

CASE TOOLS

TEST REPORT

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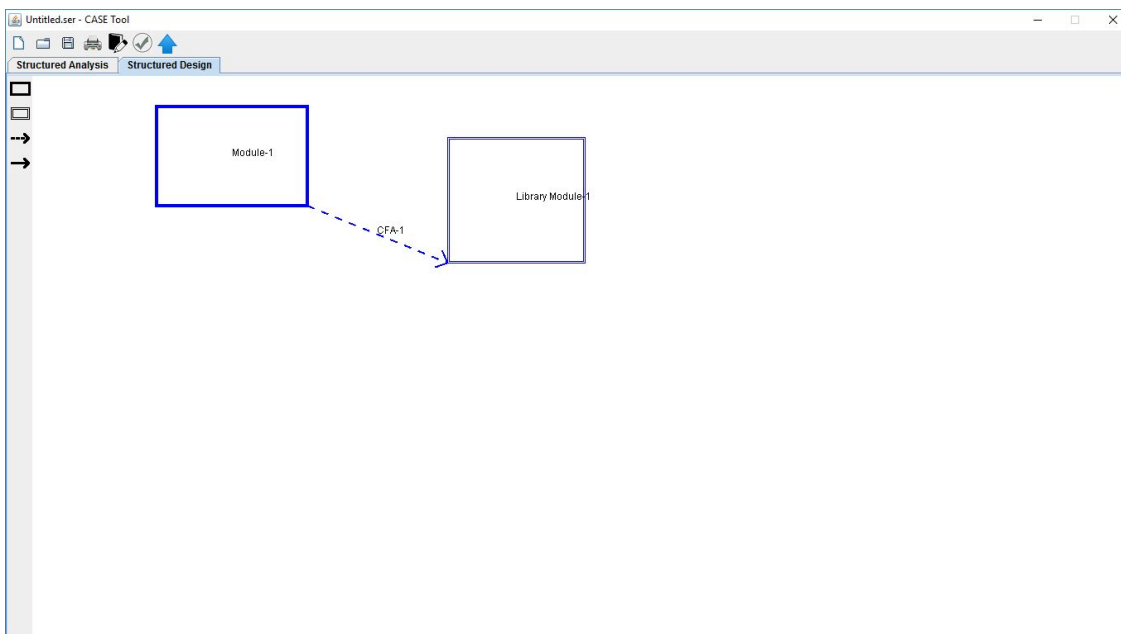
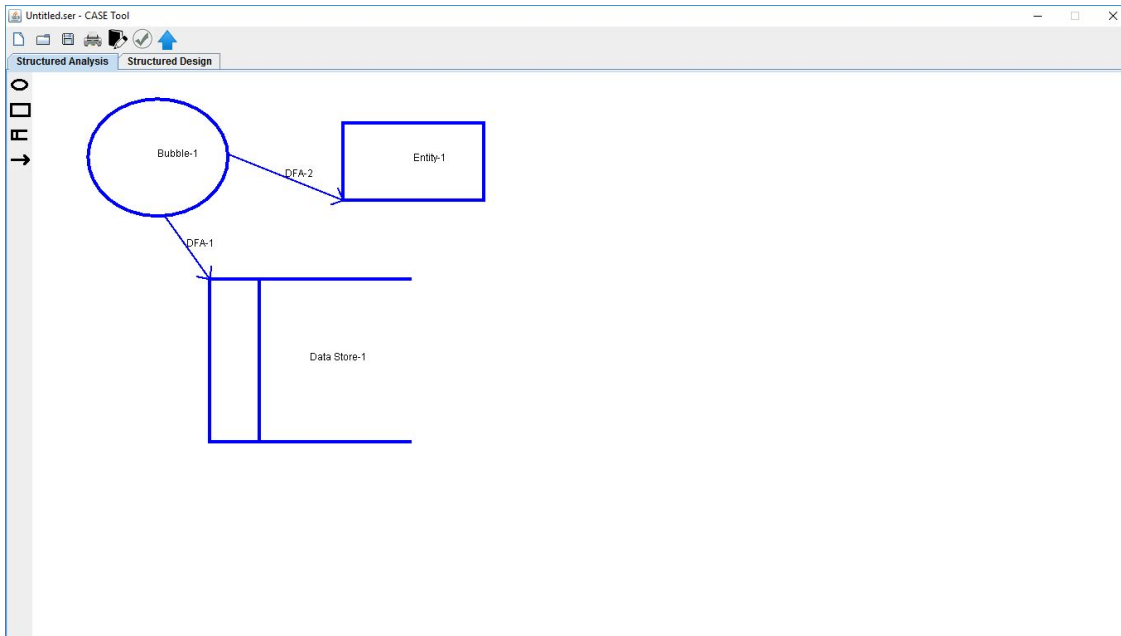
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Black Box Testing

