Chapter 12 (3.3)

Creating Responsive Webpages Using Bootstrap and jQuery

Objectives

At the end of this session, you will be able to:

- Describe the role of media queries in achieving responsiveness in Bootstrap
- Understand the use tables in Bootstrap
- Understand the use tabs in a well in Bootstrap
- Describe how to customize Bootstrap
- Explain how to create a Website using Bootstrap and jQuery

Roles of Media Queries (1-2)

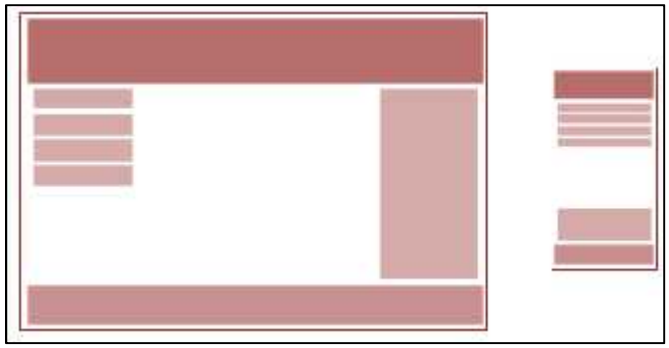
- Media query is a style rule for displaying Website on a particular device type
- Adds responsive CSS to bootstrap application
- CSS2 – computer screens, TV-type gadgets, handheld devices, and printers
- CSS3 – focus on characteristics of target devices rather on type
- Physical properties of device type:

Width and height of viewport and device	Screen resolution	Orientation – portrait, or landscape

- Device specific style sheet
- Defines breakpoint for width of media where layout changes visibly

Roles of Media Queries (2-2)

- Bootstrap defines media queries in bootstrapresponsive.css file
- Folder structure: **Assets** folder>> **CSS** folder>> **bootstrapresponsive.css** file
- File specifies breakpoints in a grid system
- Breakpoint on mobile:



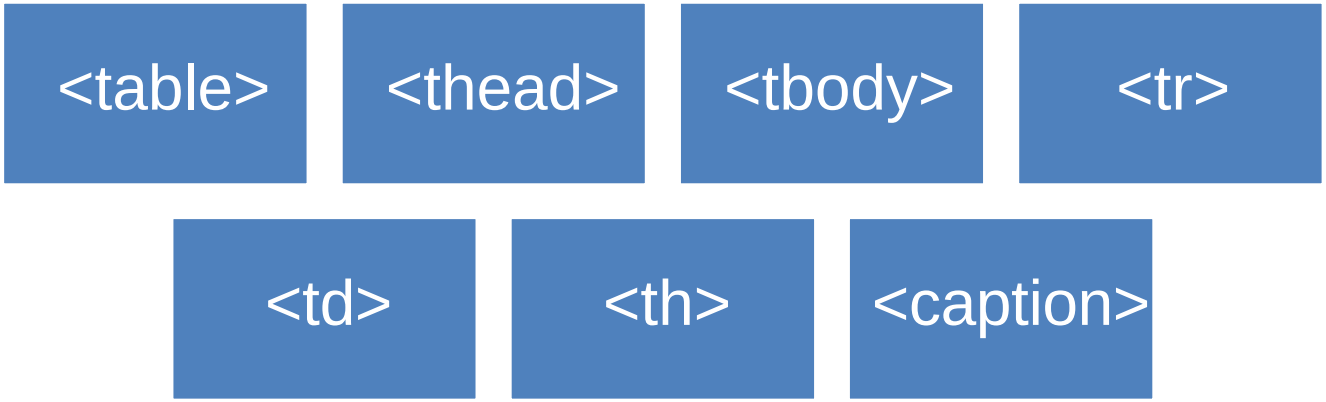
- Contains *@media* attribute with width-based logical expression
- Returns true when matches, otherwise returns false
- Include styles for different devices in a single Webpage

Tables (1-2)

- Displays data in a grid layout
- Contains rows and columns
- Provides built-in classes to improve appearance
- Basic table has – horizontal splitters and slight padding of 8 pixels
- Basic bootstrap table:

Tables (2-2)

- Bootstrap provides a clean layout to create a table
- Table elements are:



- Standard order of tags: <table>, <tbody>, <tr>, <td>
- Order of column headers: <thead>, <tr>, <th>

Striped Rows

- Table can be created with alternate rows and alternate background color.
- Appearance of zebra strips
- Use *.table-stripped* class and add to *.table* base class
- Output:

Bordered Table

- Enable borders on all sides of table
- By default only horizontal dividers are enabled
- Use *.table-bordered* class and add to *.table* base class
- Output:

Bordered Table

Firstname	Lastname	Email
Stella	Mark	smark@example.com
Josie	Fernandes	josief@example.com
Jack	Doe	jdoe@example.com

Hover Effects on Rows

- Apply hover effects on rows of the table
- When hover effect is applied for row, row color changes when user moves mouse on a particular row
- Use .table-hover class and add to .table base class
- Output:

Hover Effect on a Table

Firstname	Lastname	Email
Stella	Mark	smark@example.com
Josie	Fernandes	josief@example.com
Jack	Doe	jdoe@example.com

Condensed Tables

- Also known as compact tables
- Reduce cell padding by half to make condensed table
- Saves spaces around cells
- Use .table-condensed class and add to .table base class
- Output:

Compact Table

Firstname	Lastname	Email
Stella	Mark	smark@example.com
Josie	Fernandes	josief@example.com
Jack	Doe	jdoe@example.com

Emphasis on Tables

- Few contextual classes to emphasis a cell or entire row
- Indicate success, warning, information, or danger by changing the background color of the row or cell
- List of contextual classes with color:

Contextual Class	Background Color	Description
.active	Gray	Applies the hover color to a cell or row.
.success	Green	Denotes a successful action.
.info	Blue	Denotes informative text or neutral action.
.warning	Yellow	Denotes a warning to grab quick attention.
.danger	Red	Denotes a harmful action.

- Use classes .warning, .success, .danger, .active, .info to .table base class.

Responsive Tables

- Bootstrap 3 activates horizontal scrolling on small devices
- Same table on larger screens have no difference
- Use .table-responsive class
- Output of responsive table on small screen and larger screen:

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2	Ruby	Yukhiro Matz	Ruby is a dynamic, reflectiv
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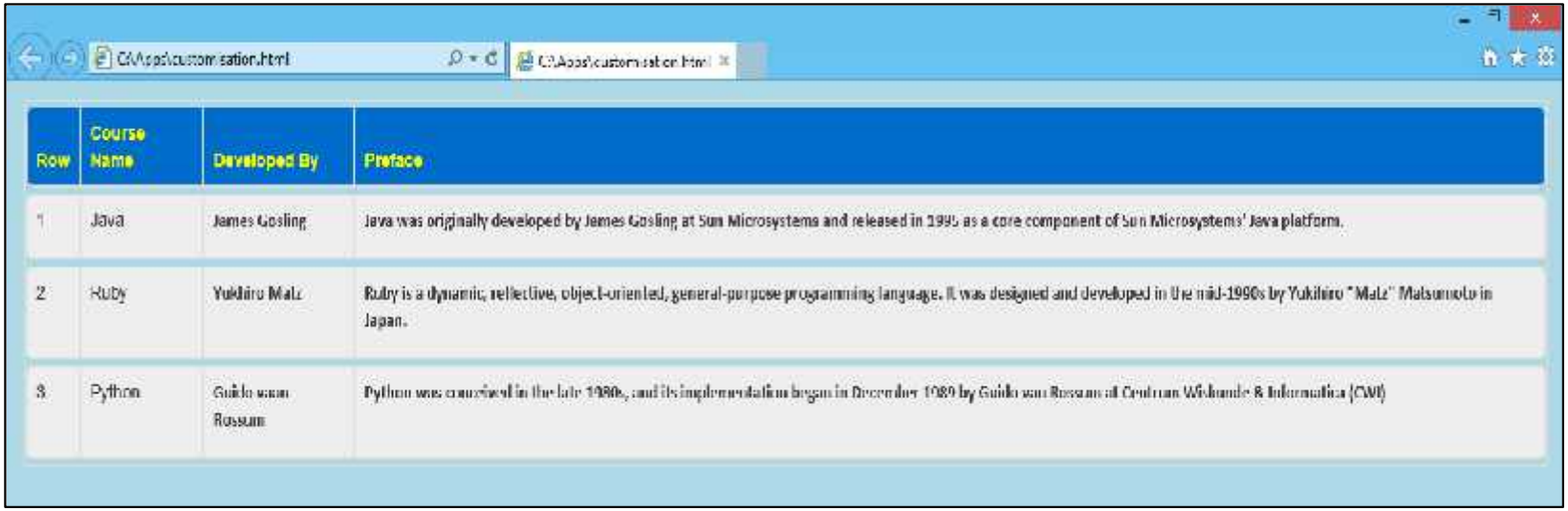
Customizing Bootstrap

- Twitter bootstrap is a popular CSS framework
- Official Website offers custom builder to generate personal bootstrap package
- LESS and SASS versions for compiling CSS file
- Prevents deviation from normal workflow and provide hassle-free upgradation
- Output:



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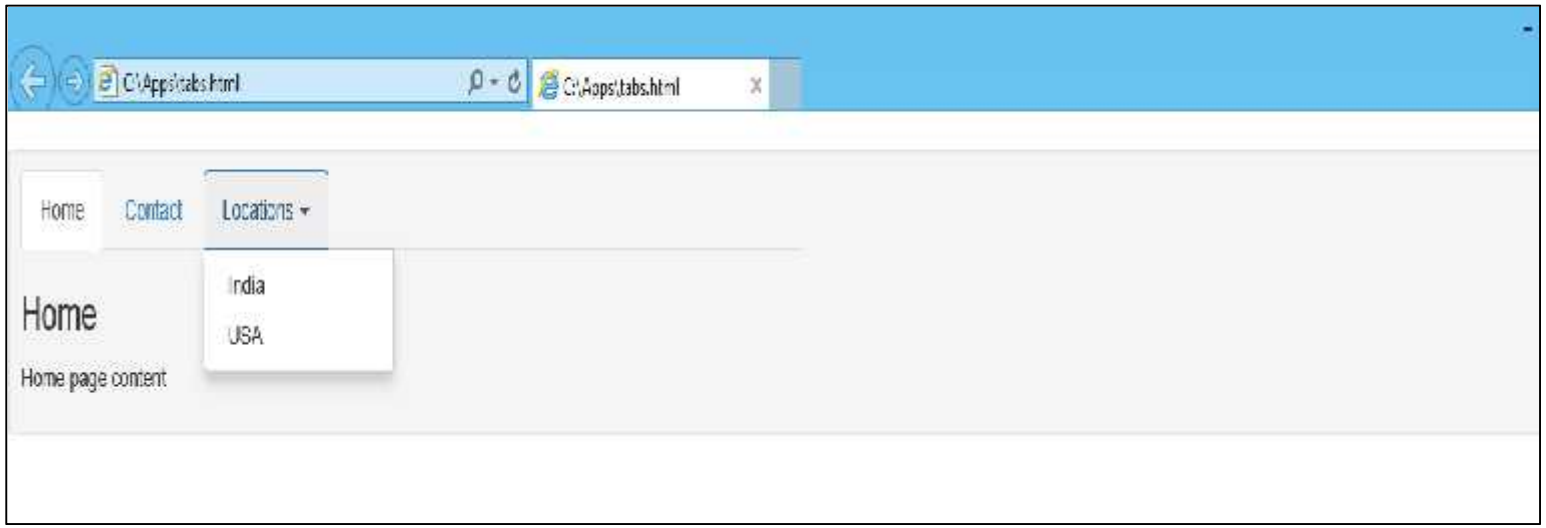
Bootstrap Wells

- A well is a container component for applying an inset style
- Used to insert content inside a box
- Put content inside using .well class
- Rounded border with padding and grey background color
- Change the size of well by controlling its padding by using two modifier class .well-lg and .well-sm
- Render a well smaller or larger as per defined base class
- Output of smaller, default, and larger well:

Tabs in Bootstrap Well

- Offers tabbed interface in a well
- Contains a series of tabs, drop-down menus, or both
- Use .nav-tabs class and add to .nav base class in <ul> tag
- Output:



Building a Website

- jQuery with bootstrap used to design robust and dynamic Webpages
- Simple to use and quick to design
- Compatible to multiple browsers
- Bootstrap include containers, form, or form controls in a Webpage
- jQuery provides functionalities to these components

Summary (1-3)

- A media query defines styles for displaying a Webpage on a specific type of device without modifying the markups.
- Media queries are useful in determining the device's physical properties namely, viewport's and device's width and height, screen resolution, and orientation.
- Media queries define the breakpoint for the media's width from where the layout changes on a specific screen.
- Web developers can define device-specific style sheets in Bootstrap and include all in a single Webpage.

Summary (2-3)

- A basic Bootstrap table features distinct appearance in terms of only horizontal splitters and slight padding of 8 pixels.
- A Bootstrap table can have striped rows, borders on all sides, a hovering effect on rows, and emphasized effect on rows or cells.
- The emphasized effect on rows and cells comes from one or more contextual classes namely .active, .success, .info, .danger, and .warning.
- Bootstrap 3 activates horizontal scrolling on a small device whose screen width is not more than 768 pixels.

Summary (3-3)

- Instead of messing up with the core files, it is more efficient to override the default CSS file in Bootstrap.
- A well is a container component to apply an inset style to a block-level element or sunken effect to its content.
- It is also possible to change the well's size by controlling its padding through the modifier classes.

Q & A