**Actors Prompt:**

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

``` As a system administrator, I want to run a script that installs the Neurohub node onto a virgin Ubuntu operating system.

As a system administrator, I want to run a script that tests to see if a Neurohub installation is functioning correctly.

As a release engineer, I want to call a script to execute acceptance tests against a Neurohub installation and report back the results.

As a systems administrator, I want to install Neurohub dependencies into an Ubuntu 10.04 LTS machine using the normal Ubuntu package management tools.

As a researcher, I want to create a log book page for an experiment and attach a file to this page.

As a researcher, I want to create a log book page for an experiment and attach a directory that contains multiple files.```

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

‘’’

- 'Actors':

-system administrator

-release engineer

-researcher

-investigator

-user

-MRI operator

-lab administrator

- 'Goals':

-run operations conducted

-call operations conducted

-view operations conducted

-navigate operations conducted

-install operations conducted

-create operations conducted

-record operations conducted

-theme operations conducted

-run a script

-a script called

-view the acceptance test results

-navigate log books

-install Neurohub dependencies

-create a log book page

-the responses recorded

-theme the Web interface graphics/colours

'''

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.

* system administrator
* release engineer
* researcher
* investigator
* user
* MRI operator
* lab administrator
* installer

**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.

* run a script to install the Neurohub node onto a virgin Ubuntu operating system
* run a script to test if a Neurohub installation is functioning correctly
* call a script to execute acceptance tests against a Neurohub installation and report back results
* install Neurohub dependencies into an Ubuntu 10.04 LTS machine
* create a log book page for an experiment and attach a file
* create a log book page for an experiment and attach a directory containing multiple files

**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.

* run a script to install the Neurohub node onto a virgin Ubuntu operating system:
  + Develop the installation script
  + Test the installation script
  + Execute the installation script on a virgin Ubuntu operating system
* run a script to test if a Neurohub installation is functioning correctly:
  + Develop the testing script
  + Test the testing script
  + Execute the testing script on a Neurohub installation
* call a script to execute acceptance tests against a Neurohub installation and report back results:
  + Develop the acceptance testing script
  + Test the acceptance testing script
  + Execute the acceptance testing script and collect results
* install Neurohub dependencies into an Ubuntu 10.04 LTS machine:
  + Identify Neurohub dependencies
  + Utilize normal Ubuntu package management tools to install dependencies
* create a log book page for an experiment and attach a file:
  + Create a new log book page
  + Attach a file to the log book page
* create a log book page for an experiment and attach a directory containing multiple files:
  + Create a new log book page
  + Attach a directory containing multiple files to the log book page

**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 smooth installation of Neurohub node
* Verify proper functioning of Neurohub installation
* Achieve successful execution of acceptance tests for Neurohub
* Maintain compatibility with Ubuntu 10.04 LTS for Neurohub dependencies installation
* Facilitate easy attachment of files to log book pages

**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 smooth installation of Neurohub node:
  + Develop detailed installation instructions
  + Conduct user acceptance testing for installation process
  + Provide troubleshooting guide for common installation issues
* Verify proper functioning of Neurohub installation:
  + Conduct functional testing of all Neurohub features
  + Perform compatibility testing on different operating systems
  + Implement automated testing for continuous validation
* Achieve successful execution of acceptance tests for Neurohub:
  + Define acceptance criteria for Neurohub functionality
  + Develop acceptance testing scripts for various scenarios
  + Establish a review process for acceptance test results
* Maintain compatibility with Ubuntu 10.04 LTS for Neurohub dependencies installation:
  + Identify specific dependencies required for Ubuntu 10.04 LTS
  + Test compatibility of dependencies with the operating system
  + Provide clear documentation on resolving compatibility issues
* Facilitate easy attachment of files to log book pages:
  + Develop a user-friendly interface for attaching files
  + Implement drag-and-drop functionality for file attachment
  + Ensure proper file organization within log book pages

**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>

* MAKE::run a script to install the Neurohub node onto a virgin Ubuntu operating system : Ensure smooth installation of Neurohub node
* MAKE::run a script to test if a Neurohub installation is functioning correctly : Verify proper functioning of Neurohub installation
* HELP::run a script to test if a Neurohub installation is functioning correctly : Ensure smooth installation of Neurohub node
* MAKE::call a script to execute acceptance tests against a Neurohub installation and report back the results : Achieve successful execution of acceptance tests for Neurohub
* HELP::call a script to execute acceptance tests against a Neurohub installation and report back the results : Verify proper functioning of Neurohub installation
* MAKE::install Neurohub dependencies into an Ubuntu 10.04 LTS machine : Maintain compatibility with Ubuntu 10.04 LTS for Neurohub dependencies installation
* MAKE::create a log book page for an experiment and attach a file : Facilitate easy attachment of files to log book pages

**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>

* system administrator DEPENDS-ON installer FOR installing Neurohub node
* system administrator DEPENDS-ON system administrator FOR testing Neurohub installation
* release engineer DEPENDS-ON system administrator FOR executing acceptance tests for Neurohub installation
* system administrator DEPENDS-ON installer FOR installing Neurohub dependencies into an Ubuntu 10.04 LTS machine
* researcher DEPENDS-ON user FOR creating log book page for an experiment and attaching a file

**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::run a script to install the Neurohub node onto a virgin Ubuntu operating system : Develop detailed installation instructions, Test the installation script, Execute the installation script on a virgin Ubuntu operating system
* AND DECOMPOSITION::run a script to test if a Neurohub installation is functioning correctly : Develop the testing script, Test the testing script, Execute the testing script on a Neurohub installation
* AND DECOMPOSITION::call a script to execute acceptance tests against a Neurohub installation and report back the results : Develop the acceptance testing script, Test the acceptance testing script, Execute the acceptance testing script and collect results
* AND DECOMPOSITION::install Neurohub dependencies into an Ubuntu 10.04 LTS machine : Identify Neurohub dependencies, Utilize normal Ubuntu package management tools to install dependencies
* AND DECOMPOSITION::create a log book page for an experiment and attach a file : Create a new log book page, Attach a file to the log book page

**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'