

# Telelogic Rhapsody :Getting Started

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# Tool overview(1 / 7)

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## ❖ Rhapsody

- ✓ Tool that enables visual design environment
  - To create requirements and model systems
- ✓ Tool that allows the following

Analysis	Define system requirements and so on using the UML diagrams
Design	Take into account architectural and detailed design considerations
Implementation	Generate code automatically from models
Testing	Perform design-level debugging with simulations

Rhapsody stands for this part in our class

# Tool overview(2/7)

## ❖ Download

✓ <http://www.telelogic.com/Products/rhapsody/evaluation.cfm>

The screenshot shows the Telelogic Rhapsody evaluation page. The navigation bar includes Home, Solutions, Products, Services, Customers, Partners, Community, and Company. The breadcrumb trail is Home > Products > Rhapsody > Evaluation. The page title is "Telelogic Rhapsody evaluation".

On the left, there is a "Products" sidebar with a list of products, including "Telelogic Rhapsody" which is highlighted. Below it are sub-items: Overview, Highlights, Specifications, and Statemate.

The main content area features a "Login to your telelogic passport" form with fields for Email and Password, and a "Login" button. A link for "Can't remember your password?" is also present. Below the login form is a registration form titled "1. Enter your Telelogic passport information" with an Email field and a "Preferred email format" section with radio buttons for HTML and Plain text.

On the right side, there are buttons for "TRY" and "BUY", and a "Telelogic passport" link. Below these are links for "Contact me", "Tell a colleague", and "Print page".

A blue speech bubble with the text "Fill this area and press register" points to the registration form.

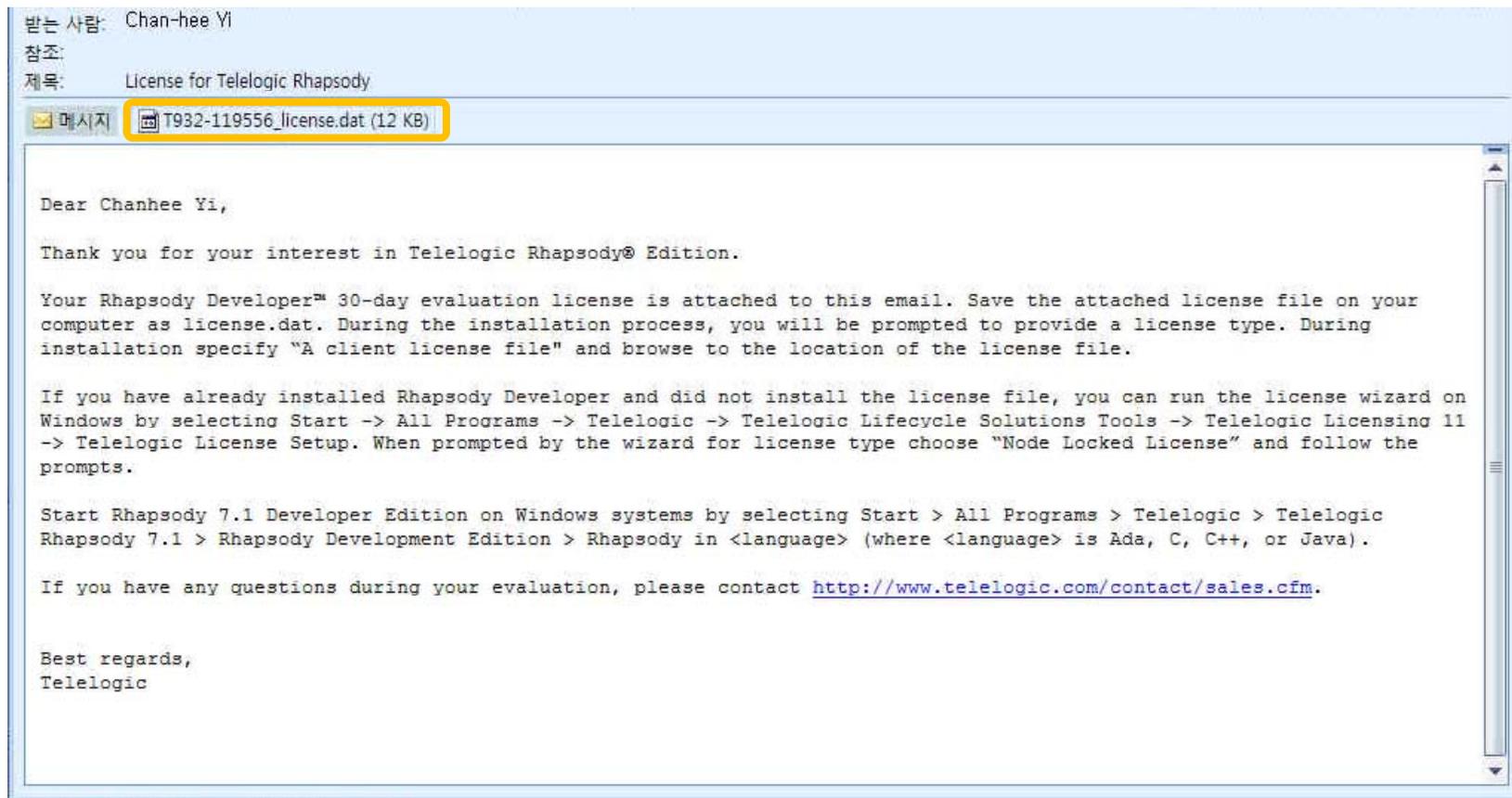
# Tool overview(3 / 7)

