

KRA Quali Research Administration : Exercise 2

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Exercise 2:

Create three more BOs, one of which contains references to the other two, along with 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:

- SpecialReview
- SpecialReviewApprovalType
- ValidSpecialReviewApproval
- ProposalSpecialReview



The ValidSpecialReviewApproval artifacts have been created for you.
The ProposalSpecialReview object references the other three objects.

Java Business Object Classes

SpecialReview

1. create the `SpecialReview` Business Object class in the `org.kuali.kra.bo` package
2. add the following attributes and their corresponding setters & getters
 - `specialReviewCode` (String)
 - `description` (String)
3. add each new attribute to the `toStringMapper()` method

SpecialReviewApprovalType

1. create the `SpecialReviewApprovalType` Business Object class in the `org.kuali.kra.bo` package
2. add the following attributes and their corresponding setters & getters
 - `approvalTypeCode` (String)
 - `description` (String)
3. add each new attribute to the `toStringMapper()` method

ProposalSpecialReview

1. create the `ProposalSpecialReview` Business Object class in the `org.kuali.kra.proposaldevelopment.bo` package
2. Add the following attributes and their setters/getters
 - `proposalNumber` (Integer)
 - `specialReviewNumber` (Integer)
 - `applicationDate` (Date)
 - `approvalDate` (Date)
 - `approvalTypeCode` (String)
 - `comments` (String)
 - `protocolNumber` (String)
 - `specialReviewCode` (String)
 - `specialReview` (SpecialReview)
 - `specialReviewApprovalType` (SpecialReviewApprovalType)
 - `validSpecialReviewApproval` (ValidSpecialReviewApproval)
3. add each new attribute to the `toStringMapper()` method

OJB Mapping

1. Add the mapping for the SpecialReview class to SPECIAL_REVIEW table; here's the DDL for reference:

```
CREATE TABLE "SPECIAL_REVIEW"
(
  "SPECIAL_REVIEW_CODE" VARCHAR2(3) CONSTRAINT "SPECIAL_REVIEW_N1" NOT NULL ENABLE,
  "DESCRIPTION"          VARCHAR2(200) CONSTRAINT "SPECIAL_REVIEW_N2" NOT NULL ENABLE,
  "UPDATE_TIMESTAMP"     DATE CONSTRAINT "SPECIAL_REVIEW_N3" NOT NULL ENABLE,
  "UPDATE_USER"          VARCHAR2(8) CONSTRAINT "SPECIAL_REVIEW_N4" NOT NULL ENABLE,
  "VER_NBR"              NUMBER(8,0) DEFAULT 1 CONSTRAINT "SPECIAL_REVIEW_N5" NOT NULL ENABLE,
  "OBJ_ID"               VARCHAR2(36) DEFAULT SYS_GUID() CONSTRAINT "SPECIAL_REVIEW_N6" NOT NULL
  ENABLE,
  CONSTRAINT "SPECIAL_REVIEW_P1" PRIMARY KEY ("SPECIAL_REVIEW_CODE") ENABLE,
  CONSTRAINT "SPECIAL_REVIEW_C0" UNIQUE ("OBJ_ID") ENABLE
)
```

2. Add the mapping for the SpecialReviewApprovalType class to SP_REV_APPROVAL_TYPE table; here's the DDL for reference:

```
CREATE TABLE SP_REV_APPROVAL_TYPE (
  APPROVAL_TYPE_CODE VARCHAR2(3) CONSTRAINT SP_REV_APPROVAL_TYPE_N1 NOT NULL,
  DESCRIPTION         VARCHAR2(200) CONSTRAINT SP_REV_APPROVAL_TYPE_N2 NOT NULL,
  UPDATE_TIMESTAMP    DATE CONSTRAINT SP_REV_APPROVAL_TYPE_N3 NOT NULL,
  UPDATE_USER         VARCHAR2(8) CONSTRAINT SP_REV_APPROVAL_TYPE_N4 NOT NULL,
  VER_NBR             NUMBER(8,0) DEFAULT 1 CONSTRAINT SP_REV_APPROVAL_TYPE_N5 NOT NULL,
  OBJ_ID              VARCHAR2(36) DEFAULT SYS_GUID() CONSTRAINT SP_REV_APPROVAL_TYPE_N6 NOT
  NULL,
  constraint SP_REV_APPROVAL_TYPE_P1 PRIMARY KEY(APPROVAL_TYPE_CODE),
  constraint SP_REV_APPROVAL_TYPE_C0 unique (obj_id)
)
```

3. Add the mapping for the ProposalSpecialReview class to EPS_PROP_SPECIAL_REVIEW table; here's the DDL for reference:

```
CREATE TABLE "EPS_PROP_SPECIAL_REVIEW"
(
  "PROPOSAL_NUMBER"          NUMBER(12,0) CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN1" NOT NULL ENABLE,
  "SPECIAL_REVIEW_NUMBER"    NUMBER(3,0) CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN2" NOT NULL ENABLE,
  "SPECIAL_REVIEW_CODE"      VARCHAR2(3) CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN3" NOT NULL ENABLE,
  "APPROVAL_TYPE_CODE"       VARCHAR2(3) CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN4" NOT NULL ENABLE,
  "PROTOCOL_NUMBER"         VARCHAR2(20),
  "APPLICATION_DATE"        DATE,
  "APPROVAL_DATE"           DATE,
  "COMMENTS"                CLOB,
  "UPDATE_USER"             VARCHAR2(8) CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN5" NOT NULL ENABLE,
  "UPDATE_TIMESTAMP"        DATE CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN6" NOT NULL ENABLE,
  "VER_NBR"                 NUMBER(8,0) DEFAULT 1 CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN7" NOT NULL ENABLE,
  "OBJ_ID"                  VARCHAR2(36) DEFAULT SYS_GUID() CONSTRAINT "EPS_PROP_SPECIAL_REVIEWN8" NOT NULL
  ENABLE,
  CONSTRAINT "PK_EPS_PROP_SPECIAL_REVIEW_KRA" PRIMARY KEY
  ("PROPOSAL_NUMBER", "SPECIAL_REVIEW_NUMBER") ENABLE
)
```

Data Dictionary Configuration Files

1. create org.kuali.kra.datadictionary.ProposalSpecialReview.xml
2. create org.kuali.kra.datadictionary.SpecialReview.xml
3. create org.kuali.kra.datadictionary.SpecialReviewApprovalType.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.SpecialReviewApprovalTypeMaintenanceDoc.xml`
2. create `org.kuali.kra.datadictionary.docs.SpecialReviewMaintenanceDoc.xml`

Web Configuration

1. Add lookup links for `SpecialReview` and `SpecialReviewApprovalType` to the `mainInquiryLookup.tag`

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