Salesforce Certified Administrator Exam

Study Guide

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Revisions

Version	Change	Date
1.0	Original	7/14/16
1.1	Added revision page and page numbers	

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1.0 Organization Setup

1.1 Describe the components of the Company Profile

1) Update company information
    a. Edit the company default localization settings and primary contact details
    b. Display base licenses, active users, and feature licenses
        i. User license entitles a user to functionality within Salesforce and determines profiles available to user
        ii. Feature licenses entitles a user to an additional SF feature
        iii. Permission set license is used to provide a user with access to certain features that are not part of their licenses
        iv. SF bills on total number of licenses not active users
    c. Set corporate currency (by default only one)
        i. Used for currency conversion
        ii. Report revenue
        iii. Users can set local when multiple currencies are activated (request to SF support)
    d. Manage Currencies (only when multiple is set)
    e. Dated Exchange rates allow you to track conversion rates when an opportunity closes, i.e., the closed opportunity rate is the rate of the date of closing.
2) Change default language for company information
    a. Users can set their own language
    b. Primary language for all interface text and help
3) Change company default time zone
    a. Login hours apply to company time zone, not personal time zone
    b. Login hours can be set here to prevent users from logging in for maintenance
    c. Users can set their own time zone
4) Edit Fiscal Year settings for company
    a. Standard
        i. Default is from 1/1 to 12/31
        ii. Can start of the first day of any month and you can specify which year you use
    b. Custom
        i. Template or create your own.
5) Define business hours for your customer support team
6) Create or update holidays which business hours do not apply
7) Change (restrict) the languages that are available for your users

2.0 User Setup

2.1 Identify the steps to set up and/or maintain a user

1) Initial Fields
    a. Name
    b. Email (can be the same for multiple Usernames. Must be valid see note on user name)
    c. Username (must be in a valid email format, but does not need to be a valid email)
    d. User license (determines which profiles are available to user)
    e. Profile (minimum permissions and access)
    f. Approvals in required
    g. Role (in professional, unlimited, performance, and developer additions)
2) Email becomes username (see notes above), community name and Alias are derived from email and names, role is not compulsory
3) User can be assigned to one of more feature licenses
4) Set up accounts for user outside your organization who need access to a limited set of fields and objects
5) User licenses can grant access to customer portal and partner portal.
6) Using SF to SF you can create connections to share records with other SF users outside of your organization.
7) Maximum SF users per edition (Contact manager:5; Group:5; Profesional(unl); Unlimited (unl), developer:2)

2.2 Given a scenario, troubleshoot common user access and visibility issues

1) Check log in history
    a. Wrong login information (no evidence of login)
        i. Wrong address
        ii. Wrong user name
    b. Invalid password
        i. Reset to send a new password
        ii. Unlock lockout
2) Other access problems
    a. Profile restrictions (logon hours, etc.)
    b. User IP address in trusted range
        i. IP address considered activated if IP address falls within trusted IP range
        ii. IP address previously activated by user
        iii. Browser can be identified by cookie
    c. Has user been activated from this IP before
    d. User's web browser have valid cookies from SF
3) User Profile login restrictions
    a. Login hours
        i. After hours expire you will not be able to log back in after your session ends

    b. IP address
4) Grant Login Access: Only users themselves can grant login access to the administrator
    a. If you change a user's email address and generate a new password a confirmation message will be sent to the new email address you entered
    b. If you change a user name the confirmation email will be sent to the email address associated with the account
    c. Grant Checkout Access gives user access to checkout (allows user to purchase products).
5) Sharing
    a. Sharing enables you to show or hide an internal or external user from another user in your organization
    b. Assign the "view all users" permission to users who need to see or interact with other users. Automatically enabled for users who have the "Manage User" permissions
    c. Set the organization-wide default for user records to private or public read only
    d. Create user sharing rules based on group memberships or other criteria
    e. Create manual shares for user records to open up access to individual users or groups
    f. Control the visibility of external users in customer or partner portals and communities
    g. View All Users permission can be assigned to users who need Read access to all users regardless of the sharing settings
    h. Organization-wide defaults for user records – This setting defaults to private for external users and public read only for internal users. When the default is set to Private, users can only read and edit their own user records. Users with subordinates in the role hierarch maintain read access to the user records of those subordinates
    i. User sharing rules – General sharing rule considerations to user sharing rules. User sharing rules are based on membership to a public group, role, or territory. Each sharing rule shares members of a source group with those of the target group. You must create the appropriate public groups, roles, or territories before creating your sharing rules. Users inherit the same access as users below them in the role hierarchy.
    j. Manual sharing for user records –Manual sharing can grant read or edit access on an individual user, but only if the access is greater than the default access for the target users. Users inherit the same access as users below them in the role hierarchy. Apex managed sharing is not supported
    k. User sharing for external users – Users with the "manage external Users" permission have access to external user records for Partner Relationship Management Customer Service and Customer Self-Service portal users, regardless of sharing rules or organization wide default setting User records. The manage External Users permissions does not grant access to guest or chatter external users
    l. User Sharing Compatibility – When the organization-wide default for the user object is set to Private, user sharing does not fully support:
        i. Chatter messenger is not available for external users. It is available for internal users only when the organization wide default for the user object is set to public read only

ii. Customizable forecasts – Users with the view all forecast permission can see users to whom they don't have access
iii. Salesforce CRM Content – Users who can create libraries can see users they don't have access to when adding library members
iv. Standard report types – some reports based on standard report types expose data of users to whom a user doesn't have access.

3.0 Global User Interface

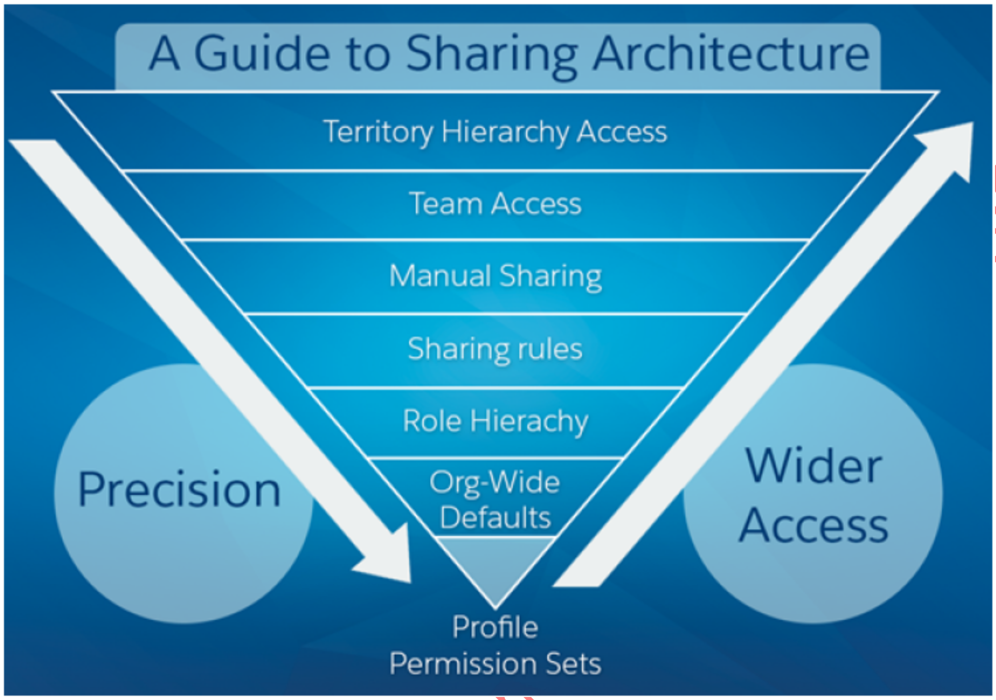
3.1 Distinguish between the various UI settings that an administrator controls

User Interface determines how everyone in your organization access the Setup Menu

1) Enable Classic Theme
2) Enable New Theme (enabled by default)
3) Enable improved user interface (activated by default)
4) Enable collapsible sections
5) Show quick create
6) Enable hover details
7) Enable related list hover links
8) Enable separate loading of related lists
9) Enable separate loading of related lists of external objects
10) Enable inline editing
11) Enable enhances lists
12) Enable tab bar organizer
13) Enable printable list views
14) Enable spellchecker on tasks and events
15) Enable customization of chatter user profiles
16) Enable collapsible sidebar
17) Show custom sidebar components on all pages
18) Calendar settings
    a. Enable home page hover links for events
    b. Enable drag-and-drop on calendar views
    c. Enable click-and-create events on calendar views
    d. Enable drag-and-drop scheduling on list views
    e. Enable hover links for my task list
19) Setup Settings
    a. Enable enhanced page layout editor
    b. Enable enhanced profile list views
    c. Enable enhanced profile user interface
    d. Enable streaming API
    e. Enable dynamic streaming channel creation
    f. Enable custom object truncate
    g. Enable improved setup user interface
    h. Enable advanced setup search (beta)
20) Advanced settings
    a. Activate extended mail merge
    b. Always save extended mail merge documents to the documents tab

4.0 Security and Access

4.1 Explain the various organization security options



1) Sharing rules can never be stricter that OWD settings
2) Salesforce checks whether user's profile has object level permission to access that object
3) Salesforce checks whether user's profile has any administrative permissions (view all data, modify all data)
4) Salesforce checks the ownership of the record (OWD, role-level access, any sharing rules will be checked)
5) Controlling a user's access to data in several ways
    a. To control access to applications and objects including fields and record types within objects:
        i. Use profiles and permission sets (create record types for a custom object to display different picklists values and page layouts to different users based on their profiles)
        ii. To control access to specific records: Use sharing settings and rules
        iii. You can't delegate administrative duties related to your organization to partner portal or customer portal users, However, you can delegate some portal administrative duties to portal users:
    b. Object level security:

        i. What objects can users see
        ii. Set in user Profiles and Permission Sets
        iii. Prevents user form viewing, creating, editing, or deleting any instances of a particular type of object
        iv. It allows us to hide whole tabs & objects from particular users (wouldn't even know the object exists)
    c. Field Level Security
        i. What fields on those objects can a user see
        ii. In user Profiles and Permission Sets
        iii. A variation of object level security
        iv. User is prevented from a particular field without having to hide the whole object
        v. Page layouts only control the visibility of field on detail and edit pages whereas field level security controls the visibility in any part of the app.
    d. Record Level Security
        i. Organization wide defaults
            1. Specifies the baseline level of access that a user has
            2. Role hierarchies allow us to make sure that a manager will always have access to the same records as subordinates
            3. Sharing rules allow for making automatic exceptions to organization-wide defaults for particular group of users
            4. Manual sharing allows records owners to give read and edit permission to folks who might not have access to the record any other way
    e. Profiles (user must be associated with a profile)
        i. A collection of setting of what the user can see and permissions (what user can do)
        ii. A profile contains user permissions and access settings that control what users can do
        iii. Profiles are usually defined by a user's job function, but can be anything that makes sense
        iv. A profile can be assigned to many users, but a can only be assigned to one profile at a time
            1. All of the members of the group have the same folder permissions and access to the same software
        v. Profiles never override organization's sharing model or role hierarch
        vi. Profiles control:
            1. Which standard and custom apps users can view
            2. Which tabs users can view
            3. Which record types are available to users

4. Which page layouts users can see
5. Object permissions that allow users to create, read, edit and delete records
6. Which fields within object users can view and edit
7. Admin permissions that allow users to manage the system and apps within it
8. Which Apex classes and Visualforce pages users can access
9. Which desktop clients users can access
10. The hours during which and IP addresses a user ca log in from (profile login hours, profile IP addresses)
11. Which service provider's users can access (if SF is enabled as identity provider)

vii. Use standard profiles or create, edit and delete custom profiles

viii. For standard profiles, on certain settings can be changed

ix. You can never edit object permissions on a standard profile; so you must first clone the standard profile and then assign user and then use permission sets to grand additional permissions

x. When custom object is created, most profiles don't give access to the object (except those with modify all data under profiles

xi. Standard profiles

1. Marketing User
2. Contract manager
3. Read only (executive team)
4. Solution manager
5. Standard User
6. System Admin

f. Permission sets

i. Administrative and General

ii. Standard object permissions, custom object permissions

iii. Collection of settings and permissions that determine what users can do

iv. If custom box is not checked it is a standard provide and can't edit standard profiles permission set

v. Can choose which tabs should appear at top of user's profile page and also select which apps to display in force.com

1. Default on – displayed at top of user's page
2. Default off – hiding form user's page but available when tabs is clicked
3. Tab hidden- completely hidden
4. Hiding a tab does not prevent a user from accessing the records of that tab

                vi. Only assign permission sets that have the same user licenses as the user or permission sets with no associated license.
                    1. Can't change the license later
                    2. If you plan to assign to multiple uses select none
                vii. Grant access to a custom object or app
                viii. Temporary/long term permission set

6) Differences between profiles and permission sets
    a. Users can only have one profile, but many permission sets
    b. Profiles are used to grant the minimum permission and settings that every type of user needs (assigned before permission sets)
    c. Use permission sets to grand additional permissions without changing a profile (can be temporary or long term)
    d. Permission to create, read, or edit an object does not necessarily mean users will be allowed to read every object's records because:
        i. Permission on a record is evaluated according to a combination of object, field, and record level permissions
        ii. When object vs. record level permissions conflict, the most restrictive setting wins

