➢

➢ Entity Objects.

What is Entity Object?   *It refers a row structure in a table/view/synonym.*

Is it possible to create an Entity object out of two or more tables.   *No.*

Why Entity Object should maintain PK? *Consistency in ADF Business Layer.*

Which Entity method needs to override in a situation before any DML operation? *beforeCommit*

Why Entity Object exactly resembles like a table?**To enforce *ORM*.**

Is Entity Object methods exposed onto Application module.   *No*

When "isAttributeUpdatble" method of EntityObjectImpl class invoked? *any attribute value changed.*

What is the significance of "Queryable" on an Entity Object attribute? **Filtering and able to show on Search panel.**

Is it possible to restrict the update operation on a particular attribute of an Entity Object declaratively?   *Yes.*

What is the significance of setting "Alternate Key" Constraint?   *Fast access.*

What happens when the type of Entity Attribute changed to "DBSequence"?   *"RefreshAfterInsert" automatically set.*

What is the restriction for Refresh condition on a specific Attribute?   **Only Applies for Oracle DB.**

is it a good practice to call AM in bean... if not why ?   *No. MVC violation.*

I have an AM with a VO and another AM with a VO both are on a taskflow which has rollback as end transaction ... what will happen:

Parent AM or AM which stats transacton first can end the transaction last.

What is AM pooling?   *Concept of maintaining a pool of "AM instances" and supplies to the Application during run time.*

How can i test whether my am is pooled or not?   *Check "Edit Business Components section" for enabled Am pool option.*

I want to display one message in all of my modules after a transaction is complete how can i do that? *Override "beforeCommit" method of an Entity object.*

How/Where to invoke a particular "DB sequence"?

EntityObjectImpl-→initDefaults method:

```
// In ProductEOImpl.java
import oracle.jbo.server.SequenceImpl;
// Default ProdId value from PRODUCTS_SEQ sequence at
protected void initDefaults() {
  super.initDefaults();
  SequenceImpl sequence = new
    SequenceImpl("PRODUCTS_SEQ",getDBTransaction());
  DBSequence dbseq = new
    DBSequence(sequence.getSequenceNumber());
  populateAttributeAsChanged(ProdId, dbseq);
}
```

I have two am's can i do transaction of one am in other?**Yes , The outermost AM provides the transaction context for both the AM's.**

I have certain records i want to make a db trip only once in the beginning and store it in vo cache ... as
i want to use the same values again n again ... i do not want to make anymoredb trips how do u do that?**"Programmatic VO"**

One of my user is entering data into db through adf form 1,2,3 to other user i should show as 10,20,30... it should automatically get refreshed for other user both opened the form at the sametime.

In taskflowi got exception some weird exception occurs once in a while i want to log that how can i do it?

What are geometry components and transaction components in adf?

➢ Association Vs Composition.

Is it possible to create an association on a table itself? Give an example.   *Yes.Empolyee and Manager*.

What is the significance of Association?

Associations can be useful in helping you to create a more comprehensive representation of the business. For example, they allow you to "walk" between entity objects, using the find-by-primary-key query. When you traverse entity associations in your model, if the entities are not already in the cache, the ADF Business Components framework performs the query to bring the entity (or entities) into the cache.

Difference between Association vs Composition Association?
        Composition Association is tightly coupled.

Give an example for Association and Composition Association.

        Oder ←OrderItems is an example for Composition Association.

        Employee←Jobs is example for Association.

What is the significance of Many-to-Many relationship and How to implement it?   *Additional table.*

➢ View Objects.

What exactly a View Object refers?   **View Object instance refers a Result of a Query / RowSet.**

Is View Object methods exposed onto Application module?   Yes.

How the View Object instances visible on the data control? **Based on how they configured in Application Module's Data Model.**

How programmatically access View Object instances?

> In "AMImpl":
>
>> ViewObjectImplvo=this.getEmplyeeViewObject();
>>
>> Row row = vo.first();
>>
>> String employeeId = Row.getAttribute(EmplyeeId);
>
> Alternatively, We can access in a bean class with AM, but not advisable.

Explain about Bind variables?   **To Supply input values to a "Where clause" columns dynamically. Dependent LOV's.**

➤ View Links.