- ❖ Getting a license for 30-days
  - ✓ Submit your own computer information and go on

The screenshot shows the 'Telelogic Rhapsody evaluation' page. The navigation bar includes 'Home', 'Solutions', 'Products', 'Services', 'Customers', 'Partners', 'Community', 'Company', and 'Telelogic passport'. The breadcrumb trail is 'Home > Products > Rhapsody > Evaluation'. The main heading is 'Telelogic Rhapsody evaluation'. Below the heading, there are two callouts: 'Press this and then follow' pointing to the 'TRY' button and another 'Press this and then follow' pointing to the 'Submit' button. The form contains two mandatory fields: '\* Hostname' and '\* Disk serial number', each with a 'How to find your...' link. A 'Submit' button is highlighted with a green border. On the right side, there are buttons for 'TRY' and 'BUY', and a sidebar with 'Contact me', 'Tell a colleague', and 'Print page' options. A left sidebar lists various Telelogic products, with 'Telelogic Rhapsody' expanded to show 'Overview', 'Highlights', and 'Specifications'.

# Tool overview(4 / 7)

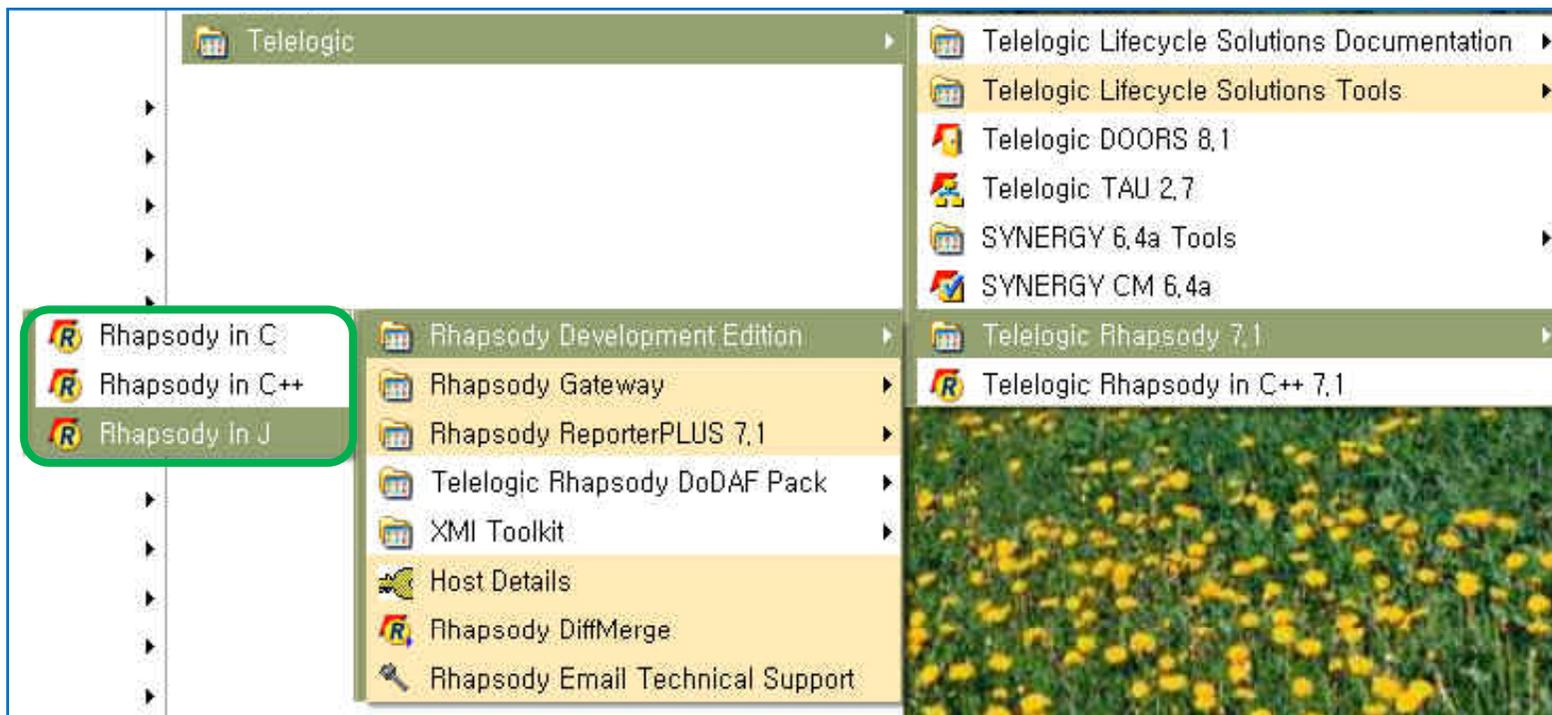
- ❖ Getting a license for 30-days(cont'd)
  - ✓ You may get it through your e-mail.