4.2 Describe the features and capabilities of the salesforce sharing model

1) Record Access (record level security) – changing your sharing model deletes any manual your users have created
2) Ownership
    a. Record owners can view/edit, transfer and delete record.
    b. They can also view but not edit the accounts their records are associated to
3) Organization Wide Defaults
    a. Administrator can define the default-sharing model for your organization by setting OWD
    b. OWD specify the default level of access to records
    c. Allows us to specify a baseline level of access that any user has in the org
    d. Private
        i. Allows user to access only the data they own
        ii. No one will be able to view records owned b others
    e. Public Read Only
        i. Allows users to see but not change records regardless of who owns those records
        ii. Items can be added to anyone onto the related lists with this permission level (providing objects have a look up relationship)
    f. Public Read/Write

    i. This setting allows all users the ability to view and edit records by owned by others
    ii. Ownership can't be changed except by the owner

  g. Public Read/Write/Transfer:
    i. This setting on the object allows all users the ability to view, edit, and even change ownership of record owned by others

  h. You can't change the OWD sharing default setting for some objects:
    i. Solutions are always Public Read/Write
    ii. Service contracts are always private
    iii. The ability to view or edit a document, report, or dashboard is based on a user's access to the folder in which it's stored
    iv. Users can only view the forecast of other users who are placed below them in the role hierarchy, unless forecast sharing is enabled
    v. When a custom object is on the detail side of a master-detail relationship with a standard object, it's OWD is set to Controlled by Parent and it's not editable
    vi. You can't change the OWD setting from private to public for a custom object if Apex code uses the sharing entries associated with that object

4) Roles Hierarchy

  a. Open up access (vertical)
  b. Create role hierarch to give access to managers on the account owners
    i. Managers inherit the privileges of user below them
    ii. Allows to make sure that a manager will always have access to the same records as his subordinates
  c. Users who need access to the same records can be grouped together
  d. Users can always view and edit all data owned by or shared with users below them in the role hierarchy.
  e. Users can always view and edit all data owned by or shared with other users below them in the role hierarchy
  f. An option (Grant Access Using Hierarchies) on your OWD allows you to ignore hierarchies when determining access to data
    i. Grand using hierarchies can't be disabled for standard objects
  g. Contacts that are not linked to an account are always private
    i. Only the owner of the contact and administrator can view it
    ii. Contact sharing rules do not apply to private contacts
  h. Notes and attachments marked as private via the private checkbox are accessible only to the person who attached them and administrators
  i. Events marked as private via the private checkbox are accessible only by the event owner

        i. Other users cannot see the event details when viewing the event owner's calendar
        ii. Users with the "View All Data" or "Modify all Data" permission can see private event details in reports and searches, or when viewing other users' calendars
    j. Users above a record owner in the role hierarchy can only view or edit the record owner's records if they have the "read" or "edit" object permission for the type of record

5) Sharing Rules
    a. Based on record owner or criteria
    b. Open up access (horizontal/lateral)
    c. Used by the admin, it's a way to automatically grand users access to object when the OWD or Role Hierarch doesn't allow it
    d. Allows making automatic exceptions to organization wide defaults for a particular group of users
    e. Sharing rules works best if used on a predicted group of users (roles)
    f. Use public groups when defining a sharing rule for more than 1 person or group or role
6) Sharing rules allow you to selectively grant data access to defined set of users
7) Use sharing rules to grant wider access to data
    a. You can't restrict access below your OWD levels
8) Sharing rules apply to both active and inactive users
9) When you change the access levels for a sharing rule all existing records are automatically updated to reflect the new access levels
10) When you delete a sharing rule, the sharing access created by that rule is automatically removed
11) When you transfer records from one user to another, the sharing rules are reevaluated to add or remove access to the transferred records as necessary
12) When you modify which users are in a group, role, or territory, the sharing rules are reevaluated to add or remove access as necessary
13) Sharing rules automatically grand additional access to related records
14) If multiple sharing rules give a user different levels of access to record, the user gets the most permissive access level
15) Users in the role hierarchy are automatically granted the same access that users below them in the hierarch have from a sharing rule, provided the object is a standard object or the grant access using hierarchies option is selected
16) Regardless of sharing rules, users can, at a minimum, view the accounts in their territories
    a. Users can be granted access to view and edit the contacts, opportunities, and cases associated with their territories accounts

17) Making changes to sharing rules may require changing a large number of records at once
    a. To process these changes efficiently, your request may queued and you may receive an email notification when the process has completed
18) You can create rules to share records between most types of Customer Portal users and SF users.
    a. You can create sharing rules between Customer Portal users from different accounts as long as they have the Customer Portal Manager user License.
    b. You can't include high volume-portal users in sharing rules because they don't have roles and can't be in public groups
19) You can easily convert sharing rules that include Roles, Internal, and Portal Subordinates to include Roles and Internal Subordinates instead by using the Convert Portal User Access wizard.
    a. Wizard can be used to convert publically accessible report, dashboard, and document folders to folders that are accessible by all users except for portal users
20) Lead sharing rules do not automatically grant access to lead information after leads are converted into account, contact, and opportunity records
21) In a master detail object relationship, you can't create a sharing rule for a detail object, it is inherited
22) Sharing rules based on Record owner or based on Criterial:
    a. Criteria-based sharing rules determine whom to share records with based on field values in records
    b. Although criteria-based sharing rules are based on values in the records and not the record owners, a role, or territory hierarchy still allows users in the hierarchy to access the records
    c. Create criteria-based sharing rules for accounts, opportunities, cases, contacts, leads, campaigns, and custom objects
    d. Limit of 50 criteria-based rules per object
23) Manual Sharing
    a. Open up access (flexible), for owners or users with full access to give users read/write access to another user or group who might not have access to the records any other way
24) Implicit access (accounts and associated records)
25) Teams (account, case and opportunity)
26) In environments where the sharing model for an object has been set to Private or Public Read Only, an administrator can grant users additional access to records by setting up role hierarchy and defining sharing rules
27) Role hierarchies and sharing rules can only be used to grant additional access – they can't be used to restrict access to records beyond what was originally specified with the sharing modle through OWD
28) Roles

a. Principal element is sharing rules, users can be grouped into roles based on their need to access data
b. Each role in a hierarchy should represent a level of data access required by users
c. Depending on sharing settings, roles can control the level of visibility that users have into your organization's data
d. If the Grant Access Using Hierarchies option is disabled for a custom object, only the record owner and users granted access by the OWD receive access to the objects records
e. You can create up to 500 roles for your organization
f. Every user must be assigned to a role, or their data will not display in opportunity reports, forecast roll-ups, and other displays based on roles
g. If your organization uses territory management, forecasts are based on the territory hierarchy rather that the role hierarchy

29) Role Name
   a. The unique name used by the API and managed packages
   b. Name must begin with a letter and use only alphanumeric characters and underscores.
   c. Name can't end with an underscore or have two consecutive underscores

30) Sharing Groups
   a. Groups are automatically created and maintained
      i. The role group contains all users in this role plus all users in roles above this role
      ii. The Role and Subordinates group contains all users in this role plus all users in roles above and below this role in the hierarchy
      iii. The role and internal subordinates group (available if Customer Portal or partner portals are enabled) contains all users in this role plus all users in role above and below this role, excluding Customer Portal and partner portal users
      iv. Users that gain access to data due to their position in hierarchies do so based on setting in your OWD (Grand Access Using Hierarchies)

31) Roles Control Records
   a. Roles primarily control a user's record level access permissions through role hierarch and sharing rules
   b. Roles is the easiest way to define record level access permissions

32) Profiles and permission sets control a user's object & field level access permission
   a. Users can't be defined without being assigned to a particular profile since the profile specifies the most basic access for users
   b. Each role in the hierarchy should just represent a level of data access that a user or group of users needs

4.3 Given a scenario, apply the appropriate security controls

1) Who is the most restricted user of this object: Standard Employee
2) Is there ever going to be an instance of this object that this user shouldn't be allowed see: Yes – sharing model is private
3) Is there ever going to be an instance of this object that this user shouldn't be allowed to edit
    a. Yes – Sharing model is Public Read Only
    b. No – Sharing model is Public Read/Write

Describe the various settings and permissions a **profile controls**

1) System Admin: Has access to all functionality that does not require an additional license. For example, administrators cannot manage campaigns unless they also have a Marketing User license.
2) Standard platform user: Can use custom apps and the apps from Appexchange + can use core platform functionality such as accounts, contacts, reports, dashboards, and custom tabs
3) Solution manager: Can review and publish solutions. Also has access to the same functionality as the Standard User
4) Marketing user: Can manage campaigns, import leads, create letterheads, create HTML email templates, manage public documents, and update campaign history via the import wizards. Also has access to the same functionality as the Standard User.
5) Partner user: Can only log in via a partner portal.
6) Customer portal user/manager: Can only log in via a Customer Portal. Can view and edit data they directly own or data owned by or shared with users below them in the Customer Portal role hierarchy; and they can view and edit cases where they are listed in the Contact Name field.
7) Contract manager: Can create, edit, activate, and approve contracts. This profile can also delete contracts as long as they are not activated. Can edit personal quota and override forecasts.
8) Read only: (executive team) Can view the organization's setup, run and export reports, and view, but not edit, other records.
9) Chatter user/moderator: Can only log in to Chatter. Can access all standard Chatter people, profiles, groups, and files.
10) Site.com user: Can only log in to the Site.com app. Each Site.com Only user also needs a Site.com Publisher feature license to create and publish sites, or a Site.com Contributor feature license to edit the site's content

4.4 Given a scenario, determine the appropriate use of a custom profile

1) A profile is a collection of permissions and other settings associated with a user or a group of users.
2) Number of standard profiles already defined
3) Custom objects have the permissions to access the object (CRED) disabled
    a. Ensures that access to custom objects and their data is only explicitly granted to users
    b. You can change the permissions in custom profiles but not standard profiles
4) Overview of User Permissions and Access
    a. User permissions and access settings specify what users can do within an organization
    b. Access settings determine other functions such as access to Apex classes, app visibility and the hours when a user can log in
    c. Permission and access settings are specified in user profiles and permission set
        i. Every user is assigned only one profile, but can also have multiple permissions sets
        ii. Permission sets are the best way to apply system access to users without affecting all other users that have the same profile
        iii. Up to 1000 permissions can be grouped into a set without creating complete profiles
    d. When determining access for your users, it's a good idea to use profiles to assign the minimum permissions and access setting for specific groups of users, then use permissions sets to grant additional permissions
    e. Permission sets are reusable; you can distribute access among more logical groupings of users, regardless of their primary job function
    f. You can assign permissions sets to various types of users, regardless of their profiles

Permission or Setting Type	In Profiles?	In Permission Sets?
Assigned apps	✓	✓
Tab settings	✓	✓
Record type assignments	✓	✓
Page layout assignments	✓	
Object permissions	✓	✓
Field permissions	✓	✓
User permissions (app and system)	✓	✓
Apex class access	✓	✓
Visualforce page access	✓	✓
External data source access	✓	✓
Service provider access (if Salesforce is enabled as an identity provider)	✓	✓
Custom permissions	✓	✓
Desktop client access	✓	
Login hours	✓	
Login IP ranges	✓	

5) Delegating Data Administration
    a. Overriding the security and sharing configurations and who has such powers are granted
    b. Creating a profile with manage users permission is not recommended because of security risks
    c. Limited admin privileges such as create/edit users, reset passwords, assign users to specific profiles, login as a user who granted login access
6) Global Administrative Permissions
    a. "View all Data", "Modify all Data" including mass transfer/update records and Undelete what others delete
    b. Customize Application – customize just about anything in Salesforce, from page layouts to the data model
    c. Manage users – Add and remove users, reset passwords, grant permissions and more
        i. Global permissions apply to records of every object in organization permissions, if global is too permissive the use object permissions
    d. Two ways to delegate restricted data administrative access (overriding sharing)
        i. Object Level Permissions: (view all, modify all) Object permissions apply to records of a specific object. Or create a permission set with "modify all" and assign roles

ii. Delegate Administration Groups is a group of non-admin users with limited admin privileges.
    1. Delegated Administrators: Users
    2. User Administration (Roles): lets us kinds of users this group can manage
    3. Assignable profiles: lets us specify the profiles this group can assign to users they manage.
    4. Custom Object Administration: specify custom objects delegated admins can administer.

e. Profiles and permission sets – objects and field level access permissions
f. Roles – Record level access permissions through role hierarchy and sharing rules
g. Sharing rules and role hierarchies can never be stricter than the OWD
h. A public group is a collection of individual users, other groups, individual roles, and/or roles with their subordinates that all have a function in common
i. Using a public group when defining a sharing rule makes the rule easier to create and easier to understand later,
j. Create a public group if you want to define sharing rule that encompasses more than one or two groups or roles or any individual
k. Profile controls access to objects and records using roles
l. One account can have many opportunities, many opportunities can belong to one account.