What is Association and Viewlink ?

> **Association Exists b/w two Entity Objects maintaining PK-FK relationships.**

View link Exists b/w two View Objects maintaining Master-Detail relationships on its instances.

View link may base upon Association.

How does a join query and view link work?

By Applying Join Query, we can join two or more tables but can't able to maintain Master/Detail relationship. "View link" maintain this.

➢ View Criteria.

What is the significance of View Criteria If the Developer has the freedom of "Where Clause" on a Query?**View Criteria is like Built-in,reusable, apply any fashion(Design/Runtime).**

How programmatically apply "ViewCriteria"?

```
ViewCriteria vc = custOrdVO.createViewCriteria();

ViewCriteriaRow promotionRow = vc.createViewCriteriaRow();
ViewCriteriaRow noPromRow = vc.createViewCriteriaRow();
promotionRow.setAttribute("OrderTotal", "> 500");
promotionRow.setAttribute("CreditLimit", "> 2500");
promotionRow.setAttribute("DiscountId", "<> NULL");
noPromRow.setAttribute("OrderTotal", "> 1000");
noPromRow.setAttribute("CreditLimit", "> 5000");

vc.addElement(promotionRow);
vc.addElement(noPromRow);

custOrdVO.applyViewCriteria(vc);

custOrdVO.executeQuery();
```

How to make a particular View Criteria should execute for a particular View Object instance? **Configure in Application Module's Data Model.**

My page is loading very slow... i have one lov that is having huge number of data basically its a master lov... now my data is not changing in db..so what are the

ways that i can improve the page performance... basically i am looking at a very high level answer for this

What is the difference between af:query and af:quickquery?

➤ View Accessor.

What is the significance of "View accessor"?   **LOVs**

Creating an LOV with a view a "View accessor" of another AM?

➤ Application Module.

Which data type a service method can return? **Only Scalar type**.

What factors need to take into consideration before designing any Application Module?

- ✓ **Custom methods,**
- ✓ **View Object instances (Independent/unrestricted),**
- ✓ **View link instances,**
- ✓ **And Application Module instances.**

What is the role of Data model in design of Application Module?
Data Model describes "VO instances" and their relationships,

   "View Criteria" set for a particular instance,

   Set Values to Bind Variables in View Criteria.

Application Module Service methods reside in?   **"Application Module Impl" class**

Named Where clause for?   **Setting the entire "Where" clause dynamically.**

What happens when a value is changed and a commit is invoked?

   The application module,

   ->gets the DBTransaction and calls commit

   ->DBTransaction issues a validate call to all its entities in its data model

   ->Every VO/EO validates itself and finally the transaction gets commited.

   For master-detail entities the master validate will invoke child validation and the chain is invoked recursively till the last child vo.

➢ Application Module Pooling Parameters.

What is application module pooling and how we can handle it?

What is passivation?

For transient attributes and transient views, if you do not mark them to be passivated,

Their state will be lost, and during recovery of pooling connections (already lost).

Note: - State for the Persistent Attributes implicitly activated during AM pool releases(while running out of connections).

How to handle Application module pooling for nested AMs?
Parent AM can handle it.

Model

➢ Data Controls

When datacontrols.dcx file created?   Data control is created by any business service source except ADF BC.

In case of java control or ejb does it have a "datacontrol.dcx" file? Yes.

What is binding context and binding container..what are the 3types of bindings?

The Oracle ADF binding context is a runtime map (accessible through the EL expression #{data}) of all data controls and page definitions within the application.   The binding context does not contain real live instances of these objects. Instead, the map contains references that become data control or binding container objects   on demand. The ADF lifecycle creates the binding context from the application module, DataBindings.cpx, and page definition files.

In Oracle ADF, the group of bindingssupporting the UI components on a page are described in a page-specific XML file called the page definition file. The ADF Model layer   uses this file at runtime to instantiate thepage's bindings. These bindings are held in a request-scoped map called the binding container, accessible during each page request.

Iterator bindings, Value bindings and Action bindings.

Difference b/w databindings.cpx and datacontrol.dcx?

Databindings.cpx contains references to datacontrols in datacontrol.dcx.

