### ✅ Bootstrap Study Checklist

This **Bootstrap checklist** covers all important aspects from **basic to advanced topics**, ensuring a strong understanding of **Bootstrap 5 (or latest version).**

## **✅ 1. Bootstrap Basics**

* Understand **What is Bootstrap?**
* Learn how to **Include Bootstrap** in a project (CDN & Local Installation)
* Understand the **Bootstrap Grid System** (container, row, col)
* Learn **Breakpoints** (xs, sm, md, lg, xl, xxl)
* Explore **Bootstrap Utility Classes**

## **✅ 2. Bootstrap Layout System**

* Use **Containers** (.container, .container-fluid)
* Implement **Grid System** (col-, col-sm-, col-md-, col-lg-, col-xl-)
* Use **Flexbox Utilities** (d-flex, justify-content-\*, align-items-\*, order-\*)
* Use **Spacing Utilities** (m-, p-, g-)

## **✅ 3. Bootstrap Typography & Colors**

* Apply **Bootstrap Typography** (.h1, .h2, .lead, .display-1)
* Use **Text Utilities** (text-center, text-uppercase, fw-bold, fst-italic)
* Apply **Bootstrap Colors** (bg-primary, text-danger, border-warning)

## **✅ 4. Bootstrap Forms & Inputs**

* Create basic **Forms** (<form class="form-group">)
* Use Bootstrap **Form Controls** (.form-control, .form-check, .form-select)
* Implement **Input Groups** (.input-group, .input-group-append, .input-group-text)
* Apply **Floating Labels** (.form-floating)

## **✅ 5. Bootstrap Buttons & Alerts**

* Use **Buttons** (.btn, .btn-primary, .btn-outline-secondary)
* Modify button sizes (.btn-lg, .btn-sm)
* Use **Alerts** (.alert-primary, .alert-success, .alert-dismissible)

## **✅ 6. Bootstrap Navigation & Navbar**

* Create a **Navbar** (.navbar, .navbar-expand-lg, .navbar-light, .navbar-dark)
* Implement **Navbar Brand & Toggler**
* Use **Dropdowns in Navbar** (.dropdown, .dropdown-menu, .dropdown-item)
* Apply **Sticky Navigation** (.fixed-top, .sticky-top)

## **✅ 7. Bootstrap Cards & Containers**

* Use **Cards** (.card, .card-body, .card-header, .card-footer)
* Modify card layouts (.card-img-top, .card-columns, .card-deck)
* Use **List Groups** inside cards (.list-group, .list-group-item)

## **✅ 8. Bootstrap Tables & Modals**

* Style **Tables** (.table, .table-striped, .table-hover, .table-bordered)
* Use **Modals** (.modal, .modal-header, .modal-body, .modal-footer)
* Implement **Modal Sizes** (.modal-lg, .modal-sm)

## **✅ 9. Bootstrap Carousels & Media**

* Use **Carousels** (.carousel, .carousel-inner, .carousel-item, .carousel-control-prev)
* Implement **Carousel Indicators** (.carousel-indicators)
* Use **Images & Figures** (.img-fluid, .rounded-circle, .figure)

## **✅ 10. Bootstrap Utility Classes**

* Apply **Background Colors** (.bg-light, .bg-dark)
* Use **Text Alignment & Formatting** (.text-left, .text-muted)
* Implement **Border Utilities** (.border, .border-primary, .rounded)
* Apply **Shadow Utilities** (.shadow-sm, .shadow-lg)

## **✅ 11. Bootstrap Icons & Animations**

* Use **Bootstrap Icons** (<i class="bi bi-house">)
* Implement **Spinner Loaders** (.spinner-border, .spinner-grow)

## **✅ 12. Bootstrap Accessibility & Performance**

* Use **ARIA attributes** for accessibility
* Optimize performance by loading only necessary components
* Validate design using Bootstrap **official documentation**

## **✅ 13. Bootstrap Best Practices**

* Keep HTML structure **clean & semantic**
* Use **Bootstrap Grid properly** instead of manual positioning
* Minimize **custom CSS overrides**
* **Test responsiveness** across different screen sizes