# Tool overview(5/7)

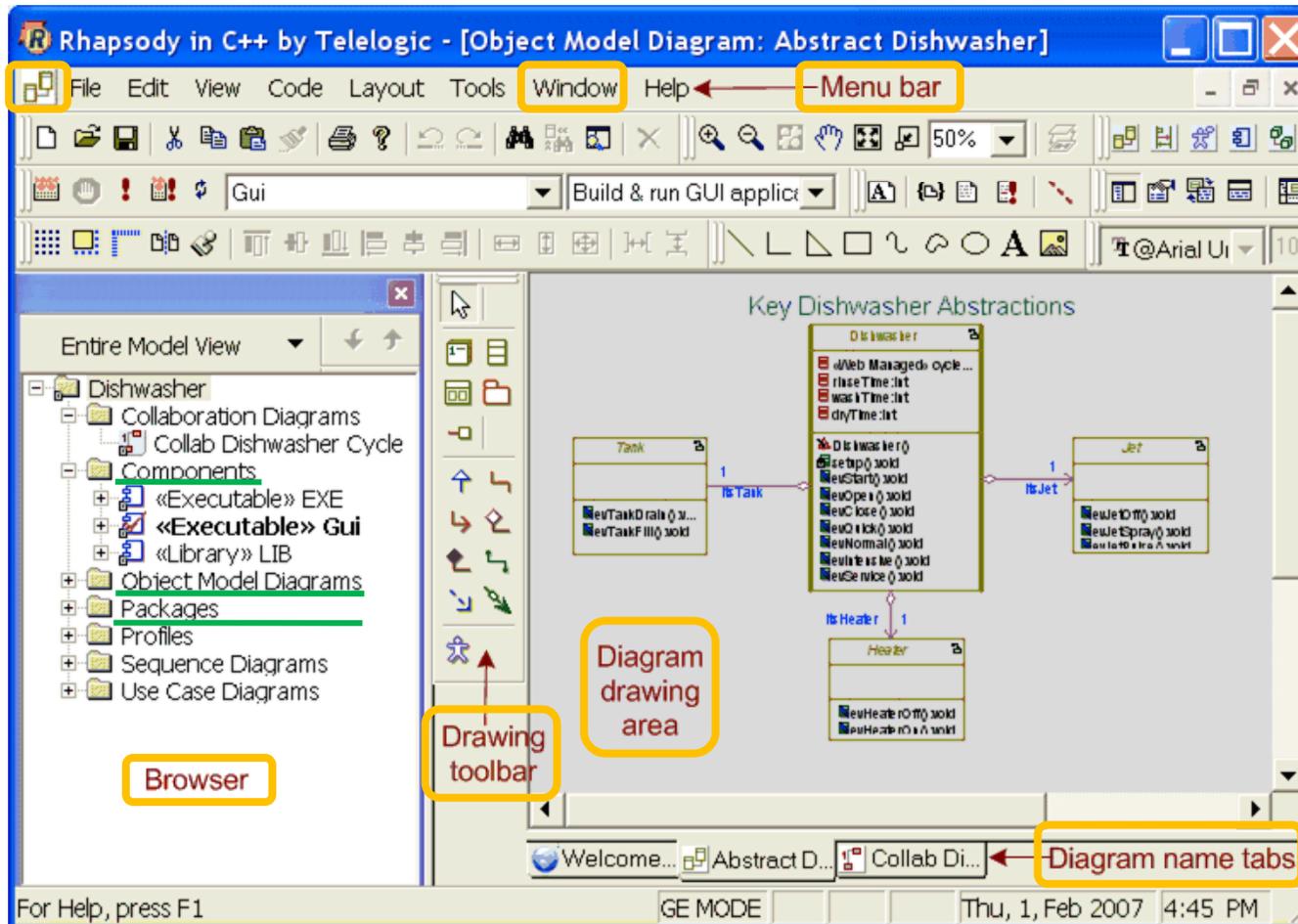
## ❖ Starting

- ✓ Run rhapsody with one chosen language



# Tool overview(6/7)

## ❖ Tool Interface

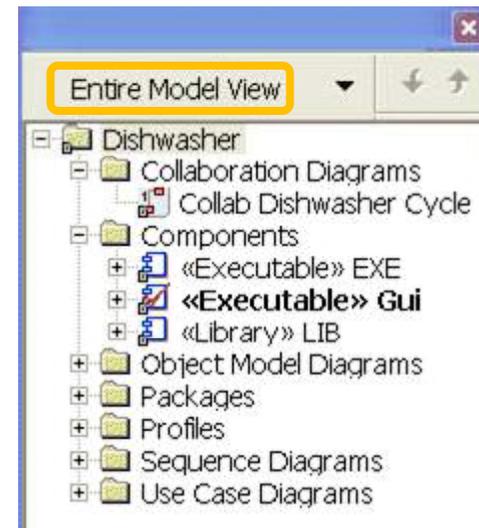


- Cascade
  - Tile Horizontally
  - Tile Vertically
  - Arrange Icons
  - Close All
- 
- Back
  - Forward
- 
- Features in New Window
- 
- Arrange Options
- 1 Welcome to Rhapsody
  - ✓ 2 Object Model Diagram: Abstract Dishwasher
  - 3 Object Model Diagram: Acme Dishwasher
  - 4 Sequence Diagram: Dishwasher
  - 5 Use Case Diagram: Dishwasher

# Tool overview(7 / 7)

## ❖ Tool Interface(cont'd)

- ✓ Filtering the browser display
  - Use-case, component, diagram, ...
- ✓ Moving and copying browser items
  - Dragging-and-dropping
  - Ctrl key when copying



## ❖ Additional feature

- ✓ Creating backups
- ✓ Using name conventions

Convention	Example	Convention	Example
Event names = "ev"	evStart	Class names	System
Interface classes = "I"	IHardware	Operations and attributes	restartSystem, checkStatus