➤ Data Bindings

- o Attribute binding

- o Method action binding

- o Action binding

- o Iterate binding

What are the three types of generic bindings?

Iterator bindings:- Tracks current row in a data collection
Value bindings:- Binds UI components to attributes values in a data collection
Action bindings:-Used to invoke customer or built-in operations on data collections.

Controller

➤ Task flows

- o UnBoundedTaskflows.

Home page/Help

- o Bounded Taskflows

Advantage of Task Flow Over JSF flow? Graphical support, Additional Scopes for ease of "UI interaction".

What is region in Task Flow?   Region can hold one/more Bounded Task flows on a JSF page.

What are type of task flow or differences of UBT and BT?.Unlike UBT, BTs are secure have Transaction support, Extensible, reusable, Can take Parameters and return resultant values.

I have 2 taskflows, on which i have page fragments jsff and i have a jspx which all components should i secure?
Bounded task flow (have page fragments) and Pagedef file (of Jspx) could be secured.

Difference between am transaction and task flow level transaction?

What is a task flow template what does it contain?

What is the diff between static and dynamic region?

The resultant Task flow is provided by While dragging the Task flow into the region.
The resultant Task flow is provided by the managed bean for a Dynamic Region.

In a task flow after certain activities an error occurs i want to rollback the activities that have been done how can we do it?

In a TF u r calling another module TF then you are performing some transactions ... your first TF activities got committed the error occured before commiting other module transaction

How to roll back the commited changes?

How can i do Exception handling at global level.

Implementing Wild card "*" character Flow in "adfconfig.xml"

Explain data control scopes?

Shared data control scope, implies the task flow will attempt to share any instance of a data control (and by implication it's state) with the task flow's caller if the

data controls have the same definition, rather than creating a new instance.
Alternatively if a task flow defines an isolated data control scope, even if both task flows use the same design time data control definition, at runtime
each task flow will have their own instance of the data control. We'll look at some examples ofthis soon.

How task flows differ with JSF pageflows?

ADF task flows compared to JSF allow not only pages to be specified in the application's flow, but also router logic, method calls, transaction support,
save points and more.

How task flows resembles with JSF pageflows?

Unbounded task flow resembles JSF page flows as both don't have specific Entry and Exit points.

How to restrict "Back: button on the browser?

Bounded Task flows "re-entered" not allowed restricts Back button on the browser.

Suppose a Bean is set with "Pageflow" scope and I want to use the same in another sub task flow. How can u do that?

Through task flow parameters.

➢ Task flow activities

- o View

- o Router

- o Method

- o Savepoint restore

- o Taskflow call

- o Taskflow return

- o URL view

➤ Task flow Control flow

    o Control flow Case:- represents directions among any activities in a taskflow.

    How to programmatically navigate to next jsf page in taskflow.?

    FacesContext context = FacesContext.getCurrentInstance();

    context.getApplication().getNavigationHandler().handleNavigation(context,null,"controlflowcase");

    o Wild Card Control flow rule:- It means "*" entry i.e Entry from any of my JSF pages.

➤ Bean scopes

    o Application scope: - exists in the overall application.

    o Session Scope:- exists until the session get expired

    o Page flow scope: - Specific to task flow.

    o Request Scope:- Specific to a request.

    o Backing Bean:- Specific to a fragment.

    o View scope:- Specific to a page.

    What are different memory scopes in ADF Managed Beans in descending order?   Application →Session-→Pageflow-→Request→Backing bean→View

    What happened If developer chose inappropriate scope? The managed bean is reinitialized with default values once the life span is over.

    What is a view scope? Specific to a page.

I have a value in session scope after my user logs in and logs out .the value is gone... i want it to be available when i login again how do u do that?

View

➢ Rich components

My UI has combo box list of values in that table name is there whatever table i select the results should be displayed dynamically i am passing the table name.

What is the diff between visible property and render property?

Difference between action and action listener?

The "action" attribute refers to an action method which returns a String from which the Faces navigation model can use to decide whether or not navigation is necessary based on the value of the string.An actionlistener method compared to an action method does not return a String. Instead it returns void. It is basically identical to the action method but instead it just executes the code after an action event (button click or link click) but a navigation is not needed.
A good example of actionlistener could be in response to clicking on a checkbox and having the actionlistener code behind it change a visual attribute of a page such as render a component that was not rendered before..