We did error guessing and boundary value analysis on all parameters and variables in a method.

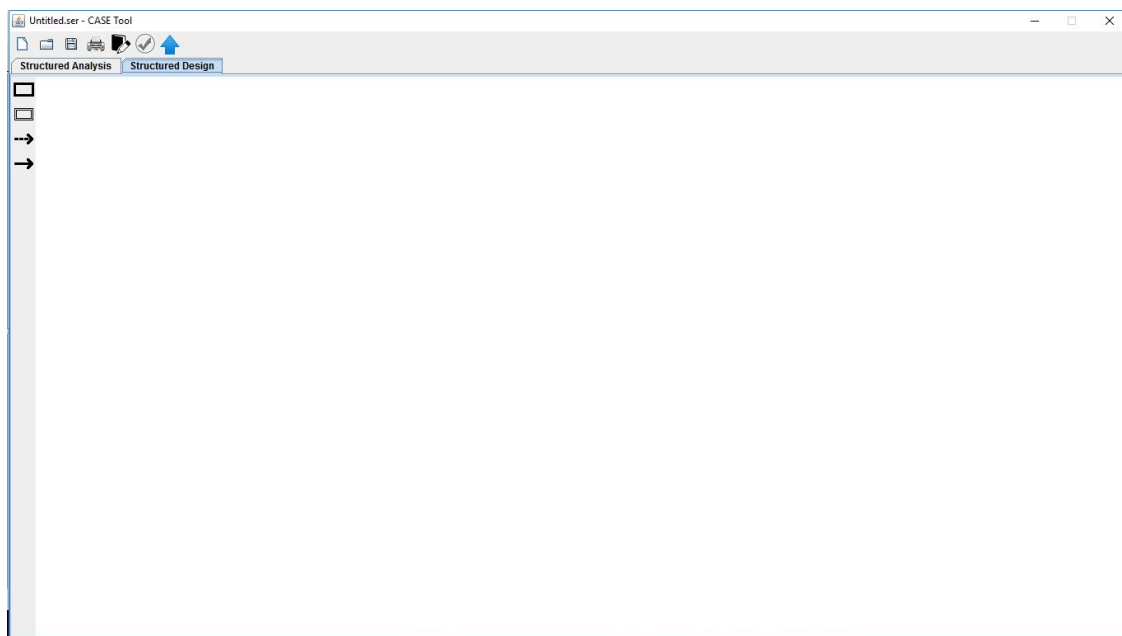
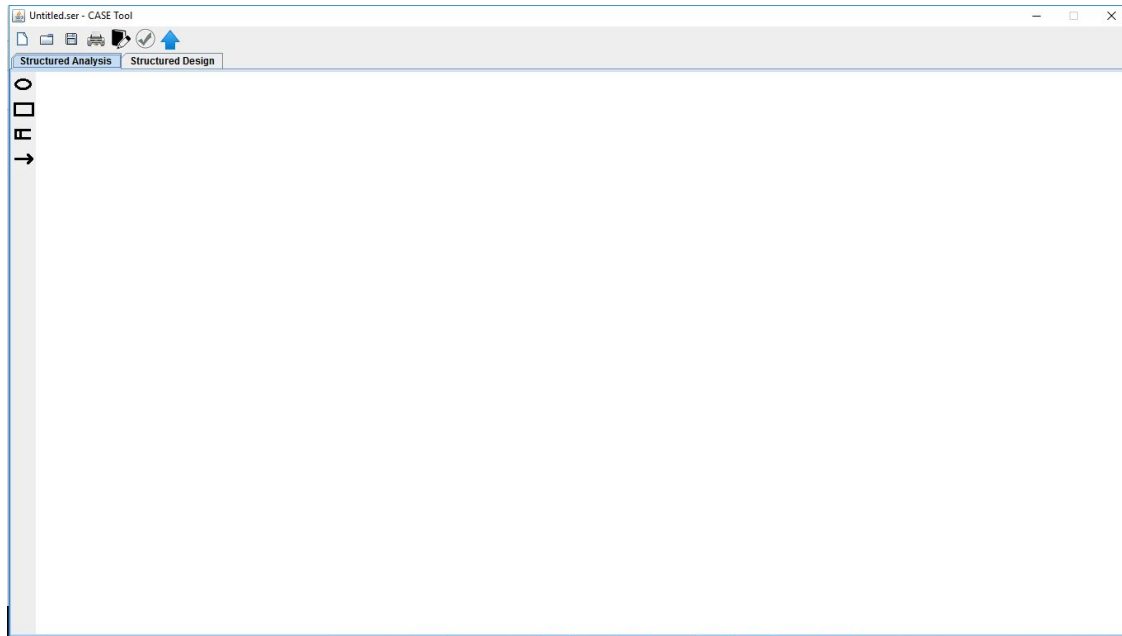
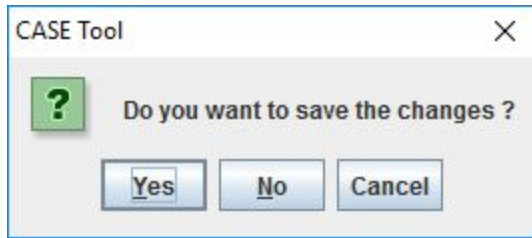
BBT for New

