Lightning Design System

Unit 1: Understand the Key principles behind Design System

Introducing the Lightning Design System
The Design System makes it easy for you to build applications that comply with the new Salesforce Lightning look and feel without reverse engineering the UI as custom CSS.

Where You Can Use the Design System
The new Design System makes it straightforward to build Lightning-compliant Salesforce apps across a range of technology stacks.

• Visualforce pages accessing Salesforce data via remote objects or JavaScript remoting. The Design System is not yet compatible with <apex> tags, but watch this space.
• Lightning pages and components made available to Salesforce1 and Lightning Experience
• Mobile apps accessing Salesforce through the Mobile SDK or another API
• Standalone web apps served by Heroku or a similar platform

1) Which of the following statements about the the Lightning Design System is correct?
A) The Design System can be used in Visualforce but not in Lightning.
B) The Design System only contains CSS and icons.
C) The Design System bakes in the Lightning UI design principles.
D) The Design System requires you to write your own CSS to create components.

2) Which of these can you build with the Lightning Design System?
A) Lightning pages.
B) Lightning components.
C) Visualforce pages.
D) Stand-alone mobile apps.
E) All of the above

3) Which of the following is an advantage of using the Lightning Design System?
A) It is built specifically for building Salesforce apps.
B) The CSS is fully namespaced.
C) The new Salesforce Sans font looks really cool.
D) All of the above.
Unit 2: Getting Started with Lightning Design System

Quick Tour of the Design System
The outer wrapper for Design System markup in Visualforce is <div class="slds">
SLDS Class Naming
Using double rather than single hyphens and underscores means that the block or modifier can itself contain hyphens or underscores, for example .slds-button__icon--x-small

1) Which of the following elements is the correct outer wrapper for Design System markup in Visualforce?
A) <div class="salads">
B) <div class="slds-outer-wrapper">
C) It can be anything.
D) This is a trick question, there is no outer wrapper with the Design System.
E) <div class="slds">

2) In the CSS class, .slds-button__icon--x-small, in BEM terminology, the --x-small portion represents:
A) A modifier.
B) An element.
C) A block.
D) None of the above.

Unit 3: Understanding the Grid System

What is a Grid System?
The foundation for all but the simplest pages and components is a layout grid of some kind. The Design System provides a dedicated component for this purpose imaginatively called the Grid System. If you have used other CSS frameworks such as Bootstrap, you will be familiar with the concept of a grid. These use a slds-size--X-of-Y format where X represents a fraction of the total space Y. For example, slds-size--1-of-2 represents a width that is 50% of the available space. The outer wrapper <div> has the class slds-page-header which applies page header styling. Inside that we have a two column Grid System.

1) In the Grid System component, the sizing class, slds-size--3-of-4, represents which of the following?
A) 75% of the available space.
B) 3 rows by 4 columns.
C) 4 columns by 3 rows.
D) The 3rd of 4 columns.
E) None of the above

2) The Design System is primarily:
A) For building web pages.
B) For building applications.
C) For building web pages and applications.
D) None of the above.

3) Which class should be applied to the outer wrapper of a Grid System component?
A) gridsystem
B) slds-grid--system
C) grid
D) slds-grid

Unit 4: Working with Salesforce Data

Populating a Data Table with Dynamic Data
We recommend the use of Remote Objects, JavaScript Remoting or the REST API to access Salesforce data from your Visualforce pages based on Design System markup. The Data Table component is an enhanced version of a HTML table for displaying tabular data with the Lightning UI styling. A Data Table is created by applying the slds-table class to a <table> tag. Use the slds-table--bordered class to apply a border. The table is wrapped in a div with the slds-scrollable--x utility class. This will give the table a horizontal scrollbar if the data is too wide to fit on the screen.

1) In order to access data from Salesforce, the Design System is compatible with which of the following technologies?
A) Salesforce REST API.
B) Javascript Remoting.
C) Remote Objects.
D) All of the above

2) What does the slds-scrollable--y class do?
A) Enables vertical scrolling within the element it is applied to.
B) Facilitates vertical scrolling within the children of the element it is applied to.
C) Displays a vertical scroll bar all the time.
D) None of the above.

3) The Design System component for displaying tabular data is called which of the following?
A) Table
B) Grid System
C) Data Table
D) Grid
E) Data

Unit 5: Using Images, Icons and Avatars

Icons
Current versions of Google Chrome, Safari and Firefox already support SVG sprite maps. To use SVG spritemap image icons with Microsoft Internet Explorer 11 you will need to download a small script called svg4everybody
The icons are supplied both as individual PNGs and SVGs, as well packaged up inside SVG sprite maps. Each of the above icon categories has its own sprite map under /assets/icons. Sprite maps are our recommended technique for including icons in pages. The advantages of SVG sprite maps over traditional icon fonts include more fine-grained CSS control and easier positioning in components, as well as better resizability of vector-based SVGs. This final advantage is a boon for responsive design. Vector-based images make clean art at any size. The <svg> element in turn contains a <use> tag that specifies the icon to display based on its xlink:href attribute. xlink:href attribute consist of icon name, split map name, sub-string assets/icons

1) Which browser requires an additional Javascript library before SVG sprite map icons work?
A) Mozilla Firefox.
B) MSIE.
C) Google Chrome.
D) Safari.
E) None of the above
F) All of the above

2) The core markup for a Design System SVG sprite map icon consists of:
A) A <svg> element inside a <use> element.
B) A single <svg> element.
C) A <use> element inside a <svg> element.
D) A single <img> element.
E) None of the above.

3) Which of the following does NOT appear in the xlink:href icon path?
A) The icon name
B) The icon colour
C) The sprite map name
D) The sub-string assets/icons

Unit 6: Laying out the record Home Page and Using Advanced Components
The design System Components are Activity Timeline, Datepicker, Pill. The narrow card body is a series of Tile components. A Tile is a grouping of related information associated with a record. There are several variants of this component, each with different groupings of information. Pay close attention to the markup in the examples provided in the documentation, as each tile layout is constructed differently. Here we use the simplest base variant. Each tile has the slds-tile class. Inside that we provide a title for the Card and some contents. As before, we wrap up the narrow card with the same <footer> markup we used in the other Card.

1) Which of these is NOT a Design System component?
A) Activity Timeline.
B) Thumbnail.
C) Datepicker.
D) Pill.
2) Which of the following is true about the Tile component?
A) It is a grouping of related information associated with a record.
B) It may contain a wide range of content such as images, icons, action overflows, and description lists
C) It is based upon the Media Object component.
D) All of the above.