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THE GEEK INSTITUTE
OF CYBER SECURITY

Regd. By: E-Max India
Centre Code: EMAX/EK80606
(Recognized By Govt. Of India)

(Building Futures Through Digital Knowledge and Innovation)

Bootstrap (03 Months)

Syllabus

01: Introduction to Bootstrap

- ✓ What is Bootstrap?
- ✓ History and evolution (from Bootstrap 2 to 5+)
- ✓ Advantages of using Bootstrap in modern web development
- ✓ Understanding mobile-first and responsive design philosophy
- ✓ Setting up Bootstrap:
  - o Using Bootstrap CDN
  - o Downloading and integrating locally
  - o File structure and customization options

02: Bootstrap Grid System

- ✓ Understanding the 12-column responsive grid
- ✓ Container types: .container vs .container-fluid
- ✓ Rows and Columns
- ✓ Breakpoints (xs, sm, md, lg, xl, xxl)
- ✓ Column alignment, nesting, and ordering
- ✓ Responsive layout examples
- ✓ Using utilities for spacing and alignment

03: Typography and Text Utilities

- ✓ Bootstrap's default typography
- ✓ Headings, display headings, lead text
- ✓ Blockquotes and lists
- ✓ Text alignment and transformation classes
- ✓ Text wrapping, truncation, and decoration
- ✓ Line height, font weight, and font size utility classes

04: Bootstrap Colors and Backgrounds

- ✓ Contextual color utility classes
- ✓ Customizing text and background colors
- ✓ Bootstrap color palette
- ✓ Creating dark/light themed sections
- ✓ Opacity utilities

05: Bootstrap Components

- ✓ Buttons:
  - o Button classes and sizes
  - o Outlined buttons
  - o Button groups and toolbars
- ✓ Alerts:
  - o Contextual alert boxes
  - o Dismissible alerts
- ✓ Badges, Breadcrumbs, and Pagination
- ✓ Cards:
  - o Card structure and customization
  - o Image overlays and grouped cards
- ✓ Progress Bars and Spinners
- ✓ List Groups and Media Objects
- ✓ Accordion and Collapse components

06: Bootstrap Forms

- ✓ Form structure and layouts
- ✓ Form controls: input, textarea, select, checkbox, radio
- ✓ Input groups and sizing
- ✓ Floating labels and placeholders
- ✓ Validation styles and feedback
- ✓ Inline forms and form grid layout

07: Bootstrap Tables

- ✓ Default table styles and responsive tables
- ✓ Table contextual classes (dark, striped, bordered, etc.)
- ✓ Table head, body, and foot customization
- ✓ Sizing, alignment, and responsive behaviors

08: Navigation Components

- ✓ Navbar:
    - o Creating responsive navbars
    - o Color schemes and branding
    - o Collapsing behavior and toggler
- ✓ Navs and Tabs:
    - o Tabbed interfaces
    - o Pills and dropdown navs
- ✓ Scrollspy integration
- ✓ Sticky headers and offcanvas navigation

09: Bootstrap Layout Utilities

- ✓ Margin and padding utilities (m-*, p-*)
- ✓ Display utilities (d-block, d-flex, etc.)
- ✓ Flexbox utilities:
    - o Alignment and justification
    - o Direction and wrapping
- ✓ Sizing utilities
- ✓ Position and Z-index
- ✓ Visibility and overflow

10: Bootstrap Images and Media

- ✓ Responsive images using .img-fluid
- ✓ Image thumbnails and rounded images
- ✓ Aligning images
- ✓ Embedding media and aspect ratios
- ✓ Working with figure and caption elements

11: Advanced Bootstrap JavaScript Components

- ✓ Modal:
    - o Launching modals
    - o Modal options and events
- ✓ Carousel:
    - o Adding images, captions, and controls

- ✓ Tooltips and Popovers:
    - o Initialization with JavaScript
    - o Customization and placement
- ✓ Toasts:
    - o Basic usage and positioning
- ✓ Dropdowns and Collapse behavior
- ✓ Tab controls and navigation events

12: Bootstrap Icons (Optional Module)

- ✓ Adding Bootstrap Icons library
- ✓ Using icons in buttons, lists, navigation
- ✓ Sizing, coloring, and aligning icons
- ✓ Alternatives: Font Awesome integration

13: Customization and Integration

- ✓ Overriding Bootstrap with custom CSS
- ✓ Using Sass variables with Bootstrap (if applicable)
- ✓ Theming: Creating dark/light mode toggles
- ✓ Using Bootstrap with other frameworks (React, Angular, Vue basics)
- ✓ Integration with form libraries and validation tools

14: Capstone Projects

- ✓ **Project 1:** Responsive Portfolio Website
- ✓ **Project 2:** Bootstrap Admin Dashboard with Cards and Charts
- ✓ **Project 3:** Multi-step Bootstrap Form with Validation
- ✓ **Project 4:** Landing Page with Carousel, Navbar, and Modals
- ✓ **Project 5:** Blog layout with Grid, Cards, Pagination, and Sidebar