Before clicking button New :-



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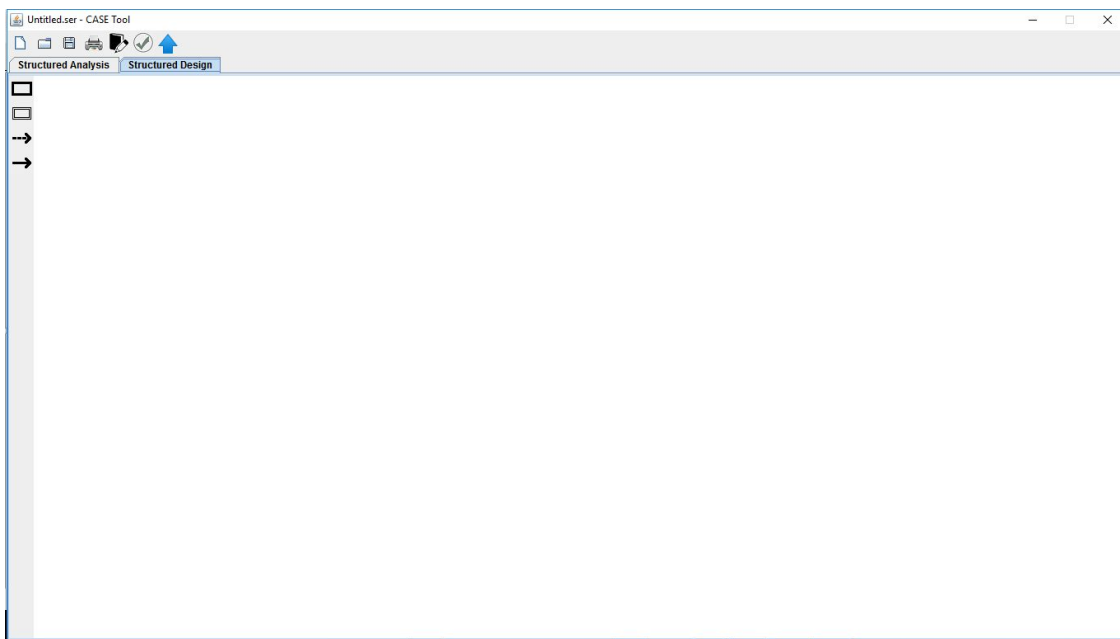
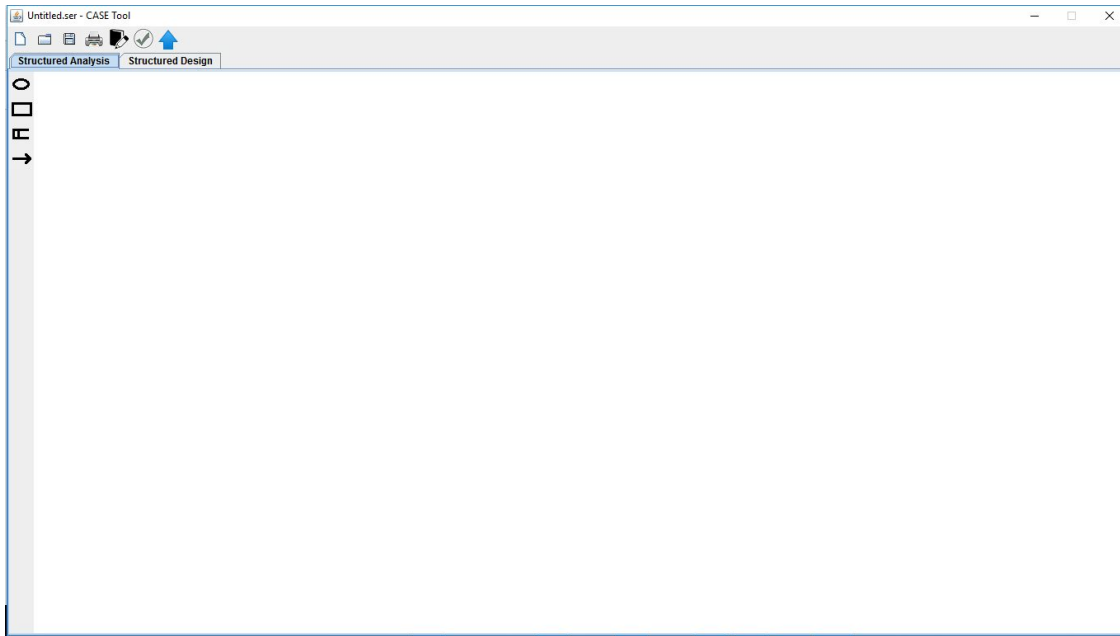
After clicking button New :-



Result : The New button performed correctly.