Difference between process action and render?

Without using contextual events how can i refresh the other region on a page?

How do you put a page fragment jsff in another page fragment which is a jsff what component do u use.

All ADF components will render into html.if we put render false on any component then in this case ADF render kit is not going
to create the html code for that component.and since no html code generated so that this component is not going to participate in

ADF/JSF life cycle.Visible is same as Render but it differ slightly.If the visible if false still html code will generated from render kit and
also it is going to participate in life cycle even though it is not visible.

- Partial Page Refresh.

- Reusable Components.

  - Taskflow Templates.

  - Page Templates.

  - Declarative Components

    What are the Steps involved in Creating and Exposing Declarative Components?

    What are declarative components have u used them?

  - Bounded Taskflow

- ADF Security.

  Application   --> ADF Security→ "No automatic grants" feature

  →   jazn-data.xml→ task flows and page definition files
  →   add application roles.

      ➔   Have Permissions → Contains Users.

  What are the Files Modified/created when securing ADF Application?

The Configure ADF Security Wizard performs the following additional file creations or modifications:

File	Location	Configuration Performed
adf-config.xml	/adf/META-INF relative to Web application	• Credential store context • JAAS security context
jps-config.xml (JPS stands for Java Platform Security.)	/src/META-INF relative to Web application	• Oracle Platform Security context for optional credential store • Oracle Platform Security context for optional policy store • Oracle Platform Security context for optional anonymous user
jazn-data.xml	/src/META-INF relative to Web application	• Default realm name for optional lightweight XML application–specific identity store • Policy store

Container level Security.

Application level Security.

In case of security if tomorrow some other admin role comes in then i need to change code... idont want to do at code level where should i do it ?
No need to change the code.

How to implement single sign on in adf?

What is policy store and identity store in OID?

➢ ADF Configuration files

o adfm.xml

metadata file specifies the path of datacontrols.dcx and databindings.cpx.

o web.xml.

o

What is the significance of Context parameter javax.faces.STATE_SAVING_METHOD?

Specifies where to store the application's view state. By default this value is server, which stores the application's view state on the server.

It is recommended that you set javax.faces.STATE_SAVING_METHOD to client when you use ADF Faces, to store the view state on the

browser client. When set to client, ADF Faces then automatically uses token-based, client-side state saving. You can specify the number of

tokens to use instead of using the default number of 15.

- o databindings.cpx

  providesBindingContext for ADF application.

- o datacontrols.dcx

  pagedefs.xml   provides BindingContainer for a specific jsf page.

- o weblogic.xml

- o facesconfig.xml

- o adf-config.xml

➢ Layouts

- o Panel Stretch Layout.

- o Panel form Layout.

- o Panel Group Layout.

Life cycles of ADF and JSF.

What exactly happens when immediate attribute set to *true* for a specific component and give an example of it.?

how does mvc work in adf.

View------->ADF faces   Controller------>TFsModel---------> Data
Controls & Data bindings.   Business Services---> ADF
BC/EJB/WebService/Java.

What is the architectural design of your project.

What is meta data commit during life cycle phase of adf what happens
here? Run time changes have been updated.

What life cycle phases get executed during ppr.

> When partialSubmit is set to true, then only the components (and
> their child components) that have values for
> their **partialTriggers** attribute will be processed through the
> lifecycle.

<af:calendar> attributes:

disabledDays: a binding to an implementation of the
org.apache.myfaces.trinidad.model.DateListProvider interface. The
getDateList method should generate a List of individual java.util.Date
objects which will   be
rendered as disabled. The Dates must be in the context of the given
base Calendar. Note: this binding requires periodic roundtrips. If you
just want to disable certain weekdays (e.g. Saturday and Sunday), use
the disabledDaysOfWeek attribute.

help link#:   http://mjabr.wordpress.com/2013/01/24/how-to-disable-specific-dates-in-afinputdate-component/

disabledDaysOfWeek: a whitespace delimited list of weekdays that
should be rendered as disabled in every week. The list should consist
of one or more of the following abbreviations: sun, mon, tue, wed,
thu, fri, sat.   By
default all days are enabled.

