**Actors Prompt:**

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

``` As a Consumer, I want to view a publisher's profile, so that that I can see who is behind a particular package or to see what other packages they produce.

As a Consumer, I want to search among all data packages owned by a publisher, so that that I can easily find one data package amongst all the data packages by this publisher.

As an Owner, I want to edit my profile, so that that it is updated with new information.

As an Owner, I want to invite an existing user, so that the user can become a member of my publisher.

As an owner, I want to remove someone from membership in my publisher, so that they no longer have ability to publish or modify my data packages.

As an owner, I want to view all the people in my organization and what roles they have, so that that I can change these if I want.```

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

‘’’

- 'Actors':

-Admin

-Owner

-Consumer

- 'Goals':

-make operations conducted

-view operations conducted

-remove operations conducted

-set operations conducted

-have operations conducted

-see operations conducted

-search operations conducted

-invited operations conducted

-edit operations conducted

-make a user

-view all the people

-a user removed

-set key configuration parameters

-see key metrics

-have a pricing plan and billing system

-all data packages searched

-view a publisher’s profile

-an existing user invited

-edit my profile

'''

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.

Admin

* Owner
* Consumer
* Publisher

**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.

* View a publisher's profile
* Search among all data packages owned by a publisher
* Edit my profile
* Invite an existing user
* Remove someone from membership in my publisher
* View all the people in my organization and their roles

**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.

View a publisher's profile:

* + Access the user interface
  + Search for the publisher
  + Display the publisher's profile information

Search among all data packages owned by a publisher:

* + Access the data packages search feature
  + Filter data packages by publisher
  + Display search results

Edit my profile:

* + Access the user profile editing feature
  + Modify profile information
  + Save changes

Invite an existing user:

* + Access the user invitation feature
  + Search for the existing user
  + Send an invitation

Remove someone from membership in my publisher:

* + Access the user management feature
  + Locate the user to be removed
  + Remove user from membership

View all the people in my organization and their roles:

* + Access the organization overview section
  + Display a list of all organization members
  + Show the roles assigned to each member

**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 user profile information is easily accessible
* Enhance user experience in searching for data packages
* Improve user satisfaction with profile editing process
* Facilitate user communication and collaboration within the platform
* Maintain organization's data security and access control
* Optimize user roles and permissions management within the organization

**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 user profile information is easily accessible:

* + Design intuitive user interface for profile viewing
  + Implement quick search functionality for user profiles
  + Optimize loading speed of user profile pages

Enhance user experience in searching for data packages:

* + Implement advanced search filters for data packages
  + Include sorting options for search results based on relevance or date
  + Provide autocomplete suggestions while searching

Improve user satisfaction with profile editing process:

* + Simplify profile editing interface
  + Enable users to preview changes before saving
  + Implement validation checks for accurate profile updates

Facilitate user communication and collaboration within the platform:

* + Introduce messaging feature for users to communicate
  + Implement notification system for updates and interactions
  + Enable user tagging and mentions in comments or messages

Maintain organization's data security and access control:

* + Implement role-based access control for different user roles
  + Regularly audit access permissions and user roles
  + Encrypt sensitive data and ensure secure data transmission

Optimize user roles and permissions management within the organization:

* + Provide a user-friendly interface for role assignment
  + Allow customization of permissions for each role
  + Implement approval workflows for role changes

**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>

* HELP: Improve user experience in searching for data packages : Enhance user experience in searching for data packages
* MAKE: Ensure user profile information is easily accessible : View a publisher's profile
* MAKE: Improve user satisfaction with profile editing process : Edit my profile
* HELP: Facilitate user communication and collaboration within the platform : Invite an existing user
* MAKE: Maintain organization's data security and access control : Remove someone from membership in my publisher
* HELP: Optimize user roles and permissions management within the organization : View all the people in my organization and their roles

**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>

* Owner DEPENDS-ON Admin FOR user profile editing feature
* Consumer DEPENDS-ON Owner FOR viewing a publisher's profile
* Owner DEPENDS-ON Consumer FOR searching among all data packages owned by a publisher
* Owner DEPENDS-ON Owner FOR inviting an existing user
* Owner DEPENDS-ON Owner FOR removing someone from membership in my publisher
* Owner DEPENDS-ON Owner FOR viewing all the people in my organization and their roles

**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: Improve user experience in searching for data packages :
  + Subtask: Implement advanced search filters for data packages
  + Subtask: Include sorting options for search results based on relevance or date
  + Subtask: Provide autocomplete suggestions while searching
* OR DECOMPOSITION: Facilitate user communication and collaboration within the platform :
  + Subtask: Introduce messaging feature for users to communicate
  + Subtask: Implement notification system for updates and interactions
  + Subtask: Enable user tagging and mentions in comments or messages
* XOR DECOMPOSITION: Optimize user roles and permissions management within the organization :
  + Subgoal: Provide a user-friendly interface for role assignment
  + Subgoal: Allow customization of permissions for each role

**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'