


KRA Quali Research Administration : Exercise 1


This page last changed on Jan 23, 2008 by [bhutchinson](#).

 **Exercise 1:**
Create two BOs and their corresponding OJB mappings, Data Dictionary xml files and Maintenance Document xml files.

Exercise Goal

At the end of this exercise, you should have working Java Business Object Classes, OJB mappings, Data Dictionary xml files and Maintenance Document xml files for the following entities:

- Sponsor
- ProposalType
- Unit

 The Sponsor artifacts have been created for you as reference.
The Unit artifacts are mostly shells that need to have details populated by you.
The ProposalType artifacts need to be created from scratch.


Java Business Object Classes

Unit

1. Add the following attributes and their setters/getters to `org.kuali.kra.bo.Unit`
 - unitNumber (String)
 - parentUnitNumber (String)
 - organizationId (String)
 - unitName (String)
 - parentUnit (Unit)
2. add each new attribute to the `toStringMapper()` method

ProposalType

1. create the `ProposalType` Business Object class in the `org.kuali.kra.proposaldevelopment.bo` package

 Don't forget to extend `KraPersistableBusinessObjectBase`

2. Add the following attributes and their setters/getters
 - proposalTypeCode (String)
 - description (String)
3. add each new attribute to the `toStringMapper()` method

OJB Mapping

1. Add attribute mappings for Unit to the `repository.xml` file; here's the DDL for reference:

```
CREATE TABLE UNIT
(
  "UNIT_NUMBER"          VARCHAR2(8) constraint UNITN1 NOT NULL ENABLE,
  "UNIT_NAME"            VARCHAR2(60),
  "PARENT_UNIT_NUMBER"   VARCHAR2(8),
  "UPDATE_TIMESTAMP"     DATE constraint UNITN2 NOT NULL ENABLE,
  "UPDATE_USER"          VARCHAR2(8) constraint UNITN3 NOT NULL ENABLE,
  "VER_NBR"              NUMBER(8,0) DEFAULT 1 constraint UNITN4 NOT NULL ENABLE,
  "OBJ_ID"               VARCHAR2(36) DEFAULT SYS_GUID() constraint UNITN5 NOT NULL ENABLE,
  CONSTRAINT "PK_UNIT_KRA" PRIMARY KEY ("UNIT_NUMBER") ENABLE
);
```

2. Add the complete mapping for the ProposalType class to PROPOSAL_TYPE table; here's the DDL for reference:

```
CREATE TABLE "PROPOSAL_TYPE"
(
  "PROPOSAL_TYPE_CODE" VARCHAR2(3)    CONSTRAINT "PROPOSAL_TYPE_N1" NOT NULL ENABLE,
  "DESCRIPTION"         VARCHAR2(200)  CONSTRAINT "PROPOSAL_TYPE_N2" NOT NULL ENABLE,
  "UPDATE_TIMESTAMP"    DATE           CONSTRAINT "PROPOSAL_TYPE_N3" NOT NULL ENABLE,
  "UPDATE_USER"         VARCHAR2(8)    CONSTRAINT "PROPOSAL_TYPE_N4" NOT NULL ENABLE,
  "VER_NBR"             NUMBER(8,0)    DEFAULT 1 CONSTRAINT "PROPOSAL_TYPE_N5" NOT NULL ENABLE,
  "OBJ_ID"              VARCHAR2(36)   DEFAULT SYS_GUID() CONSTRAINT "PROPOSAL_TYPE_N6" NOT NULL
  ENABLE,
  CONSTRAINT "PROPOSAL_TYPE_P1" PRIMARY KEY ("PROPOSAL_TYPE_CODE") ENABLE,
  CONSTRAINT "PROPOSAL_TYPE_C0" UNIQUE ("OBJ_ID") ENABLE
)
```

Data Dictionary Configuration Files

1. populate org.kuali.kra.datadictionary.Unit.xml
2. create org.kuali.kra.datadictionary.ProposalType.xml



For now, set field validations to anyCharacter allowWhitespace="true".
Set sizes to match column sizes from DDL.

Maintenance Document XML

1. create org.kuali.kra.datadictionary.docs.ProposalTypeMaintenanceDoc.xml based on SponsorMaintenanceDoc.xml

Web Configuration

1. Edit mainInquiryLookup.tag add Unit and ProposalType lookup links

Try it out

1. Start the webapp by running `Launch Web App.launch` in the exercise 1 project
2. Point your browser at <http://localhost:8080/kralite-dev> and try the new lookup links