**Actors Prompt:**

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

``` As a user, I want to search and discover music using content identification or fingerprinting.

As a user, I want to search and discover music based on my profile.

As a user, I want to search and discover music based on other users similar to myself.

As a user, I want to search and discover music or ringback tones similar to a given music video based on content similarity.

As a user, I want to search and discover music by exploiting enriched metadata and image tags, so that I find related artists, new genre, or other relevant listening path.

As a user, I want to upload tagged videos and have tags available for all further processing steps.```

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

‘’’

- 'Actors':

-user

- 'Goals':

-search operations conducted

-upload operations conducted

-view operations conducted

-receive operations conducted

-a given music video searched

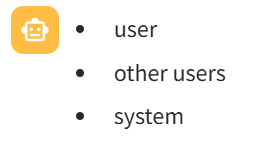
-upload tagged videos

-view thumbnail sequences

-content recommendations received

'''

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.



**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.

* search and discover music using content identification or fingerprinting
* search and discover music based on user profile
* search and discover music based on other users similar to myself
* search and discover music or ringback tones similar to a given music video based on content similarity
* search and discover music by exploiting enriched metadata and image tags
* upload tagged videos and have tags available for further processing steps

**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.

* Search and discover music using content identification or fingerprinting:
  + Implement content identification or fingerprinting algorithm
  + Integrate algorithm with music search functionality
* Search and discover music based on user profile:
  + Develop user profile creation mechanism
  + Implement personalized music recommendations based on user profile
* Search and discover music based on other users similar to myself:
  + Establish similarity criteria among users
  + Generate recommendations based on similar users
* Search and discover music or ringback tones similar to a given music video based on content similarity:
  + Develop content similarity algorithm
  + Provide recommendations based on content similarity
* Search and discover music by exploiting enriched metadata and image tags:
  + Implement metadata and image tag extraction
  + Utilize extracted data for music search and discovery
* Upload tagged videos and have tags available for all further processing steps:
  + Develop video upload feature
  + Ensure tags are properly associated with uploaded videos

**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.

* Improve music search accuracy
* Enhance user experience in music discovery
* Increase user engagement with recommended content
* Ensure efficient tagging and metadata extraction process

**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.

* Improve music search accuracy:
  + Enhance content identification algorithms
  + Implement advanced recommendation systems
  + Conduct regular data quality checks
* Enhance user experience in music discovery:
  + Optimize user interface for intuitive music search
  + Personalize user recommendations based on browsing history
  + Implement feedback mechanism for user satisfaction
* Increase user engagement with recommended content:
  + Develop interactive features for music exploration
  + Analyze user interactions with recommended content for improvement
  + Implement social sharing capabilities
* Ensure efficient tagging and metadata extraction process:
  + Automate metadata extraction from uploaded videos
  + Implement tagging algorithms for accurate content categorization
  + Conduct regular system audits for data consistency and integrity

**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 music search accuracy : Enhance user experience in music discovery
* MAKE::Enhance user experience in music discovery : Increase user engagement with recommended content
* HELP::Ensure efficient tagging and metadata extraction process : Improve music search accuracy
* MAKE::Increase user engagement with recommended content : Search and discover music using content identification or fingerprinting
* HELP::Ensure efficient tagging and metadata extraction process : Enhance user experience in music discovery

**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>

* Enhance user experience in music discovery DEPENDS-ON Improve music search accuracy FOR user engagement with recommended content
* Ensure efficient tagging and metadata extraction process DEPENDS-ON Improve music search accuracy FOR Enhance user experience in music discovery

**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::Search and discover music using content identification or fingerprinting : Implement content identification or fingerprinting algorithm, Integrate algorithm with music search functionality
* OR DECOMPOSITION::Search and discover music based on user profile : Develop user profile creation mechanism, Implement personalized music recommendations based on user profile
* AND DECOMPOSITION::Search and discover music based on other users similar to myself : Establish similarity criteria among users, Generate recommendations based on similar users
* XOR DECOMPOSITION::Search and discover music by exploiting enriched metadata and image tags : Implement metadata and image tag extraction, Utilize extracted data for music search and discovery
* AND DECOMPOSITION::Upload tagged videos and have tags available for all further processing steps : Develop video upload feature, Ensure tags are properly associated with uploaded videos

**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>

```