5.0 Standard and Custom Objects

5.1 Describe the standard object architecture and relationship model

1) Use relationships to associate an object with other objects in Salesforce (custom relationships and fields)
2) Can define different types of relationships by creating custom relationship fields on an object
3) There are different types of relationships between objects in Salesforce
4) Their differences include how they handle data deletion, sharing, and required fields in page layouts
    a. Master-Detail
        i. Closely links objects together such that the master record controls behaviors of the detail and sub-detail record
        ii. When a master record is deleted, the related detail and sub-detail records are also deleted
        iii. By default, records can't be re-parented in master-detail relationships
        iv. Administrators can allow child records in master-detail relationships on custom objects to be re-parented to different records by selecting the Allow re-parenting option in the master-detail record
        v. Owner field on the detail and sub-detail records is not available and is automatically set to the owner of the master records
        vi. Custom objects on the "detail" side of a master-detail relationship can't have sharing rules, manual sharing, or queues as this requires an owner field
        vii. Security settings for the master record control the detail and sub-detail records
        viii. Master object can be a standard object or a custom object
        ix. Do not exceed 10,000 child records for a master-detail relationship
        x. In a many-to-many relationship, a user can't delete a parent record if more than 200 junction object records are associated with it and if the junction object has a roll-up summary field that rolls up to the other parent
        xi. Custom object: Maximum number of Master-Detail relationships is 2^3
        xii. A master detail relationship on a object can only be created before the object contains record data
    b. Lookup
        i. Links two objects together.
        ii. Simple relationship between 2 objects
        iii. Lookup relationships are similar to master-detail relationships, except they do not support sharing or roll-up summary fields
        iv. Link two different objects
        v. Link object with itself

vi. When you define a lookup relationship, you have the option to include a lookup field on the page layouts for that object as well as create related list on the related object's page layouts
vii. Can't delete an object or record in a lookup relationship if the combined number of records between the two lined objects is more than 100,000
viii. To delete an object or record in a lookup relationship, first delete an appropriate number of its child records

c. Hierarchical
   i. Special look on relationship available only for the user object
   ii. Allows users to use a lookup field to associate one user with another that does not directly or indirectly refer to itself
d. Many-to-Many
   i. Allows each record of one object to be linked to multiple records from another object and vice versa
   ii. Use a junction object to connect the two objects you want to relate to each other
   iii. A junction object is a custom object with two master detail relationships with a sole purpose of simply relating two objects
   iv. Creating the many-to-many relationship consists of:
      1. Creating the junction object
      2. Creating the two master-detail relationships
      3. Customizing the related list on the page layouts of the two master objects
      4. Customizing reports to maximize the effectiveness of the many-to-many relationship
e. In a 2 master detail relationship, 2nd master detail relationship has no effect on the look feel of the junction object
   i. Sharing is done through the master object

5.2 Explain how to create, delete, and customize fields, page layouts, and list views for custom and standard objects

1) To add a custom field
   a. Navigate to the fields area of the appropriate object
      i. For standard objects, click Your Name > Setup > Customize, select the appropriate object from the Customize menu, and click Fields.
      ii. For custom task and event fields, click Your Name > Setup > Customize > Activities > Activity Custom Fields.
      iii. For custom objects, click Your Name > Setup > Create > Objects, and select one of the custom objects in the list.
      iv. For custom settings, click Your Name > Setup > Develop > Custom Settings, and click the name of the custom setting. (Allowed limit = 2

MB.) (Custom settings are similar to custom objects. Use custom settings to create and manage custom data at the organization, profile, and user levels. Custom settings data is stored in the application cache. This means you can access it efficiently, without the cost of repeated queries. Custom settings data can be used by formula fields, Visualforce, Apex, and the Force.com Web Services API.)

b. Click New in the Custom Fields & Relationships section of the page.
    i. Tip: From this section, you can also set field dependencies and field history tracking on custom objects.
c. Choose the type of field to create, and click Next.
    i. Note: Some data types are only available for certain configurations. For example, the Master-Detail Relationship option is available only for custom objects when the custom object does not already have a master-detail relationship. Also, custom settings only allow a subset of the available data types.
    ii. Relationship fields count towards custom field limits.
    iii. Field types not listed in custom field types may appear if your organization installed a package from the AppExchange that uses those custom field types.
    iv. The Roll-Up Summary option is only available on certain objects.
    v. Field types correspond to API data types. For more information, see “API Data Types and API Field Types” in the Web Services API Developer's Guide.
d. For relationship fields, choose the object that you want to associate with it.
e. Enter a field label.
    i. The Field Name is automatically populated based on the field label you enter. This name can contain only underscores and alphanumeric characters, and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Use the field name for merge fields in custom links, custom s-controls, and when referencing the field from the API.
    ii. Tip: Ensure that both the custom field name and label are not identical to the name and label of any existing standard or custom field for that object. Identical values may result in unexpected behavior when you reference that name in a merge field.
    iii. If a standard field and custom field have matching names or labels, the merge field displays the value of the custom field.
    iv. If two custom fields have matching names or labels, the merge field may not display the value of the field you expect. For example, if you create a field label called Email, the field name automatically populates as Email__c. If you also have a standard field with the label Email, the merge field may not be able to distinguish between the standard and custom field names. Make both the custom field name and label unique by adding a character to each, such as Email2 and Email2__c, respectively.
f. Enter any field attributes.

g. For relationship fields, optionally create a lookup filter to limit the valid values and lookup dialog results for the field.
h. Click Next to continue.
i. In Enterprise, Unlimited, and Developer Editions, specify the field's access settings for each profile, and click Next.
    i. Note: When you create a custom field, by default the field isn't visible or editable for portal profiles, unless the field is universally required.
    ii. Profiles with "View Encrypted Data" permission are indicated with an asterisk.
j. Choose the page layouts that should display the field as an editable field.
    i. The field is added as the last field in the first two-column section on the page layout. For long text area fields, the field is added to the end of the first one-column section on the page layout. For user custom fields, the field is automatically added to the bottom of the user detail page. For universally required fields, you cannot remove the field from page layouts or make it read only.
k. For relationship fields, choose whether to create a related list that displays information about the associated records. You can choose to put the related list on any page layouts for that object.
    i. To change the label of the custom related list as it will appear on the page layouts of the associated object, edit the Related List Label. To add the new related list to page layouts that users have already customized, check Append related list to users' existing personal customizations.
l. Click Save to finish or Save & New to create more custom fields.
    i. Note: Creating fields may require changing a large number of records at once. To process these changes efficiently,you request may be queued and you may receive an email notification when the process has completed.

2) <u>Creating Page Layouts</u>
    a. Available in: Enterprise, Unlimited, and Developer Editions, User Permissions Needed
    b. To create page layouts: "Customize Application"

    c. To create a new page layout:
    d. Click Your Name > Setup > Customize, select an object or record type, and click Page Layouts.
        i. For opportunities, click Your Name > Setup > Customize > Opportunities > Opportunity Products > Page Layouts to create or edit the additional page layouts for products on opportunities.
        ii. For person accounts, click Your Name > Setup > Customize > Accounts > Person Accounts > Page Layouts to create or edit the additional page layouts for person accounts.
        iii. For campaign members, click Your Name > Setup > Customize > Campaigns > Campaign Member > Page Layouts.
3) 2. Click New.
    a. To create a new page layout by cloning an existing one:

i. In the enhanced page layout editor, click Edit next to a layout, and then click Save As on the layout page.
ii. In the original page layout editor, select a layout, and then click Clone on the layout page.
iii. If you clone a page layout using this method, skip the following step.

b. Optionally, choose an existing page layout to clone.
c. Type a name for the new layout.
d. Click Save.

5.3 Given a scenario, determine the appropriate fields and page layouts for an object

TBD

5.4 Explain how to create, delete, and customize record types and business processes

1) Assign record types to users in their profile or permission sets or a combination of both
2) Record type assignments behaves differently in profiles and permission sets
3) User's default record type is specified in the users personal settings
   a. Can't specify a default record type in permission sets
4) You can assign the Master record type in profiles
   a. In permission sets, you can assign only custom record types
   b. The behavior for record creation depends on which record types are assigned in profiels and permission sets

Record type	# of records	When they create a record
Master	None	New record is associated with the master record type
Master	One	New record is associated with the custom record type Users can't select the Master record type
Master	Multiple	User are prompted to select a record type
Custom	One or more	Users are prompted to select a record type In their personal settings, users can set an option to use their default record type and not be prompted to choose a record type

5) Page layout assignments are specified in profiles only
   a. They are not available in permission sets
   b. When a permission set specifies a custom record type, users with that permission set get the page layout assignment that's specified for that record type in their profile

c. In profiles, page layout assignments are specified for every record type, even when record types aren't assigned
d. For lead conversion, the default record type specified in a user's profile is used for the converted records
e. Users can view records assigned to any record type
    i. Page layout is assigned to every record type on a user's profile
    ii. Record type assignment on a user's profile or permission set doesn't determine whether a user can view a record with that record type
    iii. Record type assignment simply specifies that the user can use that record type when creating or editing a record
    iv. Record types in permission sets aren't supported in packages and change sets
        1. As a result, any record type assignments in permission sets in a sandbox organization must be manually reproduced in a production organization

5.5Given a scenario, determine the appropriate record types and business processes

1) Record types
    a. Allows you to specify categories of records that display different picklist values and page layouts.
    b. Also associate record types with profiles so you can specify the picklist values and page layouts that different types of users can see in record detail pages
    c. Both usability and data integrity are adversely affected by irrelevant data
        i. Take away unnecessary choices by utilizing record types

5.6Explain the implications of deleting fields

1) Before deleting a custom field, consider where it is referenced
2) You can't delete a custom field that is referenced elsewhere
3) When you delete a custom field, all of the history data is deleted and changes are no longer tracked
4) A background process periodically runs that cleans up metadata associated with deleted custom fields
    a. This process will affect the last modified date and last modified by fields on page layouts, record types, and custom objects
    b. Deleted custom fields and their data are stored until your organization deletes them or 45 days, which ever happens first
    c. Until that time, you can restore the field and the data
    d. Field still counts against the maximum number of custom fields allows in organization.

5.7Describe when to use and how to create formulas

1) Begin building a formula field the same way you create a custom field
2) Select the data type for the formula
    a. Choose the appropriate data type for your formula based on the output of your calculation
    b. Choose the number of decimal places for currency, number, or percent data types
        i. Setting is ignored for currency fields in multicurrency organizations
        ii. Decimal places for your currency setting apply
        iii. Salesforce uses the round up tie-breaking rule for numbers in formula fields
    c. Click next
    d. Build your formula
        i. If you are building a formula in the Advanced Formula Tab or for approvals or rules, such as workflow, validation, assignment, auto-response, or escalation, click Insert Field, choose a field, and click insert
        ii. To create a basic formula that passes specific Salesforce data, select the simple formula tab.
        iii. Choose the field type in the Select Field Type drop-down list, and choose one of the fields listed in the Insert Field drop-down list
3) Build cross-object formulas to span related objects and reference merge fields on those objects
4) Because formula fields are automatically calculated, they are read-only on record detail pages and do not update last modified date fields
5) Formula fields are not visible on edit pages
6) In Account formulas, all business account fields are available as merge fields
7) Account fields exclusive to person accounts such as Birthdate and Email are not available
8) Formulas on Activities that use standard fields shouldn't be placed on both the Task and Event pages
    a. Both these pages are considered activities
9) Default value formulas for a type of record can only reference fields for that type of record
    a. Formula fields and formulas for approvals or rules, such as workflow, validation, assignment, auto-response, or escalation, for a type of record can reference fields for that type of record as well as any records that are related through a lookup of master-detail relationship
    b. Formula fields that a user can see may reference fields that are hidden or read only using field-level security
        i. If the formula field contains sensitive information, use field-level security to hide it
    c. You can add activity formula fields to task and event page layouts
        i. Task-related formula field on an event page layout may not be useful
        ii. Likewise, event-related formula fields on task page layouts may not be useful
        iii. To determine if a record is a task or event, use the IsTask merge field

d. Character limit – Formula fields can contain up to 3,900 characters, including spaces, return characters, and comments
    i. If formula requires more characters, create separate formula fields and reference them in another formula field
    ii. The maximum number of displayed characters after an evaluation of a formula expression is 1,300 characters
e. Save size limit – formula fields can't exceed 4,000 bytes (4MP) when saved
    i. The save size differs from the number of characters if you use multi-byte characters in your formula
f. Compile size limit; Formula fields can't exceed 5,000 bytes (5MB) when compiled
    i. The compile size is the size of the formula (in bytes) including all of the fields, values, and formulas it references
g. Long text, encrypted, and Description fields are not available for use in formulas
h. The value of a field can't depend on another formula that references it
i. Fields referenced in formulas can't be deleted
    i. Remove the field from formula before deleting it
j. Task Due date is not available for use in formulas
k. Campaign statistics fields can't be referenced in formulas for field updates, approval processes, workflow rules, or validation rules
    i. Can be referenced in custom formula fields
l. Dates and times are always calculated using the user's time zone
m. The created date and last modified date fields display only the date, not the date and time
n. {!CreatedDate} + 5 calculates the date and time five days after a record's created date.
    i. Note that the expression returns the same data type as the one given; a date field plus or minus a number returns a date, and a date/time field plus or minus a number returns a date/time.
o. When calculating dates using fractions, Salesforce ignores any numbers beyond the decimal. For example:
    i. TODAY() + 0.7 is the same as TODAY() + 0, which is today's date
    ii. TODAY() + 1.7 is the same as TODAY() + 1, which is tomorrow's date
    iii. TODAY() + (-1.8) is the same as TODAY() + (-1), which is yesterday's date
p. To calculate the value of two fractions first, group them within parentheses. For example:
    i. TODAY() + 0.5 + 0.5 is the same as TODAY() + 0 + 0, which is today's date
    ii. TODAY() + (0.5+0.5) is the same as TODAY() + 1, which is tomorrow's date
q. Hyperlink formula fields are just like other custom fields that you can display in list views and reports
r. Custom links display on detail pages in a predefined section
    i. Hyperlink formula fields can display on a detail page wherever you specify

s. Using custom links, you can specify display properties such as window position and opening in a separate popup position
    i. Hyperlink formula fields open in a new browser window by default or you can specify a different target window or time frame
t. Your formulas can reference custom links.
    i. Before deleting a custom link, make sure it is not referenced in a formula field
u. Hyperlink formulas fields that contain relative URLs to Salesforce pages can be added to list views, reports, and related lists
    i. Use a complete URL, including the server name and https:// in your hyperlink formula before adding it to a search layout
        1. Formula fields are not available in search results layouts
v. The output of your formula must be less than 19 digits

