

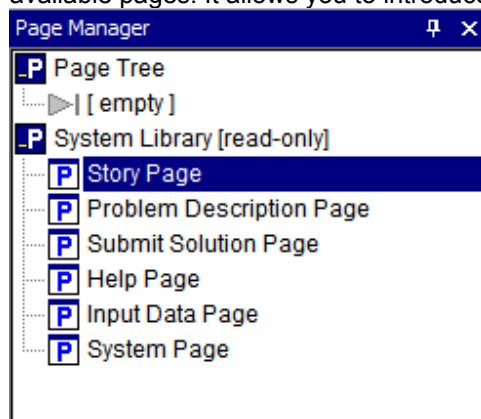
# Tutorial for G-AIMMS: Witch Apprentice - Gathering Ingredients Sublevel

## Introduction to G-AIMMS

G-AIMMS is a series of AIMMS based games aimed to extend your modeling skills and AIMMS knowledge. G-AIMMS: Witch Apprentice - Gathering Ingredients Sublevel is the second G-AIMMS. It is a sublevel for Witch Apprentice - Gathering Ingredients and its focus is to build a simple interface page in AIMMS. First-time AIMMS users are strongly recommended to read this tutorial before starting to play G-AIMMS, since it explains the basics of AIMMS in a much shorter time than it will take you to discover them on your own. You can always review this tutorial while playing G-AIMMS. It is located on the Help page.


## Using the Page Manager

The aim for this level is to build a graphical user interface page. The tool that is used in AIMMS to build pages is the Page Manager. The Page Manager provides a graphical overview of all available pages. It allows you to introduce new pages and modify existing pages.





## Introducing New Pages

New pages can be made under the main Page Tree node. To make a new page, select the [empty] entry in the page tree. In the Toolbar at the top of your screen the new page icons should

be enabled: , click it to make a new page. By default the page will get the name Page 1, you can just enter any other name to change from the default. If you want to change the name at a later stage, you can select the page in the Page Manager and push the F2 key. Once you have made a new page you can open it by double clicking on the name in the Page Manager, or by selecting the page in the Page Manager and using the right mouse menu item Open in User Mode.

## Page Modes


For this level two page modes are relevant, the User Mode and the Edit Mode. The Edit Mode is the mode in which you, the application developer, can make changes to the page, such as introducing the page objects. The User Mode is the mode in which the user works with a page, for example to change data in a page object or to click on a button to run a procedure. To complete the assignment you should switch to the Edit Mode, this can be done by clicking on the Edit Mode toolbar button  at the left side of the toolbar when the page has focus. You can switch back to User Mode by clicking on the User Mode toolbar button .

