

```
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Transitions</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<!-- Page 1 -->
<div data-role="page" id="page1">
  <div data-role="header"><h1>Page 1</h1></div>
  <div data-role="content">
    <a href="#page2" class="ui-btn" data-transition="slide">Slide to Page 2</a>
    <a href="#page2" class="ui-btn" data-transition="fade">Fade to Page 2</a>
  </div>
</div>/#page1

<!-- Page 2 -->
<div data-role="page" id="page2">
  <div data-role="header"><h1>Page 2</h1></div>
  <div data-role="content">
    <a href="#page1" class="ui-btn" data-transition="pop">Back with Pop</a>
  </div>
</div>/#page2

</body>
</html>
```



□ **Summary (Yad Rakho):**

- Transitions **page change ko animated banate hain.**
- Sirf data-transition="..." attribute lagana hota hai.
- Mobile users ke liye experience better hota hai.

### ◆ Widgets kya hain?

**Widgets** chhote chhote **pre-built UI components** hote hain jo web page ya app me alag-alag functions aur features dete hain. Ye **ready-made elements** hote hain jo aap asaani se use kar sakte ho, bina apna code likhe.

### **jQuery Mobile Widgets:**

- jQuery Mobile me bahut sare widgets hote hain jo specially **mobile devices ke liye optimized** hote hain.
- Ye widgets aapke web pages ko mobile-app jaisa look aur feel dete hain.

Widget	Explanation	Example Code
<b>Button</b>	Clickable element for actions.	<code>&lt;a href="#" class="ui-btn"&gt;Click Me&lt;/a&gt;</code>
<b>Slider</b>	Range input to select numeric value.	<code>&lt;input type="range" name="slider" min="0" max="100" value="50"&gt;</code>
<b>Checkbox</b>	Multiple options select karne ke liye.	<code>&lt;input type="checkbox" id="chk1"&gt;&lt;label for="chk1"&gt;Option 1&lt;/label&gt;</code>
<b>Radio Button</b>	Single option select karne ke liye.	<code>&lt;input type="radio" name="radio" id="r1"&gt;&lt;label for="r1"&gt;Choice 1&lt;/label&gt;</code>
<b>Listview</b>	Items ka list display karne ke liye.	<code>&lt;ul data-role="listview"&gt;&lt;li&gt;Item 1&lt;/li&gt;&lt;li&gt;Item 2&lt;/li&gt;&lt;/ul&gt;</code>

```
<body>
```

```
<div data-role="page">
```

```
  <div data-role="content">
```

```
    <a href="#" class="ui-btn">Button</a>
```

```
    <label>Slider:</label>
```

```
    <input type="range" min="0" max="100" value="50">
```

```
    <label>Checkbox:</label>
```

```
    <input type="checkbox" id="cb1"><label for="cb1">Option 1</label>
```

```
    <label>Radio:</label>
```

```
    <input type="radio" name="r" id="r1" checked><label for="r1">Choice 1</label>
```

```
    <ul data-role="listview">
```

```
      <li>Item 1</li>
```

```
      <li>Item 2</li>
```

```
    </ul>
```

```
  </div>
```

```
</div>
```

# Events in jQuery Mobile

## ◆ What are Events?

**Events** wo actions hote hain jo user ya browser perform karta hai — jaise:

- Button click karna
- Page load hona
- Screen ko swipe karna
- Form submit karna
- Input field me type karna

jQuery Mobile me hum in events ko detect kar ke custom action perform kar sakte hain.

## ❖ Common jQuery Mobile Events:

Event Type	Description (Hinglish)
pageinit	Jab page initialize hota hai
pageshow	Jab page visible hota hai
tap	Jab user screen ko touch karta hai
swipe	Jab user left ya right swipe karta hai
click (basic)	Jab user kisi button/link ko click kare

```
> app.html > ...
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Mobile Event</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.
css" />
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
  <script>
    $(document).on("pageinit", "#mypage", function() {
      $("#mybtn").on("tap", function() {
        alert("Button tapped!");
      });
    });
  </script>
</head>
<body>

<div data-role="page" id="mypage">
  <div data-role="content">
    <a href="#" id="mybtn" class="ui-btn">Tap Me</a>
  </div>
</div> /#mypage

</body>
</html>
```