10) Cross Object Formulas
a. Formulas that span two or more objects by referencing merge fields from related records
b. Cross-object formulas that reference currency fields convert the value to the currency of the record that contains the formula
c. Salesforce allows a maximum of 10 unique relationships per object in cross-object formulas
    i. The limit is cumulative across all formula fields, rules, and lookup filters
d. You can't reference cross-object formulas in roll-up summary fields
e. In cross-object formulas, you can't reference merge fields for objects related to activities
f. In cross-object formals, you can't reference record owner merge fields for any object
    i. Reference record types in formulas if you want different workflow rules, validation rules, and lookup filters to apply to different record types
        1. Create a workflow rule on accounts
        2. Create validation rules on opportunities
g. When referencing a record type in a formula, use recordtype.id instead of recortype.name
    i. If you use RecordType.Name and the record type name changes, your formula will break.
    ii. The record type ID never changes.
    iii. Using RecordType.Id can make your formula less readable, so use inline comments to make your formula readable.
    iv. Do not use the $RecordType global variable in cross-object formulas. The $RecordType variable only resolves to the record containing the formula, not the record to which the formula spans.

6.0 Sales Cloud Application

6.1 Describe the capabilities of campaign management

Sales Cloud Basics

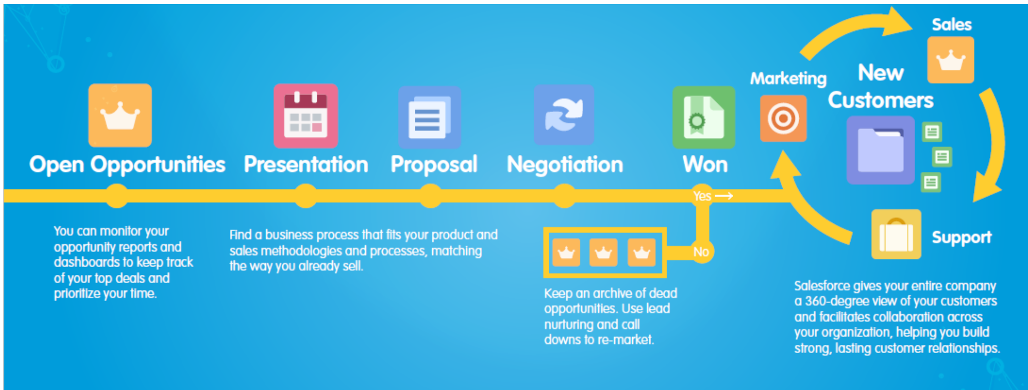
1) Leads are a person, org, company interested in working with your company
    a. First search SF to see if lead has already been created
    b. Add lead manually to create new lead
    c. Import wizard for leads (<=50,000)
    d. Web to lead
2) Leads are converted into an account or opportunity in order to be part of sales pipeline
3) Lead status
    a. Open – not converted
    b. Working – contacted
    c. Closed – converted
    d. Closed – not converted
4) Once converted leads create
    a. Account
    b. Contact Record
    c. Associated opportunity (optional)
    d. Assign an activity to-do for the record owner
5) Accounts & Contacts
    a. Org/individual/company involved with your organization as a customer, competitor, partner
    b. Create account
        i. Manually
        ii. Import can also be done via outlook, .csv, data.com
6) Contacts
    a. Any point of contact/individual/influencer with an account
    b. Any contact can be related to multiple opportunities
7) Opportunity
    a. Potential revenue generating deal/event that you want to track in SF
    b. Opportunity alert - Sends a notification the first time an opportunity reaches the threshold
    c. Big Deal Alert – Send an automatic email notification for opportunities with large amounts or reaches a threshold
8) A sales process – contains the stages of an opportunity through its sales cycle
9) Similar opportunities – allows user to search opportunities that share common fields
10) Predicting and Planning Sales cycles

a. Forecast sales revenue
    i. Forecast is a revenue projection that aggregates individual opportunities into a total or summary expressed in a dollar amount.
b. Plan and predict your pipeline
c. Meet or exceed your quota

6.2 Given a scenario, identify the capabilities and implications of the sales process

1) Marketing Administration: At the start of the process, Marketing team develops campaigns to generate leads
2) Campaigns: Campaign management is carried out using the Marketing Administration tools and had links to the lead and also any opportunities that may have been influenced by the campaign
3) Marketing/sales: When validated leads are converted to accounts, contacts and opportunities. This can be the responsibility of either the marketing or sales team and requires a suitable sales process to have been agreed upon
4) Key Metrics include:
    a. Campaign ROI
    b. Top Search terms
    c. Leads by source
    d. Lead quality

1) Leads: Lead object is a person or company that might be interested in your product or service. If the rep qualifies a lead and decides to pursue it, the lead is converted (automatically transforms it into three objects: Account, Contact, and Opportunity)
2) Accounts: The account object represents a company. Created account records for prospects, customers, competitors, partners, or others. An account record contains – or connects to- all information about your interactions e.g., in-progress and completed deals, POC, and records of past interactions
3) Contacts: Contact record contains all relevant information about the person, e.g., phone numbers, title, role. When converted Lead information is transferred to the contact. You can add additional contacts as needed
4) Opportunities: Opportunity Object contains information for every deal tracked, e.g., deal size and close date. It is core of sales processes. To gain visibility into pipeline make sure reps (owners) track deal and update fields. Can be generated from lead conversion or directly entered. Opportunities are worked through a sales process using sales stages where the stage is advanced to the point where they are won/closed and become sales.
5) Activities: Activities consist of tasks, events, calls, and emails that make it possible to track every customer interaction
6) Key metrics
    a. Lead by Status
    b. Lead conversion %
    c. Converted lead by month
    d. Top sales reps



1) Sales (won deals): Opportunity information should be logged into the organizations financial system. Upon financial completion and acceptance of the deal the post-customer acquisition process is then enabled where account and contact can be recognized as a customer
2) Key Metrics:
   a. Top 10 Deals
   b. Month-to-date trending
   c. Closed business by month
   d. Top sales reps
3) Cases: the customer relationship concerning incidents and request are managed by escalating cases within the customer services and support automation suite

Custom Sales processes

1) Create processes
2) Create page layout

General Sales Cloud features

1) Customer Management
   a. Set appointments, tasks and reminders.
   b. Prioritize meetings by location, importance or size of lead
   c. All activities are automatically organized on a daily basis for the sales rep
2) Opportunity/Pipeline Management
   a. Manage opportunity pipeline with visual reports
   b. Forecasting
3) Accounting/Back Office Integration
   a. Leverage a variety of AppExchange products to integrate your Back Office applications or build a custom integration to respond to needs or capabilities
4) Quoting and Proposal Generation
   a. Use ability to setup your product catalog and price books to generate custom quotes and proposals using existing SF information
5) Reporting & Dashboards
   a. Provide sales reps with concise snapshots of real-time information

6) Chatter
    a. Instant collaboration and cooperation
7) Data.com
    a. Unlimited access to business contacts
8) Marketing Leads
    a. Sync marketing and sales with Sales Cloud app
9) Approvals and Workflows
    a. Control routine activities, eliminate redundant tasks and automate approvals.
10) Email and Productivity
    a. Develop email templates for routine communications
11) Content Library
    a. Create, catalog and store information (documents, etc.)
12) Mobile
    a. Create virtual office for mobile device, e.g., log calls, respond to leads, review reports and collaborate using chatter

6.3 Given a scenario, identify when to apply the appropriate sales productivity features in both Salesforce Classic and Lightning Experience

Accounts and Contacts

Feature	Lightning Experience	Salesforce Classic
Account Insights	X	
Activity Timeline	X	
Enhanced Notes	X	
Reference page layout	X	
Related Lists	X	X
Integrated email and templates	X	X
Twitter highlights	X	X
Person accounts	X (beta support)	X
Account teams	X	X
Account and contact hierarchy		X
Contacts to multiple accounts	X	X

Campaigns (beta)

Feature	Lightning Experience	Salesforce Classic
Campaign member status charts	X	
Import campaign members	X	X
Add individual campaign members	X	X
Campaign member status updates via import	X	X
Clone campaign members		X
Add and manage campaign members from a list view		X

Leads

Feature	Lightning Experience	Salesforce Classic
Workspace page layout	X	
Activity Timeline	X	
Sales path	X	
Enhanced notes	X	
Change lead owner to queue	X	X
Integrated email and templates	X	X
Lead conversion customization via the API	X	X
Find and merge duplicate leads		X

Opportunities

Feature	Lightning Experience	Salesforce Classic
Workspace page layout	X	
Activity timeline	X	
Sales path	X	
Enhanced notes	X	
Visual view of opportunities (Kanban)	X	
Integrated email and templates	X	X
Opportunity teams	X	X
Opportunity splits		X
Similar opportunities		X
Big deal alerts		X

Data.com

Features	Lightning Experience	Salesforce Classic
Prospect for contacts and companies	X	X
Clean status of clean rules	X	X
See how clean rules are working	X	X
Add Data.com contacts as leads		X

Reports

Features	Lightning Experience	Salesforce Classic
Enhanced report charts	X	
Hide totals and subgroups from report view	X	
Create interactive filters when viewing reports	X	
Report builder	X	X
Bucket fields	X	X
Custom summary formulas	X	X
Matrix, summary, tabular reports formats	X	X
Report folder sharing		X
Create report folders		X
Joined reports		X
Pie charts		X
Schedule report refreshes		X

Follow reports		X
Report notifications		X
Export reports		X

Dashboards

Feature	Lightning Experience	Salesforce Classic
Display more than 3 columns	X	
Dashboard builder	X	X
View filtered dashboards	X	X
View dynamic dashboards	X	X
Schedule dashboard refreshes		X
Post dashboard components to feeds		X
Follow dashboards		X
Visualforce components		X

List Views

Feature	Lightning Experience	Salesforce Classic
Charts	X	
Create filters on the fly	X	
Search for a list view on the fly	X	
Create and edit lists	X	X
Sortable columns	X	X
Resizable columns	X	X
Sharing settings	X	X
Filter logic	X	X

Other Features and Products

Feature	Lightning Experience	Salesforce Classic
Activities-related composer windows	X	
Create and edit records	X	X
Inline editing record detail fields		X
Forecasting		X
Territory management		X
Salesforce communities		X
Partner portals		X
Service cloud		X
Work.com		X

6.4 Describe the capabilities of products and price books

Products

1) Products are individual items that you sell on your opportunities and quotes
2) Create a product and associate it with a price in price book

3) Each product can exist in many different price books with different prices
4) Product that is listed in a price book with an associated price is called a price book entry
5) Products related list of an opportunity detail page and quote line items related list of a quote detail page list the product for that record
6) Use related lists to associate a price book with the opportunity or quote, add or edit proudcts and for opportunities establish or edit product schedules

Price Books

1) Contains products and associated prices
2) Each product with it associated price is referred to as a price book entry
3) Use the standard price book or create custom price books
4) Standard price book is automatically generated to contain a master list of all products and standard prices regardless of the custom price books that also contain them

Schedules

1) Establish default schedules on a product as well as individual line items (opportunity products) on an opportunity
2) Administrator determine which types of schedules your organization can use
    a. Quantity schedules
    b. Revenue schedules
    c. Both
3) Administrator also specifies which types of schedules can be established for each product
    a. Quantity schedule outlines dates, numbers of units, and numbers of installments for payments, shipping, or other use as determined by organization
    b. Revenue schedules outline the dates, revenue amounts, and number of installments for payments, recognizing revenue, or other use.

