**Actors Prompt:**

An engineer is working on a set of user stories enclosed between triple back ticks.

``` As a collection curator, I want to map an item or items from one collection to another, so that an item may administratively belong to one collection but could appear in other collections.

As a collection curator, I want to have a summary of all remote replication status at collection level on my dashboard.

As a collection curator, I want to have my collection be encrypted with a key maintained on that server, a checksum made and stored of the encrypted file, and the encrypted file replicated to our remote storage site.

As a collection curator, I want to lift an embargo for an object in a simple way.

As a collection curator, I want to create deposit forms specific to the collection.

As a collection curator, I want to allow some collections the option of setting an embargo date at deposit.

```

He created an initial goal model with the intentional elements enclosed between triple quotes:

‘’’

- 'Actors':

-collection curator

-faculty member

-repository manager

- 'Goals':

-have operations conducted

-allow operations conducted

-create operations conducted

-lift operations conducted

-map operations conducted

-elect operations conducted

-specify operations conducted

-add operations conducted

-have the repository queue

-have a key

-have a summary

-some collections allowed

-create deposit forms

-lift an embargo

-map an item

-elect the primary remote site

-specify the remote replication policy

-a date delimiter added

'''

The created model is missing many intentional elements. Let us refine the goal model step by step. First, can you list all 'Actors' for the user stories enclosed between triple back ticks. An initial set of actors are added in the enclosed between triple quotes. You must also identify any missing and implicit actors. It is critical that you answer only as a bulleted list and do not include any explanation.

collection curator

* faculty member
* repository manager
* item
* remote storage site

**Goals**

The initial goal model does not contain all the stakeholder’s objectives or goals that are conveyed in the user stories enclosed between triple back ticks. Identify any goals explicitly mentioned in the user stories enclosed between triple back ticks as well as any implicit goals. It is critical that you answer only as a bulleted list and do not include any explanation.

* map an item from one collection to another
* have a summary of all remote replication status at collection level on the dashboard
* have collection encrypted with a key, checksum stored, and file replicated to remote storage site
* lift embargo for an object in a simple way
* create deposit forms specific to the collection
* allow some collections to set an embargo date at deposit

**Tasks for Goals**

Please provide a detailed breakdown of tasks for each of the following goals, created in the previous response. It is critical that you answer only as a bulleted list that adheres to the following format.

<a goal>: <a hyphenated list of tasks to achieve the goal>

Do not include any explanation.

map an item from one collection to another:

* + Identify source collection
  + Identify target collection
  + Link item from source collection to target collection

have a summary of all remote replication status at collection level on the dashboard:

* + Retrieve remote replication statuses
  + Aggregate statuses at collection level
  + Display summary on the dashboard

have collection encrypted with a key, checksum stored, and file replicated to remote storage site:

* + Encrypt collection with key
  + Calculate checksum of encrypted file
  + Replicate encrypted file to remote storage site

lift embargo for an object in a simple way:

* + Identify object under embargo
  + Select option to lift embargo
  + Confirm embargo lift

create deposit forms specific to the collection:

* + Design deposit form template
  + Customize form fields for the collection
  + Implement form creation functionality

allow some collections to set an embargo date at deposit:

* + Enable embargo date setting option
  + Validate embargo date input
  + Save embargo date for the deposit

**Soft Goals**

Next, there are no soft goals in the initial goal model. Please suggest soft goals. Note you must identify any soft goals explicitly mentioned in the user stories enclosed between triple back ticks as well as any implicit soft goals. It is critical that you answer only as a bulleted list and do not include any explanation.

* Ensure seamless and efficient mapping of items between collections
* Maintain data integrity during remote replication processes
* Enhance user experience by simplifying embargo lifting procedures
* Improve system security through encryption and key management
* Facilitate easy creation of deposit forms specific to each collection
* Provide flexibility for setting embargo dates at deposit

**Tasks for Soft Goals**

Next, the initial goal model misses different tasks that can be undertaken to achieve goals and soft goals.