12 34 No.	📁 Event Name	💬 Explanation (Hinglish)	📄 Example Code Snippet
1	pageinit	Jab koi page pehli baar load hota hai, tab ye event trigger hota hai. Mostly initialization ke liye use hota hai.	<pre>\$(document).on("pageinit", "#home", function() { alert("Page initialized!"); });</pre>
2	pageshow	Jab page screen par dikhta hai (visible hota hai), tab ye event fire hota hai.	<pre>\$(document).on("pageshow", "#about", function() { console.log("Page is visible!"); });</pre>
3	tap	Jab user kisi button ya element ko tap (touch/click) karta hai. Touch devices ke liye optimized.	<pre>\$(document).on("tap", "#btn", function() { alert("Tapped!"); });</pre>



## What are Forms in jQuery Mobile?

Forms allow users to **input data** — like name, email, password, options, etc. jQuery Mobile me forms **mobile-friendly design** ke sath aate hain, jisme inputs, buttons, sliders, etc. automatically styled hote hain.

Element	Description (Hinglish)
input (text)	User se text data lena
textarea	Multiple lines input (message, etc.)
checkbox	Multiple options select karne ke liye
radio	

```
<!DOCTYPE html>
<html>
<head>
  <title>Form Example</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.
  css" />
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page" id="formPage">
  <div data-role="header">
    <h1>Registration Form</h1>
  </div>

  <div data-role="content">
    <form>

      <label for="name">Name:</label>
      <input type="text" name="name" id="name">

      <label for="email">Email:</label>
      <input type="email" name="email" id="email">

      <label for="gender">Gender:</label>
      <input type="radio" name="gender" id="male" value="male">
      <label for="male">Male</label>
      <input type="radio" name="gender" id="female" value="female">
      <label for="female">Female</label>

    </form>
  </div>
</div>
</body>
</html>
```

```
<label for="hobby">Hobbies:</label>  
<input type="checkbox" id="read"><label for="read">Reading</label>  
<input type="checkbox" id="play"><label for="play">Playing</label>
```

```
<label for="msg">Message:</label>  
<textarea id="msg"></textarea>
```

```
<input type="submit" value="Submit" class="ui-btn ui-btn-b">
```

```
</form>
```

```
</div>
```

```
</div>/#formPage
```

```
</body>
```

```
</html>
```

### ✓ **Features of jQuery Mobile Forms:**

- **Auto-styled controls** – no extra CSS needed.
- **Responsive design** – mobile pe easily fit hota hai.
- **Touch-friendly** – buttons and inputs bada aur accessible.

## Themes in jQuery Mobile

### ◆ What are Themes?

**Themes** in jQuery Mobile are used to **style** your mobile webpage — jaise colors, buttons, headers, and footers ko visually attractive banana. Predefined themes aate hain (**A, B, C, D...**), jinko aap directly use kar sakte ho.

## 🎯 Why Use Themes?

- Better **look and feel**.
- Quickly apply color schemes.
- No need to write custom CSS.
- Mobile-friendly design built-in hota hai.

## □ Using Themes – Basic Syntax

```
<div data-theme="b"> <!-- Applies theme B -->  
  ...  
</div>
```

Or for a button:

```
<a href="#" class="ui-btn" data-theme="a">Click Me</a>
```

```
<!DOCTYPE html>
<html>
<head>
  <title>Themes Example</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.
css" />
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page">

  <div data-role="header" data-theme="b">
    <h1>Header with Theme B</h1>
  </div>

  <div data-role="content" data-theme="a">
    <p>Content area with Theme A.</p>
    <a href="#" class="ui-btn" data-theme="c">Themed Button</a>
  </div>

  <div data-role="footer" data-theme="d">
    <h4>Footer with Theme D</h4>
  </div>

</div>

</body>
</html>
```



Theme Code	Description
a	Default light theme
b	Dark theme
c, d	Optional alternate themes
Custom	You can create your own

💡 **Tip:**

Aap **ThemeRoller** tool ka use karke apna custom theme bhi create kar sakte ho — <http://themeroller.jquerymobile.com>



## Formatting Lists in jQuery Mobile

### ◆ Kya hai Listview?

<ul> ya <ol> ko jQuery Mobile me **data-role="listview"** dene se wo auto-styled, touch-friendly list ban jata hai.