What are the life cycle phases that will be skipped if i set immediate
to *true* on a button?

> ➢ Process Validations,

> ➢ Update Model Values,

> ➢ and Invoke Application phases.

For Cancel Buttons, Developers usually prefer this option.

Difference if i set immediate=true on a button and if i set immediate=true on a text field

For a text field, No Skip in the life cycle and for a button Process Validations, Update Model Values, and Invoke Application phases are skipped.

What are the differences between JSF and ADF life cycles?

Jsf life cycle phases.

What life cycle phases will be skipped in auto submit = true and in case of partial submit = true

The autoSubmit attribute on an input component and the partialSubmit attribute on a command component are not the same thing.

When partialSubmit is set to true, then only the components that have values for their partialTriggers attribute will be processed through the lifecycle.

The autoSubmit attribute is used by input and select components to tell the framework to automatically do a form submit whenever the value changes.

However, when a form is submitted and the autoSubmit attribute is set to true, avalueChangeEvent event is invoked, and the lifecycle runs only on the components

marked as root components for that event, and their children.

How to Enable Printing the Run time query execution?

http://jneelmani.blogspot.in/search/label/ADF%2011G

How to display the Index for Record in the Table?

SELECT ROW_NUMBER() OVER(ORDER BY Employees.FIRST_NAME)AS ROW_NUMBER , Employees.EMPLOYEE_ID, Employees.FIRST_NAME, Employees.LAST_NAME, Employees.SALARY,   FROM EMPLOYEES Employees;

How to work with ADF Log ?

```
try {
    log = ADFLogger.createADFLogger(this.getClass());

    facesContext = FacesContext.getCurrentInstance();

    vBind = facesContext.getApplication().createValueBinding("#{bindings.EmployeesView1Iterator}");
    employeesView1Iterator = (DCIteratorBinding)vBind.getValue(facesContext);
    employeesView1Iterator.getViewObject().setWhereClause("Employees.FIRST_NAME like ('%' ||'" +
                                    fName + "'" +
                                    " || '%')");

    employeesView1Iterator.getViewObject().executeQuery();
}catch(Exception e){
    log.severe(e);
}
```

Code sinppets in a Bean class.

a) Executing Custom methods:

```
BindingContainer bindings = getBindings();
OperationBinding operationBinding = bindings.getOperationBinding("manipulateView");
operationBinding.execute();
AdfFacesContext.getCurrentInstance().addPartialTarget(this.empTable);
```

publicBindingContainergetBindings() {

returnBindingContext.getCurrent().getCurrentBindingsEntry();

   }

b) Row Lock in AmImpl class:

```
public boolean executecurrentEmployeeRowLock() {
    //boolean lock = true;
    ViewObjectImpl vo = this.getDepartmentsView1();
    Row row = vo.getCurrentRow();
    try {
        row.lock();
        setLock(true);
        System.out.println("record is locked");
    } catch (Exception e) {
        setLock(false);
        System.out.println("Department: " + row.getAttribute("DepartmentId") + " record is locked");
    }
    return this.lock;
}
```

e) Cascading LOVs.

c) Search between Dates and Exclude Saturday,Sunday and the given
List at Model layer.

public List<LeaveDetails>searchDates(Date startDate, Date
endDate) {

BindingContextbindingContext = BindingContext.getCurrent();

DCDataControl dc =
bindingCon=text.findDataControl("LMSAMDataControl");

         Boolean leaveStatus = false;   if ((startDate !=
null) && (endDate != null)) {

stDate = getJboDateFromUtilDate(startDate.getValue());

eDate = getJboDateFromUtilDate(endDate.getValue());

LMSAMImplappM = (LMSAMImpl)dc.getDataProvider();

EmpLeavesVOImpl empLeaves1 =
(EmpLeavesVOImpl)appM.getEmpLeaves1();