Please provide a detailed breakdown of tasks for each soft goal created in the previous response. You can generate a variable number of tasks for soft goals. It is critical that you answer only as a bulleted list that adheres to the following format.

<a soft goal>: <list of tasks to achieve the soft goal>

Do not include any explanation.

Ensure seamless and efficient mapping of items between collections:

* + Develop user-friendly mapping interface
  + Implement validation checks during mapping process
  + Test mapping functionality with different scenarios

Maintain data integrity during remote replication processes:

* + Implement checksum generation for files
  + Monitor replication status for integrity
  + Handle replication errors and ensure data consistency

Enhance user experience by simplifying embargo lifting procedures:

* + Provide clear embargo status indication
  + Streamline embargo lifting steps
  + Notify relevant stakeholders of embargo changes

Improve system security through encryption and key management:

* + Implement encryption algorithms
  + Manage encryption keys securely
  + Regularly update encryption protocols

Facilitate easy creation of deposit forms specific to each collection:

* + Customize deposit form templates for collections
  + Allow flexible form field configurations
  + Enable easy form creation and modification

Provide flexibility for setting embargo dates at deposit:

* + Integrate embargo date selection feature in deposit process
  + Validate embargo date formats and ranges
  + Ensure embargo date visibility and accessibility

**Contribution Links**

The Contributionrelationship statement describes how softgoals, task, believes, or links contribute to the satisficing of another intentional element. The five categories of Contribution Links are enclosed between triple back-ticks symbols.

``` MAKE : The contribution of the contributing element is positive and sufficient. BREAK : The contribution of the contributing element is negative and sufficient. HELP : The contribution of the contributing element is positive but not sufficient. HURT : The contribution of the contributing element is negative but not sufficient. EQUAL : There is equal contribution in both directions. ```

Please suggest different contribution links to link all the intentional elements such as, goals, soft goals, Tasks, and Resources that you identified. Note you must identify any contributions links that explicitly mentioned in the user stories enclosed between triple back ticks as well as any hidden contribution links. It is critical that you answer only as a bulleted list that adheres to the following format.

<Contribution Link Category>::<Source intentional elements> : <Destination intentional elements>

* MAKE:
  + Soft Goal: Ensure seamless and efficient mapping of items between collections : Task: Develop user-friendly mapping interface
  + Soft Goal: Maintain data integrity during remote replication processes : Task: Implement checksum generation for files
  + Soft Goal: Enhance user experience by simplifying embargo lifting procedures : Task: Provide clear embargo status indication
  + Soft Goal: Improve system security through encryption and key management : Task: Implement encryption algorithms
  + Soft Goal: Facilitate easy creation of deposit forms specific to each collection : Task: Customize deposit form templates for collections
  + Soft Goal: Provide flexibility for setting embargo dates at deposit : Task: Integrate embargo date selection feature in deposit process
* HELP:
  + Soft Goal: Ensure seamless and efficient mapping of items between collections : Goal: map an item from one collection to another
  + Soft Goal: Maintain data integrity during remote replication processes : Goal: have a summary of all remote replication status at collection level on the dashboard
  + Soft Goal: Enhance user experience by simplifying embargo lifting procedures : Goal: lift an embargo for an object in a simple way
  + Soft Goal: Improve system security through encryption and key management : Goal: have collection encrypted with a key, checksum stored, and file replicated to remote storage site
  + Soft Goal: Facilitate easy creation of deposit forms specific to each collection : Goal: create deposit forms specific to the collection
  + Soft Goal: Provide flexibility for setting embargo dates at deposit : Goal: allow some collections the option of setting an embargo date at deposit

**Dependencies Links**

The Dependency statement of GRL describes an intentional relationship between two actors, i.e., one actor (the Depender) depends on another actor (the Dependee) on something (the Dependum). Noite that the dependum is optional.

Please suggest different Dependency links to link all the intentional elements such as, goals, soft goals, Tasks, and Resources that you identified. Note you must identify any Dependency links that explicitly mentioned in the user stories enclosed between triple back ticks as well as any hidden Dependency links. It is critical that you answer only as a bulleted list that adheres to the following format.

<Depender> DEPENDES-ON <Dependee> FOR <Dependum>

* collection curator DEPENDES-ON repository manager FOR item mapping process
* repository manager DEPENDES-ON collection curator FOR remote replication status summary on dashboard
* collection curator DEPENDES-ON system FOR collection encryption and replication to remote storage
* collection curator DEPENDES-ON system FOR lifting embargo process
* collection curator DEPENDES-ON system FOR creating deposit forms
* collection curator DEPENDES-ON system FOR setting embargo dates at deposit

**Resources**

**Not used because Dependum identified in the previous prompt are the resources.**

A resource is an (physical or informational) entity, with which the main concern is whether it is available. The initial goal model with the intentional elements enclosed between triple quotes does not have resources. Identify resources that are explicitly mentioned in the user stories enclosed between triple back ticks as well as any implicit resources. It is critical that you answer only as a bulleted list and do not include any explanation.



**Decomposition Links**

DECOMPOSITON statement provides the ability to define what other elements need to be achieved or available in order for a task to perform. Note that only Task and Goal can be decomposed into goal, task, resource, and softgoal. A Task Decomposition Structure shows the essential components of a task, which include subtasks that must be performed, subgoals that must be achieved, resources that must be accessible, and softgoals that must be satisfied. Similarly, a Goal Decomposition Structure connects a goal with its sub-goals directly, which is a short hand form of one Goal Means\_Ends Structure and the related Task Decomposition Structure.  The three categories of Decomposition Links are enclosed between triple back-tick symbols.