## ◆ Common List Formatting Options:

Option	Use (Hinglish)
<code>data-inset="true"</code>	List ko page ke beech me chhota aur rounded corners dega.
<code>data-divider-theme="b"</code>	List section headers (dividers) ka alag theme/color laga dega.
<code>data-role="list-divider"</code>	Divider item banata hai—list ko sections me todne ke liye.
<code>data-icon="star"</code>	Har <code>&lt;li&gt;</code> me default arrow ki jagah custom icon (star) show karega.
<code>data-filter="true"</code>	Search box add karega list ke upar, filtering ke liye.

```
<!DOCTYPE html>
<html>
<head>
  <title>Formatted List</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page">
  <div data-role="header"><h1>My List</h1></div>
  <div data-role="content">

    <ul data-role="listview"
      data-inset="true"
      data-divider-theme="b"
      data-filter="true">

      <li data-role="list-divider">Fruits</li>
      <li data-icon="star">Apple</li>
      <li data-icon="star">Banana</li>
      <li data-icon="star">Cherry</li>

      <li data-role="list-divider">Vegetables</li>
      <li>Carrot</li>
      <li>Broccoli</li>
      <li>Spinach</li>

    </ul>

  </div>
</div>
```

```
</div>  
<div data-role="footer"><h4>Footer Text</h4></div>  
</div>  
  
</body>  
</html>
```

### 🔍 Code Explanation :

- **data-role="listview"**: Basic jQuery Mobile list banata hai.
- **data-inset="true"**: List ko inset style deta hai (rounded & centered).
- **data-divider-theme="b"**: Section headers (Fruits, Vegetables) ko theme-B color karta hai.
- **data-role="list-divider"**: Divider items define karta hai.
- **data-icon="star"**: List item ke aage star icon show karta hai.
- **data-filter="true"**: Auto search/filter box add karta hai.

## ✦ Header and Footer in jQuery Mobile

### ◆ Kya hota hai Header aur Footer?

In jQuery Mobile, **Header** aur **Footer** page ke top aur bottom ke fixed areas hote hain.

Ye user ko consistent navigation aur info provide karte hain.

## ◆ Basic Syntax

`<div data-role="header">...</div>` ← Top section (Header)

`<div data-role="footer">...</div>` ← Bottom section (Footer)



```
<!DOCTYPE html>
<html>
<head>
  <title>Header Footer Example</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page" id="mainPage">

  <!-- Header Section -->
  <div data-role="header" data-theme="b">
    <h1>My App Header</h1>
  </div>

  <!-- Main Content -->
  <div data-role="content">
    <p>Welcome to my mobile page!</p>
  </div>

  <!-- Footer Section -->
  <div data-role="footer" data-theme="b">
    <h4>&copy; 2025 My Website</h4>
  </div>

</div>/#mainPage

</body>
</html>
```

Section	Description
Header	Page ke top pe title ya nav links ke liye use hota hai
Content	Page ka main area (text, forms, etc.)
Footer	Page ke bottom pe copyright, links etc.

### ✦✦ Features:

- **data-role="header"** → Automatically styled as a top bar.
- **data-role="footer"** → Styled as bottom fixed bar.
- **data-theme="b"** → Dark theme apply karta hai.
- Can add **buttons**, **navbars**, etc.

## CSS Classes in jQuery Mobile

### ◆ CSS Class kya hoti hai?

**CSS Classes** ek way hoti hain elements ko style dene ka. jQuery Mobile me already **built-in CSS classes** hoti hain jo automatically elements ko **responsive aur mobile-friendly** bana deti hain.