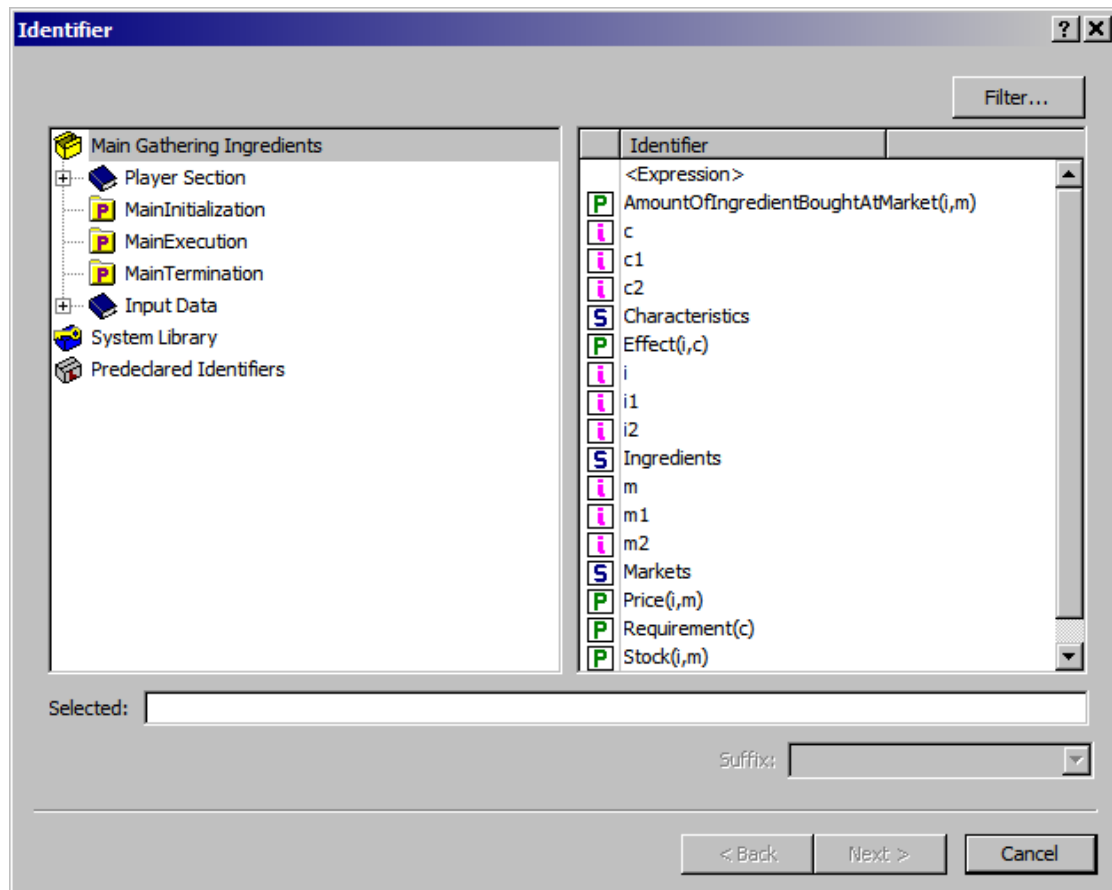
## Page Objects

A page can contain different page objects. Besides the button to run the procedure to solve the


model, you are free to choose which objects you would like to use. This tutorial will limit to give a description about the use of the Table, Pivot Table, and Button. Other objects can be configured in a similar manner. More information about the page objects and their properties can be found in the AIMMS help (menu: Help - Contents and Index).

### Table

When a page is in Edit Mode you can make a new Table by clicking on the Table toolbar button . The next step is to select the area where you would like to draw the Table, which is done by clicking on the page where you want to have the top left corner of the Table, holding down the mouse button, dragging to the position on the page where you would like to have the bottom right corner, and releasing the mouse button. The next step is to select the identifier you would like to show in the Table, via the Identifier selection window.





You can either select an identifier in the right column, or type the name in the Selected field. To complete you can click Next and Finish.

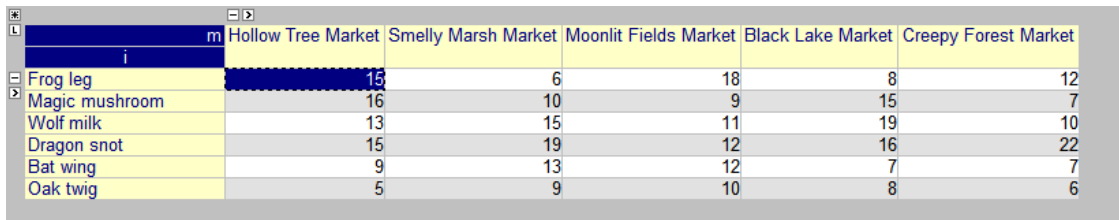
You have now an initial table, but you might like to make some modifications, like resizing/positioning or changing the properties. To resize the Table you can select any of the corners, click the mouse button, drag to the new position, and release the mouse button. To reposition you hover in the middle of the Table, click the mouse button, drag to the new position, and release the mouse button. To open the properties of the Table double click on the Table or select it and click the Properties toolbar button .

In the Contents tab of the properties you can Add or Modify the contents of the Table. For this level it is not necessary to use any of the other properties.