# Rhapsody for S/W development(1 / 7)

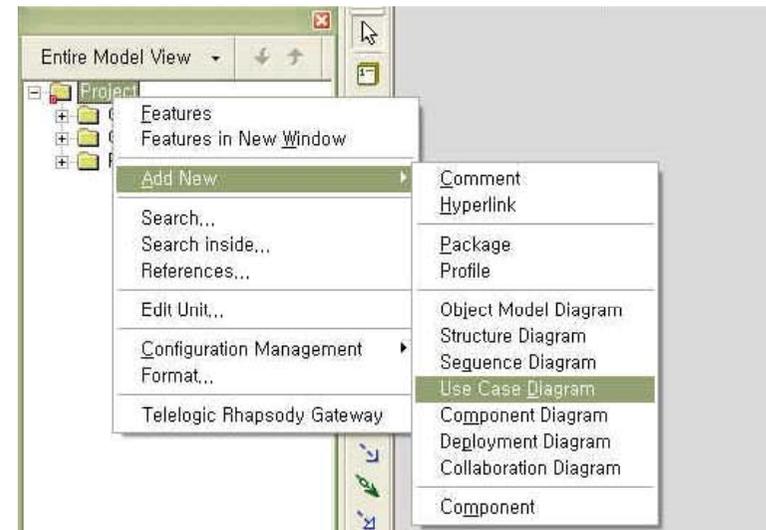
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## ❖ Used diagrams

- ✓ Partially constructive diagrams
  - Use-case, sequence, collaboration diagrams
- ✓ Fully constructive diagrams
  - Object model, component, activity diagrams and statecharts

## ❖ Creating UML diagrams

- ✓ First create **Project** and then right-click your mouse upon the project you create



# Rhapsody for S/W development(2/7)

## ❖ Drawing Use Case Diagram

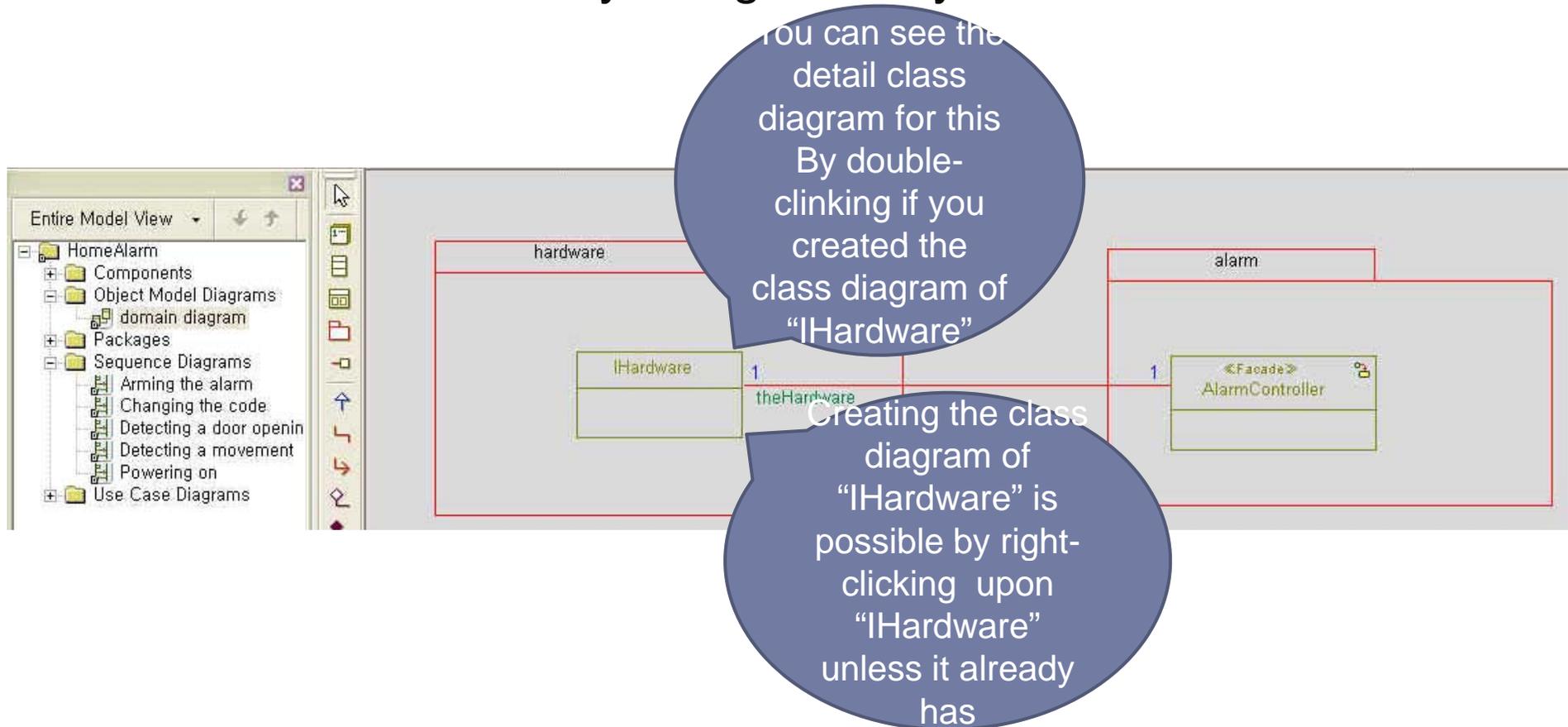
This is created when you create "Use Case Diagram" folder

