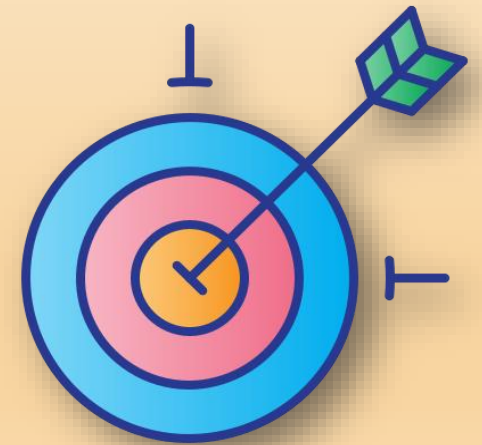# Bootstrap and jQuery for Responsive Web Pages

Session 01
Fundamentals of Bootstrap

Objectives

✓ Explain the history and benefits of Bootstrap

✓ Elaborate on setup and configuration for using Bootstrap

✓ List steps to create a basic Bootstrap page

✓ Define and describe the Bootstrap grid system

✓ Illustrate responsive layouts with nested columns and order classes

Introduction to Bootstrap [1-3]

Is a popular open-source framework used to create responsive and mobile-friendly Websites and Web applications.

Offers a strong set of CSS and JS tools that help developers build modern, attractive, and easy-to-use interfaces.

Simplifies front-end development with customizable design templates for text, forms, buttons, navigation, and other interface elements, making it easier and more efficient.

Introduction to Bootstrap [2-3]

History of Bootstrap

Bootstrap 1 (August 2011)

Bootstrap 2 (January 2012)

Bootstrap 3 (August 2013)

Bootstrap 4 (January 2018)

Bootstrap 5 (May 2021)

Introduction to Bootstrap [3-3]

Benefits of Bootstrap

Responsive Design	Consistency	Pre-styled Components	Customizable
Cross-browser Compatibility	Community Support	Speed of Development	Accessibility

Getting Started with Bootstrap

Setting Up the Environment

Including Bootstrap via Content Delivery Network (CDN)

Downloading and Installing Bootstrap Locally

Setting up Bootstrap with `npm/yarn`

Basic Structure of a Bootstrap Page

Key Elements

HTML5 Doctype

Meta Tags for Responsive Design

Including CSS and JS Files

Grid System [1-4]

Key Points

Responsive Design	12-Column Grid	Rows and Columns	Grid Classes
Responsive Breakpoints	Offsetting Columns	Nesting Columns	Utility Classes

Grid System [2-4]

Core Components

1 Containers
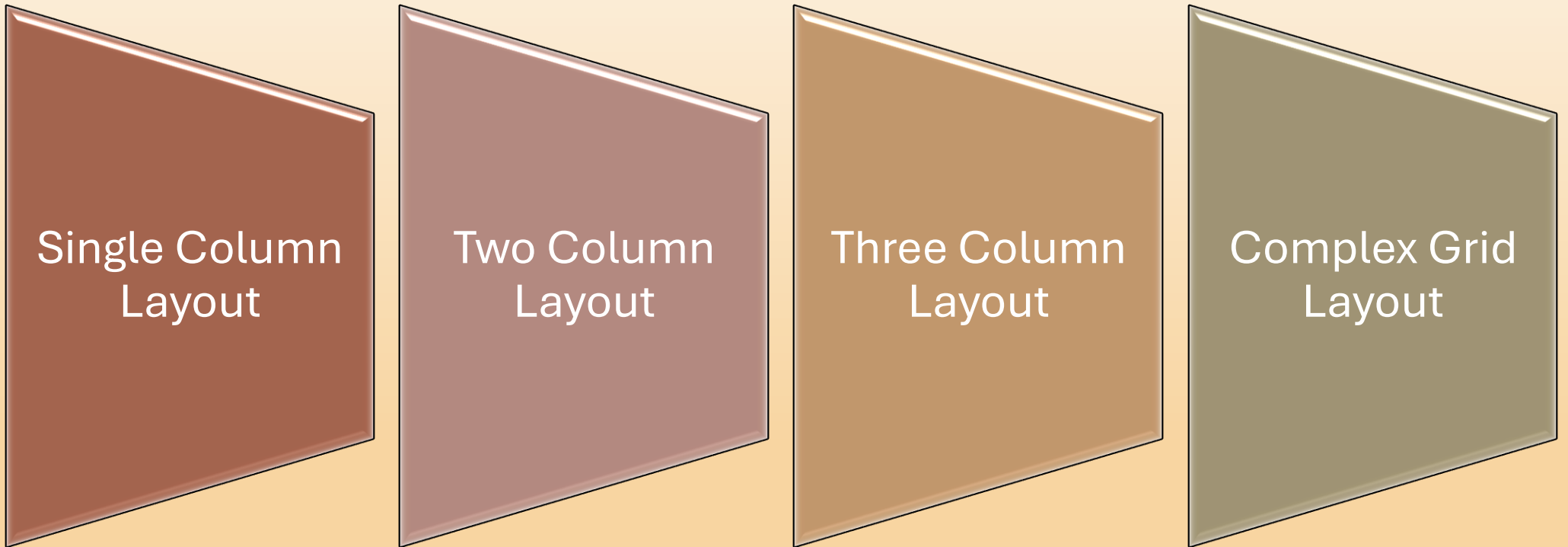
2 Rows and Columns

Grid System [3-4]

Grid Options

Grid Breakpoints

Column Classes

Offset Classes

Grid System [4-4]

Creating Layouts with Grid System

| Single Column Layout | Two Column Layout | Three Column Layout | Complex Grid Layout |

Summary [1-2]

✓ Bootstrap is a framework for responsive, mobile-first Web development, offering pre-designed components and a grid system.

✓ Bootstrap was created at Twitter in 2011 and has evolved through five versions, with the latest being Bootstrap 5.

✓ Benefits of Bootstrap include responsive design, consistency, pre-styled components, customizability, cross-browser compatibility, community support, and accessibility.

Summary [2-2]

✓ To use Bootstrap, set up the environment by including it via CDN, downloading it locally, or using package managers such as npm or yarn.

✓ A Bootstrap page's basic structure includes an HTML5 doctype, meta tags for responsiveness, and Bootstrap's CSS and JS files.

✓ Bootstrap's grid system is a 12-column layout that adjusts content based on screen size and device.

✓ Understanding containers, rows, and columns is essential for creating responsive and well-structured layouts with Bootstrap's grid system.