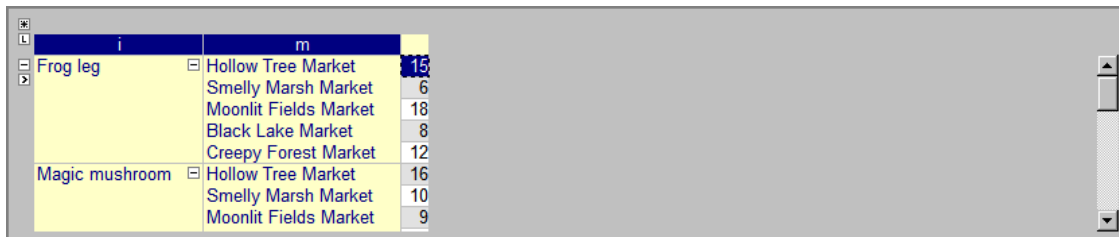
## Pivot Table

You can make a new Pivot Table by clicking on the Pivot Table toolbar button . Selecting the position where the Pivot Table is drawn is the same as with the Table. When making a new Pivot Table you will get into the Property dialog Contents tab directly. You can add an identifier to the Pivot Table by double clicking on the right of Explicit Identifier [1] and either manually typing the identifier, or clicking  to open the Identifier selection dialog. Clicking Ok will close the Properties dialog and commit the changes.

Resizing, repositioning and changing the properties works in a similar manner as with the Table. The Pivot Table is an object in which you as developer can give the end-user flexibility in how he wants to look at your data. See below three different variations of the same Pivot Table. The User can change the layout by dragging (when the page is in user mode) the dark blue headers between row and column area, or up to the outer area.



i	m	Hollow Tree Market	Smelly Marsh Market	Moonlit Fields Market	Black Lake Market	Creepy Forest Market
Frog leg		15	6	18	8	12
Magic mushroom		16	10	9	15	7
Wolf milk		13	15	11	19	10
Dragon snot		15	19	12	16	22
Bat wing		9	13	12	7	7
Oak twig		5	9	10	8	6





i	m	
Frog leg	Hollow Tree Market	15
	Smelly Marsh Market	6
	Moonlit Fields Market	18
	Black Lake Market	8
	Creepy Forest Market	12
Magic mushroom	Hollow Tree Market	16
	Smelly Marsh Market	10
	Moonlit Fields Market	9



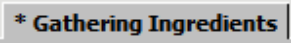

m	
Hollow Tree Market	

## Buttons

You can make a new button by clicking on the Button toolbar button . Selecting the initial position of the button goes in the same manner as for the Table. When making a new Button you will get into the Properties dialog Button tab directly. For the default button type Text Button you can specify a title in the Title field. In the Actions tab you can select Run from the list of possible actions and click the Add button. Subsequently you can select Procedure on the right top side of the dialog and use the wizard button  to select which procedure should be run when the user clicks this button. Clicking Ok will close the Properties dialog and commit the changes.

## Saving a Page

After you have finished placing the data objects on your page, it is important that you save the page first before checking your solution. Your page needs to be saved in case you see an

asterisk to the left of your page name in the tab like . You can save your page by clicking on the Save toolbar button , the second from the left.


### **Playing this G-AIMMS Level**

Below is an overview of the steps you have to take to complete this G-AIMMS level:

- Open the file 'GatheringIngredientsSublevel.aimms'. This will start this G-AIMMS level. For this G-AIMMS you can use your own AIMMS license, a free trial license, or a free student license. A developer password is required for this level. You can obtain this password by successfully finishing the Gathering Ingredients level.
- Take a look at the story and the problem description to get an impression of the problem.
- Open the Page Manager; this is the tool you will use to make your new page.
- Now the time has come to build your page. Use the tutorial description above to make the new page and place the required objects on the page.
- To check your solution go to the Submit Solution page and click the 'Check Solution' button. If your page is ok, you will be informed that you have completed the level. If not you will get a tip about what is still missing. In this case, please correct your page and check again.

### **Where to find help while playing**

While playing G-AIMMS, there are a lot of ways to get help. See below for some of the options:

- You can always review this tutorial. It is located on the Help page.
- You can look for extra help in the Help menu, where you can find links to the complete AIMMS documentation and where you can search all of the documentation for a certain topic.
- You can click the  icon and select an object on your screen to get help on that object.
- You can type the word you want help on in a procedure, press the right mouse button while your cursor is above it and select 'Help on'.