**Actors Prompt:**

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

``` As a broker team member, I want to make some updates to the SQL codes for clarity.

As an Agency user, I want to have all derived data elements derived properly.

As a broker team member, I want to add the 00\*\*\*\*\* and 00FORGN PPoPCode cases to the derivation logic.

As a Data user, I want to see the office names derived from office codes, so that I can have appropriate context for understanding them.

As a UI designer, I want to begin user testing, so that I can validate stakeholder UI improvement requests.

As a Developer , I want to ensure that attempts to correct or delete non-existent records donot create new published data. ```

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

‘’’

- 'Actors':

-broker team member

-Data user

-Agency user

-Developer

- UI designer

- 'Goals':

-make operations conducted

-see operations conducted

-Have operations conducted

-ensure operations conducted

-begin operations conducted

-make some updates

-see the office names

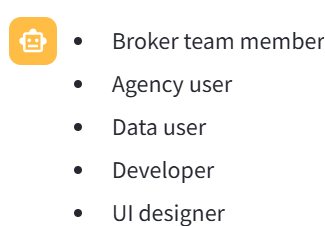
-have all derived data elements

-ensure delete non-existent records

-begin user testing

'''

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.

* Make updates to the SQL codes for clarity
* Have all derived data elements derived properly
* Add the 00\*\*\*\*\* and 00FORGN PPoPCode cases to the derivation logic
* See the office names derived from office codes
* Begin user testing
* Ensure that attempts to correct or delete non-existent records do not create new published data

**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.

* Make updates to the SQL codes for clarity:
  + Review existing SQL codes
  + Identify areas for improvement
  + Modify SQL codes for better clarity
* Have all derived data elements derived properly:
  + Review current data derivation process
  + Identify missing derived data elements
  + Update data derivation logic to ensure proper derivation
* Add the 00\*\*\*\*\* and 00FORGN PPoPCode cases to the derivation logic:
  + Analyze the existing derivation logic
  + Incorporate the 00\*\*\*\*\* case in the derivation process
  + Integrate the 00FORGN PPoPCode case into the derivation logic
* See the office names derived from office codes:
  + Define the mapping between office codes and office names
  + Implement the logic to derive office names from office codes
* Begin user testing:
  + Develop a user testing plan
  + Identify test scenarios
  + Execute user testing
* Ensure that attempts to correct or delete non-existent records do not create new published data:
  + Implement checks for non-existent records before correction or deletion
  + Define the process for handling correction or deletion of non-existent records
  + Test the system to validate the prevention of new data creation

**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 clarity of SQL codes
* Ensure proper derivation of all data elements
* Enhance the derivation logic for 00\*\*\*\*\* and 00FORGN PPoPCode cases
* Achieve accurate derivation of office names from office codes
* Validate stakeholder UI improvement requests
* Maintain data integrity by preventing creation of new published data from non-existent records

**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 clarity of SQL codes:
  + Conduct code review sessions with team members
  + Implement coding standards for SQL scripts
  + Document SQL code changes for future reference
  + Seek feedback from stakeholders on code readability
* Ensure proper derivation of all data elements:
  + Review existing data derivation processes
  + Identify gaps in current data derivation logic
  + Update data derivation documentation
  + Perform testing to validate accurate data derivation
* Enhance the derivation logic for 00\*\*\*\*\* and 00FORGN PPoPCode cases:
  + Analyze requirements for including 00\*\*\*\*\* and 00FORGN PPoPCode cases
  + Modify existing derivation logic to accommodate new cases
  + Verify correct implementation of new derivation logic
* Achieve accurate derivation of office names from office codes:
  + Define mapping rules between office codes and office names
  + Implement the logic for deriving office names
  + Test the derivation process with sample data
  + Ensure consistency and reliability of office name derivation
* Validate stakeholder UI improvement requests:
  + Gather UI improvement requests from stakeholders
  + Prioritize UI enhancement tasks based on stakeholder feedback
  + Develop prototypes or mockups for proposed UI changes
  + Conduct usability testing with stakeholders
* Maintain data integrity by preventing creation of new published data from non-existent records:
  + Implement validation checks for existing records before deletion
  + Enforce constraints to prevent creation of new data from non-existent records
  + Conduct data integrity audits periodically
  + Monitor system logs for any attempts to create new data from non-existent records

**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::Improve clarity of SQL codes : Review existing SQL codes*
* *HELP::Ensure proper derivation of all data elements : Review current data derivation processes*
* *HELP::Ensure proper derivation of all data elements : Update data derivation documentation*
* *MAKE::Enhance the derivation logic for 00\*\*\*\*\* and 00FORGN PPoPCode cases : Analyze requirements for including 00\*\*\*\*\* and 00FORGN PPoPCode cases*
* *HELP::Achieve accurate derivation of office names from office codes : Define mapping rules between office codes and office names*
* *HELP::Validate stakeholder UI improvement requests : Gather UI improvement requests from stakeholders*
* *MAKE::Maintain data integrity by preventing creation of new published data from non-existent records : Implement validation checks for existing records before deletion*

**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>

* Ensure proper derivation of all data elements DEPENDS-ON Data user FOR accurate data derivation
* Enhance the derivation logic for 00\*\*\*\*\* and 00FORGN PPoPCode cases DEPENDS-ON Developer FOR incorporating new case logic
* Achieve accurate derivation of office names from office codes DEPENDS-ON Data user FOR mapping rules definition
* Validate stakeholder UI improvement requests DEPENDS-ON UI designer FOR gathering improvement feedback
* Maintain data integrity by preventing creation of new published data from non-existent records DEPENDS-ON Developer FOR implementing validation checks

**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 DECOMPOSITON::Ensure proper derivation of all data elements : Data user : accurate data derivation, resources for data derivation, soft goal of data element accuracy*
* *AND DECOMPOSITON::Enhance the derivation logic for 00\*\*\*\*\* and 00FORGN PPoPCode cases : Developer : new case logic implementation, resources for logic enhancement, soft goal of accurate derivation*
* *AND DECOMPOSITON::Achieve accurate derivation of office names from office codes : Data user : mapping rules definition, resources for mapping, soft goal of accurate derivation*
* *AND DECOMPOSITON::Validate stakeholder UI improvement requests : UI designer : improvement feedback gathering, resources for UI validation, soft goal of stakeholder satisfaction*
* *AND DECOMPOSITON::Maintain data integrity by preventing creation of new published data from non-existent records : Developer : validation checks implementation, resources for data integrity, soft goal of data integrity*

**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>

```