Use this to draw an use-case diagram

```
graph TD
    subgraph "home alarm"
        C[changing code]
        CE[code entry]
        AD[arming and disarming]
        SA[sound alarm]
        DI[detect intrusions]
        OS[occupation simulation]
        C -- Extends --> CE
        AD -- Extends --> CE
        SA -- Extends --> AD
        OS -- Extends --> DI
    end
    H[homeowner] --- C
    H --- CE
    H --- AD
    H --- DI
    I[intruder] --- DI
```

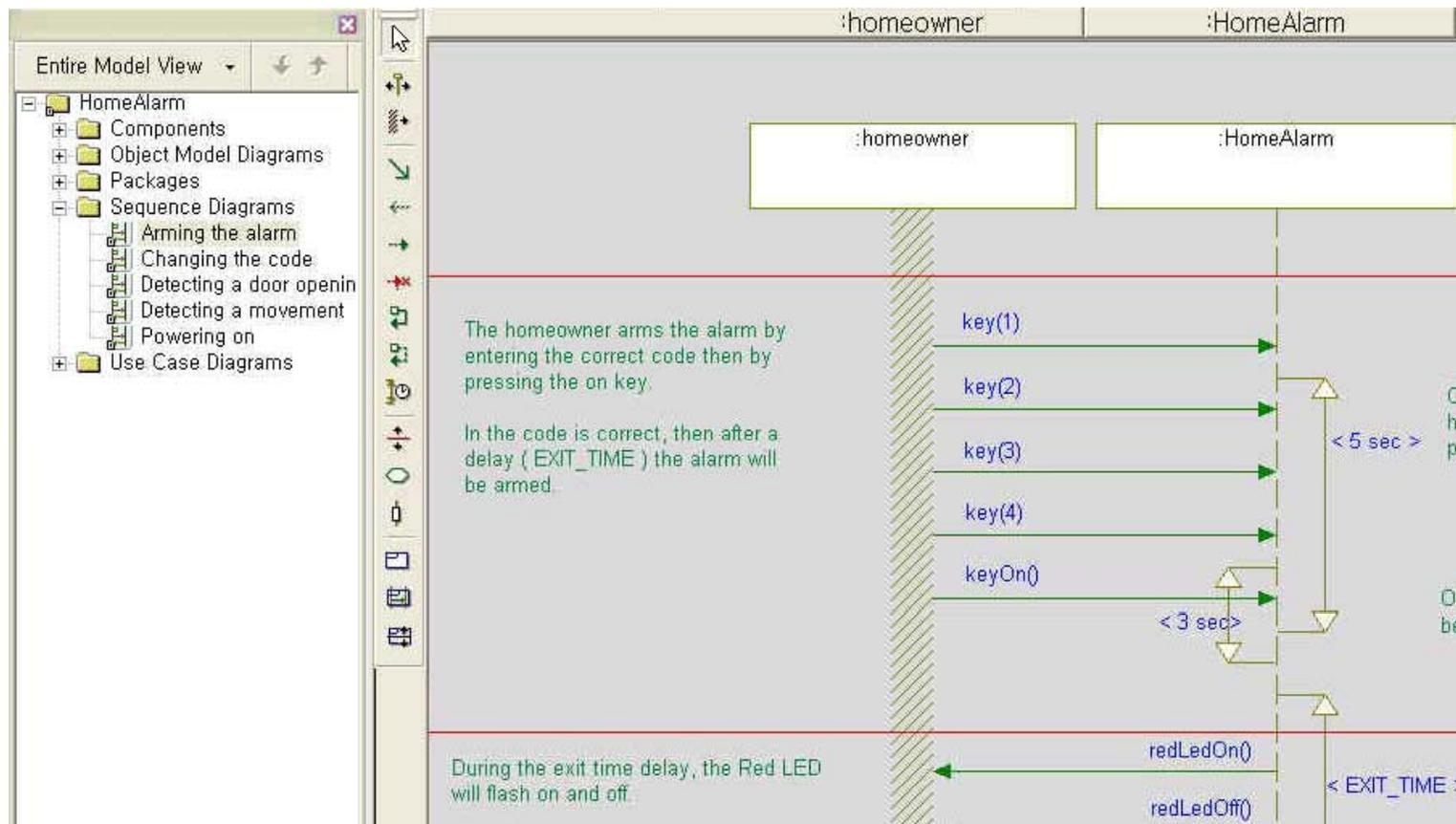
# Rhapsody for S/W development(3/7)