``` AND DECOMPOSITON: The relations between the dependent elements are “AND”. Each of the sub-components are necessary. OR DECOMPOSITON : The relations between the contributing elements are “OR”. Any of the sub-components is sufficient. XOR DECOMPOSITON: The relations between the contributing elements are “XOR”. Either of the sub-components are necessary, but not both. ```

Please suggest different Decomposition links to link all the intentional elements such as, goals, soft goals, Tasks, and Resources that you identified. Note you must identify any Decomposition links that explicitly mentioned in the user stories enclosed between triple back ticks as well as any hidden Decomposition links. It is critical that you answer only as a bulleted list that adheres to the following format.

< Decomposition Type>::<Source intentional elements> : <Destination intentional elements>

* AND DECOMPOSITION::Task: Ensure seamless and efficient mapping of items between collections : Subtasks: Develop user-friendly mapping interface, Implement validation checks during mapping process, Test mapping functionality with different scenarios
* AND DECOMPOSITION::Soft Goal: Maintain data integrity during remote replication processes : Subgoals: Implement checksum generation for files, Monitor replication status for integrity, Handle replication errors and ensure data consistency
* AND DECOMPOSITION::Soft Goal: Enhance user experience by simplifying embargo lifting procedures : Subgoals: Provide clear embargo status indication, Streamline embargo lifting steps, Notify relevant stakeholders of embargo changes
* AND DECOMPOSITION::Soft Goal: Improve system security through encryption and key management : Subgoals: Implement encryption algorithms, Manage encryption keys securely, Regularly update encryption protocols
* AND DECOMPOSITION::Soft Goal: Facilitate easy creation of deposit forms specific to each collection : Subgoals: Customize deposit form templates for collections, Allow flexible form field configurations, Enable easy form creation and modification
* AND DECOMPOSITION::Soft Goal: Provide flexibility for setting embargo dates at deposit : Subgoals: Integrate embargo date selection feature in deposit process, Validate embargo date formats and ranges, Ensure embargo date visibility and accessibility