6.5Describe the capabilities of lead management

1) Use assignment rule when creating or editing a lead
2) Lead assignment rule used to automatically assign leads to different users or queues
3) Without lead assignment rule system assigns all new web-generated leads to the Default Lead Owner defined on the Lead settings page
4) Can assign new web-generated leads using the Web-to-lead setup or when creating or editing a lead (check a box to assign the lead automatically using your lead assignment rule)
5) Email is automatically sent to the new owner if Administrator specified an email template in the matching rule entry
6) Checkbox can be selected by default if modified on appropriate page layout
7) Importing leads
    a. When importing leads administrator can apply a lead assignment rule to automatically assign leads to users or queues based on values in certain lead fields

b. Alternatively, administrator can add a Record Owner field to the import file to assign lead ownership

8) Creating a Lead Manually (default assignment)
    a. If you create the lead you are automatically listed as the owner lead
9) Taking leads from a Qued
    a. Take ownership of leads in a queue, got to the queue list view, check the boc next to the one or more leads and click to accept
10) Changing ownership of one lead
    a. To change ownership of a lead you own or have read/write sharing to, click the Change link next to the Lead Owner field and then specify the mane of user or queue
    b. Select send notification email box to send an automated email to the new lead owner
    c. If new owner is a queue, emails sent to all queue members
11) Changing Ownership of Multiple Leads
    a. Can transfer ownership of multiple leads if you have the Transfer Leads or Transfer Record Permission, the edit object permission on leads and sharing access to view the leads
    b. To transfer leads use
        i. Mass Transfer (leads automatically marked unread)
        ii. If organization used divisions, leads that are assigned via assignment rules are automatically set to the default division of the new owner.
    c. Organization-wide sharing model for an object determines the access users have to that object's records in queues
        i. Public Read/Write/Transfers: Users can view and take ownership from any queue
        ii. Public Read/Write or Public Read Only: View any queue but only take ownership of records from queues of which they are a member or depending on sharing settings, if they are higher in the role or territory hierarchy than a queue member
        iii. Private: Users can only view and accept records from queues of which they are a member or, depending or sharing settings, if they are higher in the role or territory hierarchy that a queue member
    d. Regardless of sharing model, users must have the Edit permission to take ownership of records in queues of which they are a member
    e. Administrators, users with the Modify All object-level permission for cases, and users with the Modify All Data permission can view and take records from any queue regardless of the sharing model or their membership in the queue
12) User Permissions Needed
    a. To change status of leads: Manage leads
    b. Change ownership: Transfer Leads or Transfer Records and Edit on leads
    c. Add leads to campaign from a list view: Marketing User checked and Read on Leads and Edit on Campaigns
    d. From any List Page: Administrator can mass update multiple leads.

e. From any queue list view, users can take ownership of leads if:
    i. They are a member of queue
    ii. They are higher in the role hierarch than a queue member
    iii. The organization's default sharing for leads is set to Public Read/Write/Transfer

13) Checkboxes for leads
  a. Accept: Assigns you as the owner for the selected leads and transfers open activities to you.
    i. In organizations that are not Public Read/Write/Transfer for leads, you can take leads only from the queues of which you are a member or if you are higher in the role hierarchy than a queue member
  b. Change status: Changes the Status of the leads to the value set
    i. Must have the Manage Leads permissions and read/write access to leads
    ii. If you change the status the unread by owner checkbox is selected
  c. Change owner: Assigns leads to user or queue
    i. If new owner is a user –not a queue- associated note, attachments, and open activities are also transferred
    ii. To use feature, you must have the Transfer Leads or Transfer Record permissions, the Edit object permission on leads, and access to view the leads you are updating
  d. Add to Campaign: Adds leads to an existing campaign
    i. Must have Marketing User Box checked, read permission on leads, and edit permission on campaigns

14) Creating Leads
  a. Web-to Lead to automatically capture leads (500)
    i. Automated lead changes that result from Web-to-Lead, user listed in history is the Default Lead Creator (determined by settings)
  b. Import leads using the import wizard
  c. Create leads manually
    i. You are automatically assigned as owner
    ii. Lead status set to default, as specified by administrator
    iii. Assignment rule might change the record type depending on rule
    iv. Lead is marked as read and will not display in unread list
    v. If you save the lead using the Save and New button, the lead is marked unread
    vi. Lead Activity history tracks changes to lead
  d. Data.com contacts can be added as leads

15) To convert leads
  a. Converted lead, creates a new account, contact and optionally an opportunity
  b. Campaign members are moved to the new contact and the lead becomes read only
  c. SF does not overwrite an existing account and contact data
  d. If an existing account and contact have same name you can update the existing account and contact, Information from the lead is inserted only into black fields

e. All open and closed activities from the lead are attached to the account, contact, and opportunity
f. You can assign the owner of the records and schedule follow-up task
g. When you assign a new owner, only the open activities are assigned to the new owner
h. When custom lead fields are present, information can be inserted into custom account, contact or opportunity fields
i. Converted leads can't be reviewed although they can appear in lead reports
j. SF updates last modified date and last modified by system fields on converted leads when picklist values included on converted leads are changed
k. Conversion impact on workflow
    i. Can't convert lead that is associated with an active approval process or has pending workflows
    ii. Converting a lead to a person account cannot trigger workflow rules
    iii. If validation and triggers for lead convert are enabled, converting lead can trigger workflow action on a lead
    iv. When lead is converted by non-owner, all workflow tasks associated with the lead that are assigned to that user, except email alerts, are reassigned to the lead owner. Workflow tasks assigned to users other that the lead owner and lead converter aren't change.
l. Conversion impact on campaigns
    i. If lead matches an existing contact and both records are linked to the same campaign, the member status is determined by whichever is further along in the lifecycle of the campaign.
    ii. Related campaign information is always associated with the new contact record regardless of the user's sharing access to the campaign
    iii. With more than one campaign is associated with a lead, the most recently associated campaign is applied to the Primary Campaign Source Field on the opportunity regardless of the user's sharing access to the campaign
    iv. When a lead is converted, chatter feeds post associated with the lead are not migrated
    v. The leads are no longer available in the chatter feed.
m. Salesforce ignores lookup filters when converting leads if the Enforce Validation and Triggers from Lead Convert checkbox on the Lead Settings page is deselected
n. If the lead has a record type, the default record type of the user converting the lead is assigned to records created during lead conversion
o. The default record type of the user converting the lead determines the lead sources values available during conversion
p. Convert lead as soon as it becomes a real opportunity that you want to forecast
q. If organization uses territory management, the new account is evaluated by account assignment rules and may be assigned to one or more territories.
r. If rule assigns the account to exactly one territory, then the opportunity will also be assigned to that territory

s. If the rules assign the account to multiple territories, then the opportunity in not assigned to any territory
t. If organizations uses person accounts, you can convert leads to either person accounts or business accoutns.
u. Leads with a black company field are converted to person accounts
v. The default person account record type for your profile is applied to the new person account.
w. Note that you can only create leads with a blank Company field using the force.com API
x. In particular, remove the company field from the page layouts of leads that will be converted to person accounts, and make the Company field required on the page layouts of leads that will be converted to business accounts
y. When you convert a lead into a existing account, you don't automatically follow that account
z. However, when you convert the lead into a new account, you automatically follow the new account, unless you disabled feed tracking for your account in your chatter settings

6.6Given a scenario, identify how to automate lead management

1) Web-to-lead can be used to gather information from website and automatically generate up to 500 new leads per day

6.7Describe the capabilities of campaign management

1) Create the campaign: After determining marketing strategy, create a campaign to track your efforts
2) Create your target list: Next define who you want to target with your campaign. The method used to create a target list depends on who you are targeting:
    a. Rented or purchase lists – Simply use the list of names as your target list. Best not to import the names into the system yet
    b. Existing contacts, leads, or person account – run a contact, lead, or person account report in Salesforce and use the add campaign button to associate those records with your campaign. Person accounts are included in contact list views and can be added to campaigns from them.
3) Execute the campaign: All campaign execution occurs outside of Salesforce.
    a. Online – send email using an execution order
    b. Offline – plan and host a conference; run print or radio advertisements; send direct mail pieces; or host a web seminar
4) Track responses: The possible types of campaign responses can be divided into the following groups based on the response tracking mechanism:
    a. Website Response – Prospects respond by filling in a form on your website (web-to-lead or jump page or microsite for the campaign). All responses are created as leads, and if

the Web form includes the Campaign field value, the leads are directly associated to the campaign. Also include the Member Status field in the form to automatically mark all submissions with a particular member status

   b. Manual update – Customers and prospects respond via phone or mail.
   c. Mass update/offline response – Any response you track in an offline list. Use manage Members page to update the member status of leads, contacts, or person accounts

5) Analyze campaign effectiveness: The final step is to analyze the effectiveness of the campaign using reports and campaign statistics.
6) Salesforce Sales Cloud-Campaign and ROI
   a. Campaign contains name, start/end date, expected revenue, budgeted cost, actual cost. Can have different page layouts for each campaign type
   b. Campaign members can be lead, contact, person account, with status. Can have different page layouts for each campaign type. Status can be set up through advanced setup
7) How to add campaign members to a campaign
   a. Add members by search
   b. Add members by importing fields
   c. Add members by created a report
8) Campaign Hierarchy allows grouping campaigns together. Standard fields in Campaign Hierarchy includes summary level, for example, total actual cost in hierarch
9) Campaign Influence tracks multiple campaigns on a single opportunity, also tracks which campaign has the primary influence. Can be configured “enabled” and “automatically” by rules and timeframe
10) How Marketer measures the campaign effectiveness
   a. Which campaign drives more business (pipeline report in Sales)
   b. Which campaign drives more revenue (closed won opportunities for Sales)
   c. Which campaign have the best ROI (ROI)

7.0 Service Cloud Applications

7.1 Describe the capabilities of case management

1) Streamlines case capture, resolution and visibility across every customer communication channel
2) Case management provides a single repository for all customer support interactions
3) Solution integration enables faster case handling by seamlessly integrating case information with existing knowledge bases
4) Case escalation and workflow ensure your business processes meets guaranteed service level commitments
5) Case analytics enable you to measure team and rep productivity and view all key metrics in a dashboard.

7.2 Given a scenario, identify how to automate case management

1) A case is a description of a customer's feedback, problem, or question.
2) Used to track and solve your customers issues
3) Quickly create, edit, locate, and view cases from the Cases tab
4) Gather customer feedback from website and customer emails
    a. Web-to-Case
        i. Gather customer support requests directly from your company's website
        ii. Automatically generate up to 5000 new cases a day
        iii. Helps organization respond to customers faster and improve productivity of support team
    b. Email-to-Case
        i. Helps to efficiently resolve and correspond with customer via email
        ii. Automatically creates a case in SF when email is sent to CS email
        iii. Auto-populates case fields from content of message
        iv. Requires downloading of Email-to-case agent
            1. Allows you to keep all email traffic within your netowrk's firewall and accept emails larger that 10MB
    c. On-Demand Email-to-Case
        i. Uses Apex email services to convert email to cases
        ii. Does not require download and install behind firewall
        iii. Limits file size to 10 MB
5) Customers can also create cases via Customer Portal, Self-Service Portal, or Chatter Answers
6) If service cloud console is set up you can find, view, and edit cases and their related recordson one screen
7) Case and solution Automation

a. Business hours set you your organization support hours
b. Assignment rules to create automatically routing cases:
    i. Allow you to automatically round cases to appropriate users or quees
    ii. Create multiple rules but only one can be active at a time
c. Escalation rules
    i. Allow you to define automated actions when cases with specific criteria are open after a specified period of time
    ii. Help identify when cases have fallen outside of an intended service level
    iii. Can automatically notify a user, reassign to another user or queue or both
d. Auto-response Setup
    i. Determine which email template to send to customers when cases are captured
    ii. Set rules based on any attributes of incoming casers
    iii. Rules to set up rules that send email to customers when they submit cases from one of the following
        1. Web-to-Case
        2. Email-to-Case
        3. On-Demand Email-to-Case
        4. Customer Portal
e. Email to case
    i. Set up ability to capture customer emails as cases (automatically)
    ii. Specifies how content of each customer email automatically populates case fields

7.3 Describe the capabilities of solution management

1) Solution categories allow users to categorize the solutions they create
2) Solution settings enable specific options for solutions
3) Public solutions set up solutions for your customers to use when searching for solutions
4) Web-to-case sets up ability to capture cases from your website
5) Self-service portal to set up web portal for customers to log cases and search for solutions

7.4 Describe the basic capabilities of portals

1) Use settings to set up organization’s customer portal so customers can log case, search for solutions, and access any custom objects created for them
2) Customer Portal provides online support channel for your customers
3) Allows customer to resolve inquiries without contacting a customer server representative.
4) Customize and deliver visually stunning user interface to your customers
5) Following features allow customers to succeed

a. Determine which pages and fields customers see with page layouts and field-level security
b. Manage customer profiles, permission sets, roles and sharing rules
c. Provide and organize documents via SF CRM content or the document tab
d. Create knowledge base for your customers using SF knowledge
e. Allow customers to participate in Ideas communities
f. Display and collect data that is unique to your organization with custom objects
g. Display custom s-controls and content from other websites via web tabs
h. Provide customized reports via the Reports tab