## ✓ Common jQuery Mobile CSS Classes:

CSS Class	Use (Hinglish me)
.ui-btn	Button banane ke liye
.ui-bar	Header/Footer background ke liye
.ui-body	Page body styling ke liye
.ui-icon-*	Icons add karne ke liye (e.g., ui-icon-star)
.ui-disabled	Kisi element ko disable karne ke liye

```
<!DOCTYPE html>
<html>
<head>
  <title>CSS Classes Example</title>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<div data-role="page">

  <div data-role="header" class="ui-bar ui-bar-b">
    <h1>My Page</h1>
  </div>/.ui-bar.ui-bar-b

  <div data-role="content" class="ui-body ui-body-a">
    <p>This is a styled content area using <b>CSS classes</b>.</p>
    <a href="#" class="ui-btn ui-btn-b ui-icon-star ui-btn-icon-left">Star Button</a>
  </div>/.ui-body.ui-body-a

</div>

</body>
</html>
```

Class Name	Effect
ui-bar-b	Dark theme header bar
ui-body-a	Light background body
ui-btn	Button banata hai (mobile friendly)
ui-icon-star	Button ke left me star icon show karta hai
ui-btn-icon-left	Icon ko button ke left side me place karta hai

## 🎯 **Why Use CSS Classes in jQuery Mobile?**

- Bina custom CSS ke **clean design milta hai**
- Fast development
- Mobile optimized by default
- Touch-friendly elements



## □ **Data Attributes in jQuery Mobile**

### ◆ Data Attributes kya hote hain?

**Data attributes** HTML elements me extra information store karne ke liye use hote hain, jo JavaScript/jQuery ke through access ya control kiya ja sakta hai.

Ye sab attributes data- se start hote hain.

📱 jQuery Mobile me ye attributes UI components ko customize karne ke liye use hote hain, jaise:

## Data Attribute

## Use (Hinglish)

data-role

Kisi element ka role set karta hai (page, header, etc.)

data-theme

Color theme apply karta hai (a, b, c...)

data-icon

Button me icon add karta hai

data-inset

List ko chhoti aur rounded corners deta hai

data-position

Footer ya header ko fixed karta hai

```
<html>
<head>
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>

<!-- Full Page with Data Attributes -->
<div data-role="page" id="homePage">

  <!-- Header -->
  <div data-role="header" data-theme="b" data-position="fixed">
    <h1>My App</h1>
  </div>

  <!-- Content -->
  <div data-role="content">
    <a href="#" class="ui-btn" data-icon="home" data-theme="a">Home Button</a>
  </div>

  <!-- Footer -->
  <div data-role="footer" data-theme="b" data-position="fixed">
    <h4>© 2025 Footer</h4>
  </div>

</div>/#homePage

</body>
</html>
```

## Attribute

data-role="page"

data-theme="b"

data-position="fixed"

data-icon="home"

## What It Does

Full page layout banata hai

Dark color theme lagata hai

Header/Footer ko screen pe fix karta hai

Button me home icon lagata hai

### ★ Use of Data Attributes:

- Easy customization
- Clean & semantic HTML
- jQuery Mobile automatically inko read karke UI components ready karta hai



# **Building a Simple Mobile Webpage using jQuery Mobile**

100 / ...

```
<!DOCTYPE html>
<html>
<head>
  <title>Student Profile</title>

  <!-- jQuery Mobile CDN -->
  <link rel="stylesheet" href="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.css">
  <script src="https://code.jquery.com/jquery-1.11.3.min.js"></script>
  <script src="https://code.jquery.com/mobile/1.4.5/jquery.mobile-1.4.5.min.js"></script>
</head>
<body>
```









## 🌐 What is CDN?

**CDN** ka full form hai **Content Delivery Network**.

Ye ek network hota hai multiple servers ka jo duniya bhar me alag-alag jagah par hote hain. Inka kaam hai static content (like images, CSS, JavaScript files, videos, etc.) ko fast aur efficiently deliver karna user ke location ke close server se.

## 🚀 How is CDN Powerful in Web Development?

### 🔍 Feature

**Faster Website Loading**

**Reduces Server Load**

**Improved User Experience**

**Global Availability**

**Security Benefits**

### 💡 Explanation

CDN user ke najdeek wale server se data deliver karta hai, jisse website jaldi load hoti hai.

Origin server pe direct load kam hota hai kyunki CDN content serve karta hai.

Page load fast hone se user ko smooth experience milta hai, especially on mobile.

Website duniya ke kisi bhi kone me fast access ho sakti hai.

CDN DDoS protection, SSL support aur firewall features bhi offer karta hai.

**jayesh\_kande\_** ▾ ●

What's  
on your  
playlist?



**Jayesh Kande**

**16**  
posts

**275**  
followers

**276**  
following

23

रास्ते बदलो, मंजिल नहीं

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