**Actors Prompt:**

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

``` As a MedicalCaregiver, I want to have ALFRED to be able to determine the user's blood pressure.

As a MedicalCaregiver, I want to have ALFRED to be able to determine the user's body temperature.

As a MedicalCaregiver, I want to have ALFRED to be able to determine the user's heart rate.

As a MedicalCaregiver, I want to have ALFRED to be able to determine the user's breathing frequency.

As a MedicalCaregiver, I want to have feedback on the activity level of the user.

As a MedicalCaregiver, I want to have ALFRED to propose me games that require the combination of mental and physical exercise, such as opposing motion exercises of the arms and legs. ```

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

‘’’

- 'Actors':

-Older Person

-Medical Caregiver

- 'Goals':

-see operations conducted

-have operations conducted

-require operations conducted

-see my vital parameters

-require the combination

-have the users’ heart rate

-have the users’ body temperature

-have the user’s breathing frequency

-have the users’ blood pressure

'''

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.

* Older Person
* Medical Caregiver
* ALFRED (missing)
* User (implicit)

**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.

* Determine the user's blood pressure
* Determine the user's body temperature
* Determine the user's heart rate
* Determine the user's breathing frequency
* Have feedback on the activity level of the user
* Propose games that require the combination of mental and physical exercise

**IE Links for Goals**

Connect the goals from the previous step to the actors. It is critical that you answer only as a bulleted list that adheres to the following format.

<a actor>: <a hyphenated list of associated goals>

Do not include any explanation.

**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.

* Determine the user's blood pressure:
  + Check for available blood pressure monitoring sensor
  + Initiate blood pressure measurement process
  + Record blood pressure reading
  + Display blood pressure reading to the Medical Caregiver
* Determine the user's body temperature:
  + Check for available temperature sensor
  + Start temperature measurement process
  + Capture body temperature
  + Present body temperature reading to the Medical Caregiver
* Determine the user's heart rate:
  + Ensure presence of heart rate monitoring sensor
  + Activate heart rate measurement procedure
  + Collect heart rate data
  + Showcase heart rate reading to the Medical Caregiver
* Determine the user's breathing frequency:
  + Verify availability of breathing frequency sensor
  + Commence breathing frequency measurement process
  + Gather breathing frequency information
  + Demonstrate breathing frequency reading to the Medical Caregiver
* Have feedback on the activity level of the user:
  + Monitor user's movements and activities
  + Analyze activity data
  + Generate activity level feedback
  + Provide activity level feedback to the Medical Caregiver
* Propose games that require the combination of mental and physical exercise, such as opposing motion exercises of the arms and legs:
  + Identify suitable games for mental and physical exercise
  + Develop mechanisms to combine mental and physical elements in the games
  + Suggest games involving opposing limb motions
  + Offer game recommendations to the Medical Caregiver

**IE Links for Tasks of Goals**

Connect the tasks of goals from the previous step to the actors. It is critical that you answer only as a bulleted list that adheres to the following format.

<a actor>: <a hyphenated list of associated tasks of goals>

Do not include any explanation.

**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 comfort during vital parameter measurements (explicit)
* Enhance user engagement during game recommendations (implicit)

**IE Links for Soft Goals**

Connect the soft goals created in the previous step to the actors. It is critical that you answer only as a bulleted list that adheres to the following format.

<a actor>: <a hyphenated list of associated soft goals>

Do not include any explanation.

**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 comfort during vital parameter measurements:
  + Provide user-friendly interfaces for parameter measurement devices
  + Ensure devices are non-intrusive and comfortable to wear
  + Display measurement results clearly and intuitively for easy understanding
  + Allow customization of measurement settings based on user preferences
* Enhance user engagement during game recommendations:
  + Collect user activity preferences and limitations
  + Analyze user interaction data with previous game recommendations
  + Offer personalized game suggestions based on user profiles
  + Incorporate feedback mechanisms for users to provide game preferences

**IE Links for Tasks of Soft Goals**

Connect the tasks of soft goals from the previous step to the actors. It is critical that you answer only as a bulleted list that adheres to the following format.

<a actor>: <a hyphenated list of associated tasks of soft goals>

Do not include any explanation.

**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::Ensure user comfort during vital parameter measurements : Determine the user's blood pressure
* MAKE::Enhance user engagement during game recommendations : Propose games that require the combination of mental and physical exercise, such as opposing motion exercises of the arms and legs
* HELP::Enhance user engagement during game recommendations : Have feedback on the activity level of the user
* MAKE::Ensure user comfort during vital parameter measurements : Determine the user's body temperature
* MAKE::Ensure user comfort during vital parameter measurements : Determine the user's heart rate
* MAKE::Ensure user comfort during vital parameter measurements : Determine the user's breathing frequency

**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>

* Determine the user's blood pressure DEPENDS-ON Medical Caregiver FOR blood pressure monitoring sensor
* Determine the user's body temperature DEPENDS-ON Medical Caregiver FOR temperature sensor
* Determine the user's heart rate DEPENDS-ON Medical Caregiver FOR heart rate monitoring sensor
* Determine the user's breathing frequency DEPENDS-ON Medical Caregiver FOR breathing frequency sensor
* Have feedback on the activity level of the user DEPENDS-ON ALFRED FOR activity monitoring system
* Propose games that require the combination of mental and physical exercise DEPENDS-ON ALFRED FOR game recommendation system

**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::Determine the user's blood pressure : blood pressure monitoring sensor, blood pressure measurement process, blood pressure reading display
* AND DECOMPOSITON::Determine the user's body temperature : temperature sensor, temperature measurement process, body temperature capture
* AND DECOMPOSITON::Determine the user's heart rate : heart rate monitoring sensor, heart rate measurement process, heart rate data collection
* AND DECOMPOSITON::Determine the user's breathing frequency : breathing frequency sensor, breathing frequency measurement process, breathing frequency data gathering
* AND DECOMPOSITON::Have feedback on the activity level of the user : activity monitoring system, user activity analysis, activity level feedback generation
* AND DECOMPOSITON::Propose games that require the combination of mental and physical exercise : game recommendation system, game identification, mental and physical exercise game suggestion

**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'