6) Service Cloud Portal is the Customer Portal Intended for many thousands to millions of users
7) Service cloud portal users are also referred to as high volume portal users

7.5 Describe the capabilities of the Communities

1) Share information and collaborate with people outside your company
2) Use communities to:
    a. Drive more sales by connecting employees with distributors, resellers and suppliers
    b. Deliver world class service by giving your customers one place to get answers
    c. Manage social listening, content, engagement, and workflow all in one place
3) Can create multiple communities within your organization for different purposes
4) Can be based on standard SF functionality and tabs, or a preconfigured template
5) May contain subset of features and data available in your internal SF org
6) Can be customized to use your company branding
7) Can choose which members from company, customers, partners or others can join
8) They live inside your org and can be accessed from the global header using drop down menu in both SF and SM1
9) Community Builder
    a. Intuitive convenient tool for customizing your community.
    b. Create community based on preconfigured template
        i. Apply branding
        ii. Edit pages
        iii. Update your template
        iv. Publish changes
    c. Here's what you can do:
        i. Use self-service templates – Koa, Kokua, or Mapili
        ii. Use Aloha template to create a configurable App Launcher
        iii. Design pixel-perfect, branded pages
        iv. Create public pages that anyone can access, or add private pages that you can add as a tab within your community
        v. Build and iterate quickly using drag-and-drop reusable page elements

vi. Use ready-made forms to create web-to-lead forms or gather customer feedback
vii. Create data-driven pages, such as product catalogs or other listings, using your organization's data
viii. Set a home page and set up multilingual support for your community in Site.com Studio, a web content management system that provides extra configuration options. (Site.com Studio is easily accessible from Community Management)

10) Force.com Sites
    a. Suitable for developers with experience using Visualforce.
    b. Let's you build custom pages and Web applications by inheriting Force.com capabilities including analytics, workflow and approvals, and programmable logic
    c. Best used to create sites programmatically using APX and API
    d. Here's what you can do:
        i. Create public, branded pages that anyone can access
        ii. Leverage Visualforce to create private pages that you can add as a tab withing your community
        iii. Write your own controllers, or extensions, using Apex code
        iv. Create custom login or self-registration pages
        v. Build dynamic we applications, such as event management application

Feature	Community Builder	Force.com Sites
Public pages	X	X
Community templates (Koa, Kokua, Napili, Aloha)	X	X
Authenticated pages	X	X
Visualforce pages		X
Out-of-the-box login, logout, self-registration, and error pages	X	X
Drag-and-drop environment	X	
Reusable components	X	
Pixel-perfect designs	X	X
IP Restrictions	X	X
Access to data, such as cases, leads, and opportunities	X	X
Ready-made forms	X	
CMS	X	
Programmatic page creation (using Apex, API, and controllers)		X
Web applications		X
Analytics, reports, and workflows		X
Full Force.com platform capability		X

7.6 Describe the capabilities of Salesforce Knowledge

1) Salesforce knowledge base is built from knowledge articles, which are documents of information
2) Articles can include information on processes, like how to reset your products to its default or FAQ's
3) Experienced service agents or internal writers write the articles
4) The articles are then published to a range of channels
    a. Internal database
    b. Customer and partner communities
    c. Public website
5) Where information is published is based on the article layout profile and the field level security
6) Promote search terms are useful for promoting a SF Knowledge article that you know is commonly used to resolve a support issue

7.7 Describe the capabilities of the Community application, such as Ideas and Answers

1) Ideas
    a. Ideas is a community of users who post, vote for, and comment on ideas. An Ideas community provides an online, transparent way for you to attract, manage, and showcase innovation.
    b. Category ideas are admin defined values that help organize ideas into logical sub-groups
    c. Comments are plain text responses to posted ideas that enable discussions about ideas
    d. Communities are customizable public or private spaces for employees, end-customers, and partners to collaborate on best practices
    e. Community Expert is a member of the community who speaks credibly and authoritatively on behalf of your organization
    f. Demote can be used to subtract 10 points from the overall score and decrease the idea's overall popularity ranking. Can only be used once per user
    g. Half-life setting determines how quickly old ideas drop in ranking
    h. Idea is the suggestion posted by the user
    i. Idea theme provides a forum in which you invite community members to post ideas about specific topics
    j. Point a point is a unit of measure used to represent the popularity of an idea
    k. Portal allows outside users to participate
    l. Promote adds 10 points
    m. Recent activity contains summary of your participation
    n. Status used to track progress of idea: Under review, reviewed, coming soon, now available
    o. Top All time ideas are the most popular ideas

p. Vote, idea means you have promoted or demoted
q. Zone organize ideas into logical groups

2) Answers
   a. Answers is a feature that enables users to ask questions and have members answer
   b. Best answer allows asker to mark which answer is best
   c. Community is a customizable public or private space to collaborate on best practices and business processes
   d. Data Category for Answers allow users to classify questions in an answer zone
   e. Idea are suggestions posted by members
   f. Question is an issue posted to the answers community
   g. Reply is the response to the question
   h. Vote allows you to like or dislike
   i. Zone is a place to organize ideas and questions
3) Files
   a. Working with files in Salesforce means
      i. Collaborating with coworkers by posting files to feeds and directly to records
      ii. Sharing files with customers in the secure salesforce cloud
      iii. Syncing files between your local drive and salesforce
      iv. Learning how users work with files by running standard and custom file reports
   b. Files are automatically added to the file list when you:
      i. Upload a file
      ii. Attach a file to a record
      iii. Attach to a chatter field
      iv. Sync a file in SF sync folder
      v. Sharing
      vi. Upload to content library
      vii. Creates a content pack or uploads a web link

8.0 Activity Management

8.1 Describe the capabilities of activity management

1) Two types of activities
    a. Events
    b. Tasks
2) Events show up on calendar and have specific time associated with the event
3) Tasks do not have a specific time; but do have a date
4) Reminders that come up when a user logs in
    a. Calendar (two person button, to see all users calendar and great tool to find meeting time)
    b. Schedule calls, meeting tasks
    c. Link activities to contacts, accounts and opportunities
    d. Schedule calls
    e. Recurring activities
    f. Complete activities
5) Once the scheduled time for an event passes, event automatically moved to the activity history
6) Salesforce activities more than a year old are automatically archived and not reportable
    a. Can be viewed in data exports
7) Sales reps can do:
    a. Schedule tasks and events
    b. Prioritize your tasks and events by due dates
    c. Classify tasks and events (using custom fields)
    d. Generate automatic alerts to remind
8) Managers can do:
    a. Assign tasks to team members
    b. View progress of the tasks of your team
    c. Monitor where your subordinates are spending time
9) Can't do the following
    a. Create custom lookup fields on SF activities
    b. Create workflow email alert from an activity
    c. Not truly private even if you sent OWD to private
    d. Can't be assigned to a queue
    e. No task bar out of box
    f. Activity subject is a combo picklist and text
    g. Workflow generated tasks can be related to a contact or another object but not both
    h. Records lock when importing or updated Activity records en masse
    i. No notes or attachments
    j. No long text or rich text

10) Differences between Tasks and Events

    a. Tasks are items TO-DO that have a target end date
    b. Events are calendar items that have a start and end date (as well as a time)

9.0 Chatter

9.1 Describe the features of Chatter

1) Make a post
2) Like posts or comments
3) Share a post
4) View, filter and sort your feed
5) Search the feed
6) Bookmark a post
7) Add topics to a post
8) Access people, groups, files and topics
9) View or update your profile
10) Read or send private messages
11) Access your favorites
12) View your recommendations
13) View trending topics
14) Invite people to join your Chatter network

10.0 Data Management

10.1 Describe the considerations when importing, updating, transferring, and mass deleting data

1) Clean your data
    a. Clean data is accurate, usable, credible, which effects adoptions
    b. Duplicates confuse analytics – get rid of duplicates
    c. Dirty data ruins the efficiency of sorting and filtering
    d. When new contacts or opportunities are entered it is impossible to choose between duplicates (two accounts)
    e. Correct spelling and punctuation errors
    f. Enforce naming conventions
    g. Fill in incomplete records
2) Prepare your import file
    a. Match the field names to match SF for easy mapping
    b. Add columns for the owner records
        i. If using import wizard it can be the SF user name
        ii. If using import tools that use API this must be the SF user ID
        iii. If importing contacts, opportunities, or other objects that have a parent record need to add a column for the parent account ID.
        iv. Vlookup: Match Salesforce user IDs to record owners, SF names usernames to regular names, account IDs to contacts and opportunities
3) Prepare Salesforce
    a. Compare your import data to each Salesforce object. If you are tracking data that is not yet captured you need to create custom fields for the data
    b. Add values to picklists. New values will be imported but will not be available for future records unless you add them to the list of all available values for the field. Externa IDs would be the unique identifiers that are used in old system that you integrate with. Need to create a field prior to import
4) Keep Data Clean in Salesforce
    a. Data validation rules: prevent users from entering in values outside a certain range
    b. Picklist: limit choices and so users done misspell. Help make data more accurate and consistent by applying filters
    c. Lookup fields prevent users from creating duplicate records
    d. Workflow field updates and formula fields can populate data automatically, removing potential for manual error
    e. Record types and page layouts can ensure that users see the values they need and the ones they don't.
5) Different import tools for different purposes

a. Import wizards
    i. Imports up to 50,000 accounts and contacts at a time
    ii. Can prevent duplicate records
    iii. Option to turn off work flow
    iv. Does not allow import of opportunities
    v. Does not allow for export of data
    vi. Import
        1. Accounts/contacts
        2. Leads
        3. Solutions
        4. Custom objects
        5. Articles
        6. Campaign members (member status, contacts, leads, accounts)
        7. Cant import
            a. Assets
            b. Cases
            c. Campaigns
            d. Contracts
            e. Documents
            f. Opportunities
            g. Products
        8. Notes:
            a. **Field Accessibility**—You can import values into a field only if you have read and edit access. Field access is determined by user permissions, page layout assignments, and field-level security settings.
            b. **New Values for Picklists and Multi-Select Picklists**—If you import a picklist value that doesn't match an existing picklist value:
                i. For an unrestricted picklist, the Data Import Wizard uses the value that's in the import file.
                ii. For a restricted picklist, the Data Import Wizard uses the picklist's default value.
            c. **Multi-Select Picklists**—To import multiple values into a multi-select picklist, separate the values by a semicolon in your import file. You can import up to 100 values at a time in a multi-select picklist field. If you have more than 100 values in your import file for any one record, the import wizard leaves the field blank in that record.
            d. **Checkboxes**—To import data into a checkbox field, use 1 for checked values and 0 for unchecked values.
            e. **Default Values**—For picklist, multi-select picklist, and checkbox fields, if you do not map the field in the import

wizard, the default value for the field, if any, is automatically inserted into the new or updated record.

f. **Date/Time Fields**—Ensure that the format of any date/time fields you are importing matches how they display in Salesforce per your locale setting.

g. **Formula Fields**—Formula fields cannot accept imported data because they are read only.

h. **Field Validation Rules**—Salesforce runs validation rules on records before they are imported. Records that fail validation aren't imported. Consider deactivating the appropriate validation rules before running an import if they affect the records you are importing.

b. Data Loader

   i. More robust tool that the wizard and lets you import and export data including opportunities and records
   ii. Can import more than 50,000 records at a time
   iii. Create success and error files
   iv. Professional edition does not have access to the API and therefore can't use Data Loader
   v. Data loader between 5000 to 5 million
   vi. Data loader recognizes only one field for the street address (concatenate address 1 and 2 before begin import)
   vii. Data loader matched to record IDs only
   viii. Workflow will fire on any records that meet the rule criteria (turn off if you don't want it to execute)

c. Mass transfer records: Accounts, leads, custom objects

d. Mass delete records: Accounts, leads, activities, contacts, cases, solutions, products

6) Order to Import data
   a. Salesforce Record ID (unique): every record is assigned a unique ID
   b. Owner of record owner: if left blank becomes record default owner
   c. All contacts and opportunities have owners and since they are child records they are related to a parent account therefore import files need to have both Account ID and Owner ID.
   d. Import in order file is used

7) Summary of Import Order
   a. Add users
   b. Import accounts
   c. Import contacts/opportunities

8) Mass delete records
   a. The record types you can mass-delete include cases, solutions, accounts, contacts, leads, products, and activities.
   b. Here are some ways mass delete might be handy.

i. You've identified multiple reports that are no longer used and you want to unclutter the list of reports on the Reports tab.
ii. You imported your organization's leads incorrectly and you want to start over.
iii. A user who recently left your organization had contacts that were duplicates of other users' data and you want to delete these duplicate contacts.
iv. Your organization used to enter leads as accounts with the Type field set to "Prospect." You now want to convert these accounts into leads.
v. You want to delete all the leads that have been converted for your organization. Select the lead record type, enter "Converted equals 1" for the search criteria, then choose Search.
vi. You want to clean up web-generated leads that were created incorrectly, or delete accounts and contacts with whom you no longer do business.

c. We strongly suggest you run a report to archive your information. You should also run a weekly export of your data.