Row[] rows = empLeaves1.getAllRowsInRange();

```java
                    List<LeaveDetails> list = new
ArrayList<LeaveDetails>(rows.length);

     eDate.addJulianDays(1, 0);

     while (stDate.dateValue().before(eDate.dateValue())) {

     java.util.Date d = getUtilDateFromJboDate(stDate);

     SimpleDateFormatsimpleDateformat =

     newSimpleDateFormat("EEEE");

     if
(!(simpleDateformat.format(d).toString().equalsIgnoreCase("Saturday"))
) {

     if
(!(simpleDateformat.format(d).toString().equalsIgnoreCase("Sunday")))
{

     for (inti = 0; i<rows.length; i++) {

                              Date datest =
(Date)rows[i].getAttribute(2);

                              Date dateed =
(Date)rows[i].getAttribute(3);

     if (stDate.dateValue().equals(dateed.dateValue()) ||

     stDate.dateValue().equals(datest.dateValue())) {

     leaveStatus = true;

     break;

                         }

     else if (stDate.dateValue().before(dateed.dateValue()) &&

     stDate.dateValue().after(datest.dateValue())) {

     System.out.println("L>------->" +

     stDate.getValue().toString());

     leaveStatus = true;

     break;

                              } else {
```

```java
                    leaveStatus = false;

                                        }

                            }

        LeaveDetailsleaveDetails = new LeaveDetails();

        leaveDetails.setStartDate(stDate.getValue().toString());

        if (!leaveStatus) {

        leaveDetails.setStatus("PRESENT");

                            }

        else{

        leaveDetails.setStatus("ABSENT");

                            }

        list.add(leaveDetails);

                        }

                        }

        stDate.addJulianDays(1, 0);

                    }

                List<LeaveDetails>attendedList = list;

        if (attendedList != null) {

        returnattendedList;

                }        }

        return null;

            }

        JAVA
```

What are the features tht are available in string that are not present in string buffer?
How can i store a UI input values in a java algorithm what ever the user is entering one by one in different fields ... without storing it in db or any file. i want to store in the java code only.

How to dynamically increase array size at run time..if array length is 10 i want to add 5 more as per my requirement at runtime dynamically.

3. diff b/w trinidad.config and trinidad.skins
4. train component when i go from 1st page to 2nd page.. in the 1st page it is asking to enter one mandatory field which is not shown how to avoid this error.
 13. have you worked on java script or ajax

WebCenter Interview Questions

What are WebCenter Portal Framework?

The WebCenter Portal Framework provides portal-specific features to a WebCenter application. These features include:
> ➢ page hierarchies,
> ➢ navigation models,
> ➢ delegated security,
> ➢ customization, and others.

Portals can also include features like,
> ➢ portlets,
> ➢ content management system integration,
> ➢ personalization,
> ➢ social computing services,
> ➢ search,
> ➢ analytics, and more.
Pagelet vs Portlet.

A pagelet is a reusable user interface component similar to a portlet, but while portletswere designed specifically for portals, pagelets are designed to run on any web page.
Any HTML fragment can be a pagelet, but pagelet developers can also take advantageof many of the features available to portlet developers to write pagelets that are
parameterized and configurable, to dynamically interact with other pagelets, andrespond to user input using Ajax patterns.

   1. Describe WebCenter Vs .ADF

WebCenter Framework

Injects portal capabilities into ADF
- Runtime customization: make changes to the application in-place without re-deploying it
- Portlets: JSR 168/WSRP, PDK-Java
- JSF-Portlet Bridge: Oracle drives JSR 301: expose JSF pages and ADF task flows as standards-based portlets
- Content Integration: JCR (UCM, File System, Oracle Portal, Documentum, Sharepoint, Lotus, …)

What is the significance of Oracle composer?

- Runtime customization performed in the browser, in-place
- Targeting the business user:
  - Drag and drop
  - Rich, intuitive user experience
- Typical operations
  - Browse and add resources to pages
  - Re-arrange page layout
  - Set page and component properties
  - Contextual wiring of components

What is the significance of content facet?

In WebCenter, a template should always have a facet called content. This facet will be used by the composer to make the page editable during runtime.   Without the content facet, the composercan't do anything on the page so must add it.

What is the difference between Page hierarchy (pages.xml) and Navigation model hierarchy (default-navigation.xml).

Through page hierarchy we can security to the page and the follow the same structure in runtime if the path is set accurately in Navigation model hierarchy.
If you want separate structure we can do it in Navigation model hierarchy.

WebCenter concepts.