**Generate XML using Fewshot examples:**

Please create an XML that includes all the outputs that you generated so far. An example of the right output is shown between triple back ticks.

```

<?xml version='1.0' encoding='ISO-8859-1'?>

<grl-catalog catalog-name="URNspec" description="" author="vaish">

<element-def>

<intentional-element id="72" name="Car objects" description="" type="Ressource" decompositiontype="And"/>

<intentional-element id="80" name="Easy to use" description="" type="Softgoal" decompositiontype="And"/>

<intentional-element id="82" name="Realistic simulation" description="" type="Softgoal" decompositiontype="And"/>

<intentional-element id="84" name="Simple design" description="" type="Softgoal" decompositiontype="And"/>

<intentional-element id="88" name="Generate cars" description="" type="Goal" decompositiontype="And"/>

<intentional-element id="96" name="Create new cars" description="" type="Task" decompositiontype="And"/>

<intentional-element id="98" name="Keep same cars" description="" type="Task" decompositiontype="And"/>

</element-def>

<link-def>

<contribution name="Contribution105" description="" srcid="96" destid="82" contributiontype="Unknown" quantitativeContribution="0" correlation="false"/>

<contribution name="Contribution106" description="" srcid="96" destid="84" contributiontype="Unknown" quantitativeContribution="0" correlation="false"/>

<decomposition name="Decomposition111" description="" srcid="96" destid="88"/>

<decomposition name="Decomposition114" description="" srcid="98" destid="88"/>

<dependency name="Dependency116" description="" dependerid="88" dependeeid="72"/>

</link-def>

<actor-def>

<actor id="11" name="Traffic Simulator" description=""/>

</actor-def>

<actor-IE-link-def>

<actorContIE actor="11" ie="72"/>

<actorContIE actor="11" ie="80"/>

<actorContIE actor="11" ie="82"/>

<actorContIE actor="11" ie="84"/>

<actorContIE actor="11" ie="88"/>

<actorContIE actor="11" ie="96"/>

<actorContIE actor="11" ie="98"/>

</actor-IE-link-def>

</grl-catalog>```

The generated XML must adhere to the below list of criteria.

• No duplicate values for 'name' attribute in XML

• No duplicate values for 'id' attribute? in XML

• No empty string as a value for 'name' attribute

• If you include Date attributes 'modified' and 'created', the values of 'modified' attribute must be greater than the value of 'created' attribute

• The XML must not have an empty grl-catalog element

• Do not add elements outside the section named 'grl-catalog'

• In the XML, element named 'intentional-element' must have non-empty values for following attributes- name, id, type

• XML must have section 'actor-def' consisting of actors

• In the XML, each actor element has an 'id' attribute. Do not use the value of 'id' attribute of an actor element as the value for 'srcid' or 'destid' attributes within the section named 'link-def'

• XML must have a section with title 'actor-IE-link-def'

• Within the section with name 'actor-IE-link-def', no two elements with different value for 'actor' attribute, have same value for 'ie' attribute"

• For an element named 'intentional-element', the value for the attribute 'type' of the tag must be one of the following values - Task, Goal, Softgoal, Resource, Belief?"

• For an element named 'intentional-element', the value for the attribute 'decompositiontype' of the tag must be one of the following values - AND, OR, XOR

• For an element with name 'contribution', the value for the attribute 'contributiontype' of the tag must be one of the following values- Make, Help, Break, Hurt

• For an element with name 'contribution', the values for attributes- srcid and destid, in each tag must be different

• Each element with name 'contribution', must have attribute 'srcid' and its value must not be empty string

• Each element with name 'contribution' must have attribute 'destid' and its value must not be empty string

• Each element with name 'decomposition' must have attribute 'srcid' and its value must not be empty string

• Each element with name 'decomposition' must have attribute 'destid' and its value must not be empty string

• Each element with name 'decomposition', must have different the values for attributes- 'srcid' and destid'