10.2 Given a scenario, identify tools and use cases for managing data

1) Use sample data and 5 records to check
2) Turn off any workflows hat you don't want to run
3) Validation rules are in effect during import
4) Check visibility setting for sensitive data prior to import

Methods of data import

Tool	# of Records	Internal or External to Salesforce	Notes
Data import Wizard	Up to 50,000	Internal	An in-browser wizard that imports your accounts, contacts, leads, solutions and custom objects
Data loader	5,000 to 5 million	External	Data loader is an application for the bulk import or export of data. Use it to insert, update, delete or export Salesforce records **Suitable for both Import and Export**
Import My Accounts & Contact Wizard	Up to 500 for individual Up to 50,000 record for multiple users	Internal	An in-browser wizard that imports personal contacts and accounts from various data sources lice Gmail and Outlook

10.3 Describe the capabilities and implications of the data validation tools

1) Improve the quality of your data using validation rules
2) Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record
3) A validation rule can contain a formula or expression that evaluates the data in one or more fields and returns a value of True or False
4) Validation rules also include an error message to display to the user when the rule returns a value of True due to an invalid rule
5) After you have defined validation rules
    a. User chooses to create a new record or edit an existing record
    b. User saves
    c. Salesforce executes all validation rules
        i. If data is valid, Salesforce saves the record
        ii. If data is invalid, Salesforce displays the associated error message without saving the record
        iii. User makes changes and saves again
6) Specify error message to display when a record fails validation rule where to display it, e.g., near filed or at top of page
7) Validation rules apply to all new and updated records, even if the fields references in the validation rule are not included in a page layout or an API call
8) If organization has multiple page layouts for the object on which you create a validation rule, verify that the validation rule functions as intended on each layout.
9) If organization has any integrations that use this object, verify the validation rules functions as intended for each integration
10) Salesforce processes any rules in the following order:
    a. Validation Rules
    b. Assignment rules
    c. Auto-response rules
    d. Workflow rules
    e. Process rules
    f. Escalation rules
11) Workflow field updates that run based on an approval process or time-dependent action do not trigger any rules
12) Lookup Filters vs Validation Rules
    a. Validation rules and lookup filters achieve similar ends, but offer different advantages
    b. Use a lookup filter if:
        i. You want to improve user efficiency by limiting the number of available options in a lookup search dialog
        ii. You want to improve user efficiency by automating filters on lookup search dialogs that your user manually set

c. Use validation rule if:
    i. Close to the maximum number of lookup filters allowed
    ii. Must implement a complex business rule that requires you to use a formula.
        1. Formula can reference fields that basis filter criteria can't reference, such as a parent of the source object
        2. Formulas can also use functions
d. Best practices
    i. When creating validation rules, consider all the settings in your organization that can make a record fail validation such as assignment rules, field updates, field-level security, or fields hidden on a page layout
    ii. Be careful not to create contradicting validation rules for the same field: otherwise, users won't be able to save the record
    iii. A poorly designed validation rule can prevent users from saving valid data.
        1. Make sure to test rule, or users won't be able to save data
    iv. Consider what fields are visible and editable for users on their page layouts due to field level security.
        1. Fields that aren't visible or editable for the user are still available in the formula for a validation rule and can cause a validation error.
        2. If error message is designed to be next to field, it will appear at the top of the page
        3. Consider adding a default value to automatically populate the field with a valid value since users won't be able to edit the field to correct any validation errors
    v. Use the record type ID merge field in your formula to apply different validation for different record types
    vi. If a person accounts are enabled for your organization:
        1. Define a validation rule that applies only to person accounts, use the ispersonaccount merge field
        2. Must handle person account nave and business account names separately in account validation rules
        3. Business accounts, use the name merge field
        4. Person accounts use the firstname and lastname merge fields
        5. Birthdate, email and other fields that are only supported for person accounts are available ad merge fields in account validation rules
        6. When you use fields from #5 business account records will be processed as if those fields have blank values
    vii. When using a validation rule to ensure that a number field contains a specific value, use the ISNULL function to include fields that do not contain any value
    viii. Simplify your validation formulas by using checkbox fields, which don't require any operator because the return a true or false value
    ix. When referencing related fields in your validation formula, make sure those objects are deployed

        x. Check the debug log to monitor details of the start and completion of each validation rule evaluated
        xi. Can still validate the values of encrypted fields using validation rules or Apex
            1. Both work regardless of whether the user has the “view encrypted data” permission.
            2. Data for encrypted fields in the debug log is masked.

13) When one validation rule fails, Salesforce continues to check any additional validation rules on that field or any other field on the page and displays all appropriate error message at once
14) If validation rule exist for activities and you create an activity during lead conversion, the lead converts but a task isn’t created
15) Validation rules are only enforced during lead conversion if validation and triggers for lead conversion are enabled in your organization
16) Campaign hierarchies ignore validation rules
17) Salesforce runs validation rules before creating records submitted via Web-to-lead and Web-to-Case, and only creates records that have valid rules
18) Validation rules continue to run on individual records if the owner is changed.
    a. If mass transfer tool is used to change the ownership of multiple records, however, validation rules won’t run on those records
19) Validation rule formulas don’t or can’t refer to:
    a. Compound fields, including addresses, first and last names, and dependent picklist and lookups
    b. Campaign statistic fields, including statistics for individual campaigns and campaign hierarchies
    c. Merge field for auto-number or compound address fields
20) Validation rules behave like this with regard to other fields and functions in Salesforce
    a. The detail page of a custom activity field doesn’t list associated validation rules
    b. Because updates to records based on workflow rules don’t trigger validation rules, workflow rules can invalidate previously valid fields
    c. You can’t create validation rules for relationship group members
    d. Because roll-up summary fields aren’t displayed on edit pages, you can use them in validation rules, but not as the error location

10.4 Describe the different ways to back up data

1) Back up data prior to importing, exporting, inserting or up-serting
2) Monthly Export service. Will receive email when ready and it will available within 48 hours
3) Export using Data Loader (export all will export everything including stuff in trash)
4) Formula and roll-up summary fields are always excluded from export
5) Data from all divisions included in export
6) If using person accounts and you export accounts, all account fields are included in the account data

7) If using person accounts and you export contacts, person account records are included in the contact data. However, contact data only includes fields shared by contacts and person accounts
8) Ways to export
    a. Data Export Service
    b. Data Loader
    c. Report export

11.0 Content and Folder Management

11.1 Describe the capabilities of Content

1) Three tabs – Libraries, Content, Subscriptions
2) Organize, share, search, and manage content
3) Can include all file types
4) Rather than keep files in folders that make content difficult to find, SF Content stores file in fully searchable file repositories know as libraries.
5) Search engine scans entire document as well as title, description, tags, categorization data, and author name. Also by Chatter files
6) Requires license and permissions
7) User has personal library
8) Content types are containers for custom fields
9) Content delivery allows you to easily convert documents into an optimized web-based version for easy viewing
10) Subscribe to file to get alerts when it is updated
11) Can preview
12) Can upload files
13) Can provide feedback (comments and vote)
14) Can search based on objects, if sharing is enabled (leads, accounts, contacts, opportunities, cases, products and custom objects)

11.2 Organize and secure communication templates, dashboards, reports and documents

1) Folder access is controlled by permissions
    a. Select accessible by all users, including portal users
    b. Select accessible by all users, excluding portal users
2) Folders can be public, hidden or shared and can be set to read-only or read/write.
3) Access is controlled by permissions, public groups and license types

12.0 Reports and Dashboards

12.1 Describe the options available when creating or customizing a report

1) Only User permission: Manage public reports: are able to delete reports from the report folders even if user has read/write access and has created the report themselves
2) Reports are available under standard objects tabs: Leads, Accounts, Contacts, Opportunities, Reports, Cases, Contracts, Solutions (under record or report tab)
3) Use standard reports as the basis for a new report but you must save it first as a custom report to a new folder under a new name
4) Report builder is a visual editor for reports
    a. Used to change format, add custom formulas, add/remove or reorder columns, add charts
    b. The report builder interface consists of the three panes:
        i. Filters
            1. Set the view, time frame, and custom filters to limit the data shown in the report.
            2. Drill down
        ii. Fields
            1. Fields pane lists all accessible fields in the selected report type, organized by folder
            2. Find the fields you want using the Quick Find search box and filed type filters, then drag them into the Preview pane to add them to report
            3. Create, view, edit, and delete your custom summary formulas in the Fields pane as well
        iii. Preview
            1. The dynamic makes it easy for you to customize reports
            2. Add, reorder, and remove columns, summary fields, formulas, and groupings
            3. Change the report format and display options, or add a chart
            4. Preview shows only a limited number of records
            5. Run report to see all your results
5) 4 types of report formats:
    a. Tabular
        i. Examples include contact mailing list, list of all accounts with a grand total, activity reports
        ii. Simplest and fastest listing of data without any subtotals
        iii. Cannot be used to create groups of data or graphs
        iv. Cannot be used in dashboards
    b. Summary

        i. A listing of data with groupings and subtotal, e.g., all opportunities for your team subtotaled by sales stages and owner
        ii. Similar to Tabular +graph of raw data + graphs can be used in dashboards
    c. Matrix
        i. A comparison of related totals, with totals by both row and column
            1. Group data by row and column
        ii. Large amount of data and comparison with totals of both row and column
        iii. Most detailed, most time consuming + graphs can be used in dashboards
        iv. Use matrix reports when you want to see data by two different dimensions that aren't related, such as date and product
    d. Joined reports
        i. Different views of data from multiple report types and create a graph
        ii. In joined report, data is organized in blocks
        iii. Each block acts like a "sub-report" with its own fields, columns, sorting, and filtering
        iv. You can add a chart to a joined report
        v. Enables you to add up to 5 different report blocs

6) You can add and reorder groupings on summary, matrix and joined reports
7) You can add custom summary formulas to summary and matrix reports
8) Unified public reports – standard folder for all users can access
9) Personal custom reports/personal dashboards = private to each user, can't be made public
10) Report type
    a. Defines the set of records and fields available to a report based on the relationship between a primary object and its related objects
    b. Reports display only records that meet the criteria defined in the report type
11) Other reports category
    a. Contains all reports based on custom object
    b. If you've constructed a custom object that's related to a standard object, such as Account or Contact
    c. Able to report on your custom object in the standard object's category
12) Chart values correlate to a report's summary fields and pie chart wedges correlate to a reports groupings
13) A combination chart plots multiple sets of data on a single chart
    a. Each set of data is based on a different field
14) Conditional highlighting only applies to the first summary field column in the table - True
    a. Only 3 conditions maximum per report

12.1 Describe the impact of the sharing model on reports

1) Visibility and security settings will always be active

2) Administrators control access to dashboards by storing them in folders with certain visibility settings
3) Dashboards folders can be public, hidden, or restricted to groups, roles, or territories
4) If you have access to a folder, you can view its dashboards
5) To view a dashboard component, users need access to the folder for the underlying source reports
6) Follow a dashboard to get updates about the dashboard posted to your feed
7) Can't save dynamic dashboards to personal folders
8) Folders control access to the dashboard, but the running user determines access to data
9) Running user options are:
    a. Run as specified User:
        i. The dashboard runs using the security settings of that single specific user
        ii. All users with access to the dashboard see the same data, regardless of their own personal security settings
        iii. This approach is perfect for sharing the big picture across a hierarch, or motivating team members by showing peer performance within a team
        iv. Unless you have View all Data you can only chose yourself
    b. Run as logged-in user:
        i. A dynamic dashboard runs using the security settings of the user viewing the dashboard
        ii. Each user sees the dashboard according to their own access level
        iii. Approach helps administrators share one common set of dashboards components to users with different levels of access
10) A single dynamic dashboards can display a standard set of metrics across all levels or your organization

12.2 Describe the options available when creating and modifying dashboards

1) Dashboard shows data from source reports as visual components, which can be charts, gauges, tables, metrics, or Visualforce pages
2) Components provide a snapshot of key metrics and performance indicator for your organization
3) Each dashboard can have up to 20 components on a single page and save up to 3 columns
4) Charts, metrics, tables, gauges, visualforce pages all created from existing custom reports
5) Dashboards show data from source reports as visual components
6) Snapshot of key metrics and performance indicators from your organization
7) Each dashboard has a running user, whose security settings determine which data to display in dashboard
8) All users with access to the folder see the same data, regardless of their personal security setting
9) Running user's security settings only apply to the dashboard view

10) Once a user drills down into a source report or detail page of the dashboard, the user will view the data based on normal security settings
11) Running user – named user security settings determine which data to display
12) Dynamic Dashboards
    a. Shows user data according to their own settings
        i. Same dashboard but can display a standard set of metrics across all levels of the organization
        ii. Limit – 5 dynamic for enterprise and 10 for unlimited
    b. Administrators can create up to 3 filters for each dynamic dashboard
    c. Filtering dynamic dashboard gives administrators additional flexibility in creating dashboards
13) Managers with the "View my teams dashboards" or "View all data" permission can set an option to preview the dashboard from the point of view users under them in the role hierarchy
14) Can't schedule refreshes for dynamic dashboards; must be refreshed manually
15) Can purchase additional dynamic dashboards