- ❖ Drawing an Object Model(Class) diagram
  - ✓ You can draw this by doing similarly as the case of the former



# Rhapsody for S/W development(4/7)

- ❖ Drawing a Sequence diagram(or a statechart)
  - ✓ You can draw this by doing similarly as the case of the former



# Rhapsody for S/W development(5/7)

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## ❖ Code generation

### ✓ Type of running

- Whether using provided implementations of design elements or not
  - Elaborative or Transitive

### ✓ Functions

- Dynamic model code associativity
- Generation of Makefiles
- Edition of codes with IDE\*

\*IDE : Integration Development Environment

## ❖ Building

### ✓ Compilation of the generated code

# Rhapsody for S/W development(6/7)

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## ❖ Animating diagrams

### ✓ Three target diagrams

- Sequence, activity diagrams and statecharts

### ✓ Four supported languages

- C++, C, Java and Ada

### ✓ Shortcut to run animations

- Press Generate/Make/Run in the tool tab of the menu

### ✓ Usage

- GUI testing with the given event generator
- For fun and so forth...

# Rhapsody for S/W development(7 / 7)

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## ❖ ReporterPLUS

- ✓ Enable to generate various formal presentations
  - HTML page, MS Word, MS PowerPoint
  - RTF, text
- ✓ Provide standard templates and the way to customize them

\*RTF : Rich Text Format

Template Name	Preferred Output formats	Description
Class.tpl	HTML or Word	Defines the information about the classes in the project
GetStarted.tpl	Word & PowerPoint	Show all diagrams and classes in a model
ProjectReport.tpl	Word	Defines the information about the complete project
Rhapsody HTML Exporter.tpl	HTML only	Same as the above, but in HTML

# Demo

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## ❖ Scenario

- ✓ 1. Starting and loading samples
  - HomeAlarm system
  
- ✓ 2. Animating diagrams
  - Sequence diagram and statecharts
  
- ✓ 3. Documenting using the ReportPLUS
  - Report in a Word format
  - Report as web pages

# Advice

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## ❖ About tool usage

- ✓ Press “Help -> Welcome Screen” from the menu.
- ✓ Then press “Documentation->User Guide”
- ✓ After that, you can see very kind 1242 pages
  - Your TA is also a student!!! T-T)  
(Ref. : he is a member of [prof.Bae's Lab.](#))

## ❖ About generating code and animating diagrams

- ✓ In fact, Demo is the one made very carefully
  - Making your project do those correctly may be not easy
    - But, it's certainly 짬 멋진듯.. if you do
  - Purpose of using this tool is to model your system “안전한집” with UML diagrams