- ➢ Run time changes in page templates and skins.

- ➢ Design time changes in page templates and skins. (adfconfig.xml)

- ➢ Customize pages and permissions. (Oracle Composer)

  adf.object.getPostedAttribute(adf.object.getAttributeIndexOf(model.EmployeesImpl.POSITION))

At run time, the application module delegates transaction management to a companion `Transaction` object, which provides an entity cache as a work area to hold entity rows involved in the current user's transaction. Each entity cache contains rows of a single entity type, so a transaction involving two or more entity objects holds the working copies of those entity rows in separate caches. The entity cache is also the place where new entity rows wait to be saved.

When an entity row is created, modified, or removed, it is automatically enrolled in the transaction's list of pending changes. When you call `commit()` on the `Transaction` object, it processes its pending changes list, validating new or modified entity rows that might still be invalid. When the entity rows in the pending list are all valid, `Transaction` issues a database SAVEPOINT and coordinates saving the entity rows to the database. If all goes successfully, it issues the final database COMMIT statement. If anything fails, `Transaction` performs a ROLLBACK TO SAVEPOINT to allow the user to fix the error and try again.

Scope object serialization failed (object not serializable)

A common reason for the "SEVERE: ADFc: Scope object serialization failed (object not serializable)" error message is that application developers reference JSF components in managed beans
with a scope larger than request. When using the JSF component **Binding** property to point to a managed bean, **think backing bean** and thus don't reference beans that are in scopes larger than request scope (don't: viewScope, pageFlowSope, sessionScope, applicationScope).

If, from a managed bean in a scope larger than request you need to have access to a component instance (though the other way around is a more common use case) then either
look up the component on the UIViewRoot. The Trinidad util class ComponentUtils is a appears to be useful for this too:

http://myfaces.apache.org/trinidad/trinidad-api/apidocs/org/apache/myfaces/trinidad/util/ComponentUtils.html

resolve an EL reference to a managed bean in request scope that holds the component binding.
As mentioned, a more common use case is to access a bean in a scope larger than request from a backing bean. A use case for this is if you need to remember a specific state, like a list of selected values in a select many list, or the disclosure state of panel tabs.
In this case you would save the state information in a bean with a lifecycle that spans beyond request scope and access it from a request scope backing bean using a managed property or by resolving EL in Java.

How-to query af:quickQuery on page load ?

A quick query component doesn't execute the query on page load. Check the "Query Automatically" checkbox in the ViewCriteria definition does not work as it does for the af:query component or list of values.To automatically query the af:quickQuery component, select the page's PageDef.xml file and expand the **Executables** node.   Select the **ImplicitViewCriteriaQuery** entry and set the **InitialQueryOverriden** property to true.

Code for inserting record in Database programmatically.

```
public String cb2_action() {
Row newRow;
BindingContainer bindings = getBindings();
OperationBindingoperationBinding =
bindings.getOperationBinding("Commit");
Object result ;
ApplicationModule am =
ADFUtils.getApplicationModuleForDataControl("BHCModuleDataControl");
//application name from data controls and not application module
ViewObjectmyView = am.findViewObject("TempView1"); //view name from
data controls
newRow = (oracle.jbo.server.ViewRowImpl)myView.createRow();
newRow.setAttribute("Name", "Amol");
myView.insertRow(newRow);
operationBinding = bindings.getOperationBinding("Commit");
result = operationBinding.execute();
return null;
}
```

Oracle ADF Best Practices:

Best practices when defining the primary key:

- Do not use the default pseudo column RowId as the primary key to deal with transaction sensitive business data. For example, if you delete a row from a table, a database might re-use its RowId value to a row inserted later. This may result in serious side effects for a business application.

- Prefer surrogate keys over a composite primary key.

- Do not allow the user to modify primary key fields from UI. Note that the framework uses the primary key to identify the corresponding row in the model. When you change the primary key from the UI, the data displayed in the UI and model go out of synchronization. In ADF 11.1.2.0.0 release, Oracle has added minimal support for allowing primary key modification during entity creation from UI. However, this still does not work for a composite primary key (multiple attributes as a primary key). If the use case demands an update on the primary key, try adding a surrogate key to the table and

mark this as the primary key.