12.3 Describe the capabilities of custom report types

1) Up to 4 objects can be selected, can add up to 1000 fields to each custom report type, up to 256 columns and 65536 rows of data can be exported from a report, up to 5 formulas per report
2) Users still need information that is more granular and unique to their job function so they need to create their own reports
3) Custom reports types allow you to build a framework in the report wizard, for which user can create and customize reports
4) You build custom report types off of the relationship (master-detail and lookup) between objects so you can
    a. Choose which standard and custom objects to display to users creating and customizing reports
    b. Define the relationship between objects displayed to users creating and customizing reports
    c. Select which objects' fields can be used as columns in reports
5) After you create a custom report type , you can customize, edit and delete it
6) From all custom report types pages you can:
    a. Select a list view from the view drop-down list to go directly to that list page or create new view to define you own custom view
    b. Define a new custom report type by clicking new custom report type
    c. Update a custom report type's name, description, report type category, and deployment status by clicking Edit next to a custom report type's name
    d. Delete a custom report type by clicking del next to the custom report types name
    e. All stored data in the custom report type will be deleted and cannot be restored from the Recycle bin

7) When you delete a custom report type, any reports based off it will also be deleted
8) Any dashboard components created from a report based off of a deleted custom report type display an error message when viewed
9) Display detailed information about a custom report type and customize it further by clicking a custom report type's name
10) After you click a custom report type name you can:
    a. Update which objects relationships a report can display when run from the custom report type
    b. Edit the layout to specify which standard and custom fields a report can display when created or run from the custom report type
    c. Preview how the fields display to users in reports run from the custom report type b clicking Preview Layout on the fields exposed for reporting section
    d. Create a new custom report type with the same object relationship and fields as the selected custom report types by clicking clone
    e. Rename fields in the report
    f. Set which fields are selected by default

13.0 Workflow Automation

13.1 Describe when workflow evaluated

1) Order of priority
   a. Validation Rules (fields)
      i. Use a Boolean formula
      ii. Returns a “True” due to an invalid entry (answer must be “False” for field to be valid.
      iii. Validation rules apply to new and updated records for an object, even if the fields referenced in the validation rule are not included in a page layout or an API call.
      iv. Validation rules don't apply if you create new records for an object with Quick Create.
   b. Assignment Rules
      i. Lead assignment rules specify leads are assigned to users and queues as they are created (manual, web, import)
      ii. Case assignment rules determine how cases are assigned to users (manually, web, email, on-demand email, self-service portal, customer portal, outlook, lotus notes)
   c. Auto-response rules
      i. Auto-response rules
         1. Initial response to the contact who created a case or who submitted the lead on the web
         2. Runs when a case or lead is created
         3. Sends email to contact on a case or person who submitted a web lead
         4. Sends one email based on the first rule entry criteria it matches in a sequence of rule entries
      ii. Workflow email alerts
         1. Notification to interested party
         2. Runs when a case or lead is created or editied
         3. Send to anyone
         4. One email per alert
            a. 10 email alerts as immediate actions
            b. 10 email alerts per time trigger as time-dependent actions
            c. 10 time triggers
   d. Workflow Rules (with immediate actions)
      i. Allows you to automate standard internal procedures and processes to save time
      ii. Workflow rule is the main container for a set of work flow rules

iii. Examples
   1. Create a task
   2. Email alert
   3. Field update actions
   4. Outbound message actions

e. Processes
   i. Notify user if a record has a certain value
   ii. Collect information from users or customers then do something with that information
   iii. How records get approved

f. Escalation Rules
   i. Escalate cases automatically when they are not resolved within a certain time period

g. When to use certain tools

	Process Builder	Visual Workflow	Workflow	Approvals
Complexity	Multiple if/then statements	Complex	A single if/then statement	A single if/then statements
Visual Designer	X	X		
Browser Support	All (chrome is best)	Not Safari	All	All
Starts when	Record is changed	• User clicks button or link • User accesses custom tab • Process starts • Apex is called	Record is changed	• User clicks button or link • Process or flow starts that includes a “Submit for Approval” action • Apex is called
Supports time-based actions	X	X	X	
Supports user interaction		X		
Supported Actions				
Call Apex Code	X	X		
Create records	X	X	Tasks only	Tasks only
Delete records		X		
Launch a Flow	X	X	X	
Posts to chatter	X	X		
Send email	Alerts only	X	Alerts only	Alerts only
Send outbound			X	X

messages without code				
Submit for Approval	X	X		
Update fields	Any related record	Any record	The record or its parent	The record or its parent

Workflows are evaluated when one of these conditions is met (selected by admin)

1) Only when a record is created. Evaluate the rule criteria each time a record is created and ignore all updated. Rule is never run more than once per record
2) Every time a record is created or edited. Immediate action not time-dependent
3) When a record is created, or when a record is edited and did not previously meet the rule criteria
    a. For a new record this criteria is met
    b. For an updated record run the rule if the record is changed from not meeting the rule to meeting the rule
    c. Rule is run multiple times per record and but not when changes are unrelated to the rule criteria
4) Email alert limits: 1000 per day for workflow and 2,000,000 limit on total email a day

13.2Describe capabilities of workflow rules and actions

1) Workflow rule: Main container for a set of workflow instructions
2) Must be based on a single object you chose when you define the rule
3) When workflow rule is triggered one of the follow actions occur or multiple actions occur simultaneously (workflow tasks, workflow field updates, workflow email alerts)
4) A workflow rule can trigger execution of another workflow rule
5) Workflow rules on custom objects will be deleted if custom object is deleted
6) If rule has pending actions, SF completes those actions as long as rule is not updated
7) For custom objects you can create a workflow action where a change to a detail record updates a field on the related master record. Cross object actions for standard objects need Apex triggers instead of workflow rules
8) Workflow tasks: Assigns a task to a user according to a particular template.
    a. Generates reminder message (pop up) when user logs in
    b. Set fields: Assignee, subject, status, priority, due date
    c. Task can only be assigned to users of app
    d. Example: Extend offer email or reject email
9) Workflow field updates: Changes the value of a particular field on record that initially triggered the workflow rule (e.g. reassign ownership position)

10) Workflow email alerts: Sends an email according to a template
    a. Unlike tasks email can be send to anybody
    b. Use merge fields to incorporate values from records that are stored in the system, e.g., dear {!Contact.FirstName}
11) Workflow tasks should only be assigned to a role if you confident that only one user will ever be assigned to that role at a time.
12) If role contains multiple users, the owner of the workflow rule is assigned to task
13) Default workflow user: User who should be assigned as the owner of the workflow action if the user who originally triggered the rule is no longer active
    a. If org is using time dependent actions in workflow rules, you must designate a default workflow user
    b. Must be activated before you can save a time dependent workflow action
14) Queues: To divide up orphaned records we place the record in a queue of other records without owners and then let individual users claim the records without owners
    a. Users who have access to the queue can examine every record and claim ownership of records they want
    b. Traditionally used in sales and support to distribute new leads and support cases to employees with the most availability
    c. Single queue can handle multiple objects so you don't have to define multiple queues for the same group of users
    d. Supports queues for leads, cases and any custom object

13.3Given a scenario, identify the appropriate workflow solution

1) Evaluation criteria (create workflow rules) + Trigger criteria (e.g., account meets revenue criteria) = Action (immediate or time dependent; send an email alert)
2) Track workflow tasks in "Activity History"

*Describe capabilities and the uses cases for **approval processes***

1) Approval notifications in chatter instead of email
2) Approval process: Allows specifying a sequence of steps that are required to approve a new record and/or specify actions
3) Two different wizards that can be used to create approval processes
    a. Jump Start Wizard
        i. Sets several default values and requires input for the most crucial fields
            1. Approval assignment email template
            2. Filter criteria to enter approval processes
            3. Designated approvers
    b. Standard wizard
        i. Configure every possible option for processes

14.0 Desktop and Mobile Administration

14.1 Describe the installation and synchronization options of Salesforce for Outlook

SalesForce1

1) SF1 is a mobile app development platform
2) Can develop apps with clicks not code using workflow rules, approval processes, databases and dynamic user interfaces
3) SF1 provides administrators the tools they need to centrally manage and goven apps without limiting businesses ability to innovate
4) Ability to share, follow, collaborate and take business actins directly on data within the SF1 app
5) Follow records and data with a single tap
6) Notified of changes in real time and collaborate directly within the record feed
7) SF1 provides drag-and-drop (declarative) tools for storing and working with data, defining cloud-based logic with workflows, creating approval processes and formulas, and creating mobile-ready apps
8) SF1 Mobile app basics
    a. Access SF1 via App Store or Google Play or as a mobile browser app that runs in supported mobile browsers (nothing needs to be installed)
    b. Components
        i. Feed
            1. Chatter feed shows user their updates, updates to records and people they follow, and updates in groups the follow
            2. Tapping feed item displays all of the item's details
            3. Pulling down the feed reveals search bar, sort and filter options, the feeds drop down menu, and feed items
        ii. The action bar menu
            1. Feed or record page dependent
            2. From feed they see global actions
            3. From record page they see a mix of productivity actions, standard actions and custom buttons, standard chatter actions (post and file, global and object specific actinos)
            4. Users can tap "…" icon to open the action menu which contains the full set of actions available for the object
        iii. SF1 Navigation Menu
            1. Anywhere users see Menu Icon they can tap it to access the navigation menu

2. What they see is determined by Admin and what's available in the org, and what the user has access to based on permissions and profile
3. Search box, menu items, smart search items, apps section

iv. The Record View

1. Made up of the record feed, detail, and related information pages (swipe left and right to see)
2. If chatter in not enabled, the record view only includes the detail and related information pages

9) Custom Navigation

a. Approval Requests – Displays a list of the user's pending approvals. Users can tap an approval item and approve or reject it
b. Canvas apps – Appears for organizations that have enabled app to appear in the SF1 navigation menu
c. Dashboards – Availability depends on edition and user permission. Dashboards are automatically included in the set of smart search items instead of dashboard item
d. Events – List events owned by the user, created by user, or part of group
e. Feed – Appears for organization that have Chatter enabled
f. Groups – Appears in ch
g. chatter
h. Lightning component tabs – only custom components appear in navigation menu
i. Lightning pages – custom app pages
j. Notes – Displays the notes app
k. Paused flow interviews – Displays list of flow interviews tha the user paused
l. People - Chatter users
m. Reports – depends on edition and permission.
n. Smart Search Items
o. Tasks
p. Today
q. Visualforce pages
r. General things

i. Cant set different menu configurations for different types of users
ii. Anything is SF is visible in SF1 (assuming permissions)
iii. Navigation menu in community

10) Compact Layouts

a. Used to display a records key fields at a glance
b. First four fields assigned appear

i. Object's record highlights area
ii. Expanded lookup cars on a records related information page
iii. 10 fields

c. Must override the system default compact layout

11) Global quick actions

a. Create or update records, log calls, send emails, etc.

b. Enable users to create object records, but the new record has no relationship with other records
c. Global actions can be put anywhere actions are supported

12) Object specific quick actions
    a. Actions related to a specific object

SalesforceA

1) Mobile App exclusively for SF Admins allowing you to administer org from anywhere
2) Freeze accounts
3) Manage users
    a. Resent passwords
    b. Deactivate users
    c. Receive information about scheduled maintenance
    d. Assign & un-assign permission sets
    e. Search Users
    f. Recently viewed users, frozen users, locked out users
    g. Release notes
    h. Feedback
    i. Rocket gives tour of admin resources
    j. System status
    k. Switch between accounts
    l. Use actions to perform tasks

Salesforce for Outlook

1) See and relate relevant SF content in Microsoft email
2) Create SF records on the fly in Microsoft Email
3) Sync stuff
4) Cloud based – SF servers; no software – Lightning for Outlook
    a. Sync
        i. Contacts
        ii. Events
    b. Access to SF
        i. Create records
        ii. Relate email to SF contacts
        iii. Related email to one other Record that accepts tasks
        iv. See record on calendar events
5) Installed – On desktops and requires upgrades – SF for outlook
    a. Sync
        i. Contacts
        ii. Person accounts
        iii. Events

    iv. Tasks

b. Access to SF

    i. Create records
    ii. Relate email to SF accounts
    iii. Relate email to multiple records
    iv. Newly composed email tot records
    v. See records on calendear
    vi. Search for SF records
    vii. See SF records on tasks

15.0 AppExchange

15.1 Identify use cases for AppExchange applications

1) The AppExchange is an online market place where you can browse, test drive, download and install prebuild apps and components right into your Salesforce environment
2) Download apps into a sandbox of Developer Edition org for preview and testing
3) Options to install are either production or sandbox (or Dev Edition)
4) Two types of apps
    a. Managed (protected components can be updated by publishing developer)
    b. Unmanaged (Static, can't be upgraded by the publishing developer)
5) Third party are called ISV (independent Software Vendors)
6) If an App says "This listing is private…" it usually means that e ISV has not started or passed the security review
7) Always check edition compatibility
8) Apps count towards total number of custom objects and custom tabs you can have
9) Make sure you have access to external services if the app requests them, e.g.; linked in
10) Test drive as a read only user