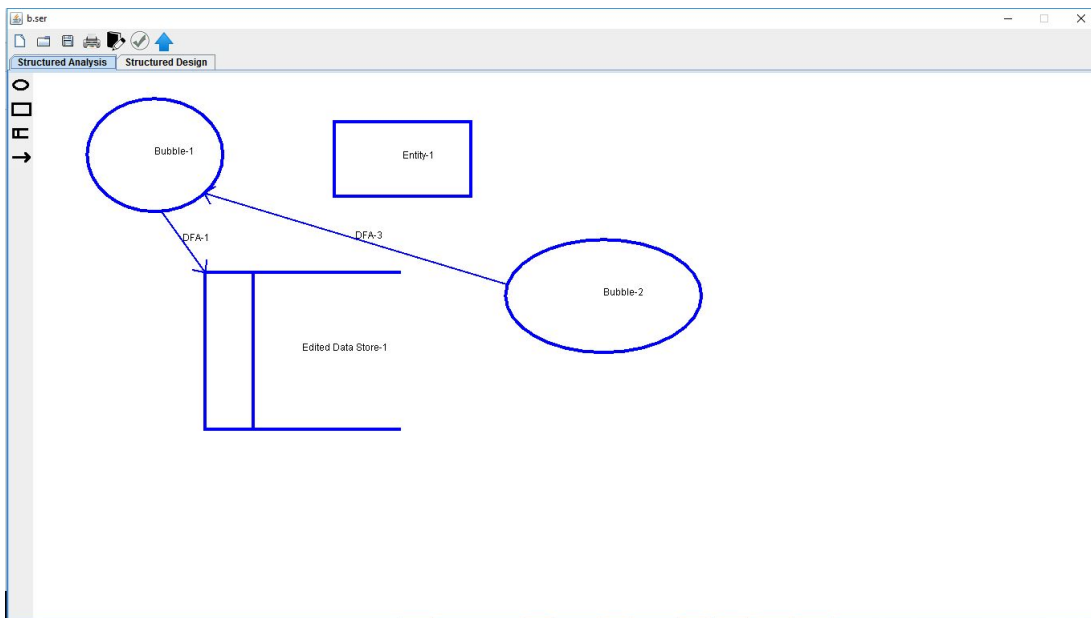
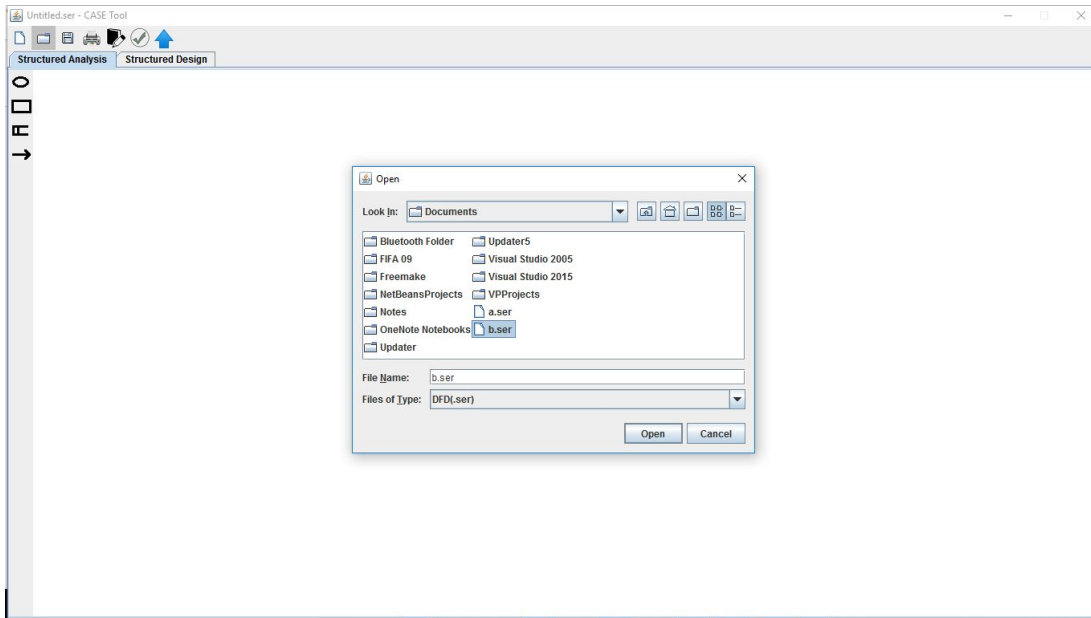
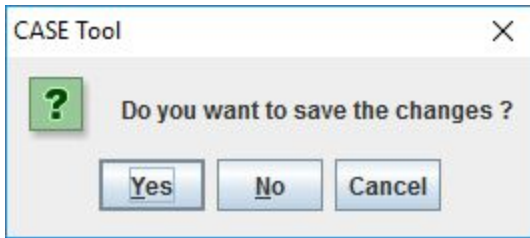
BBT for Open

Before clicking button Open :-



CASE Tool - Test Report

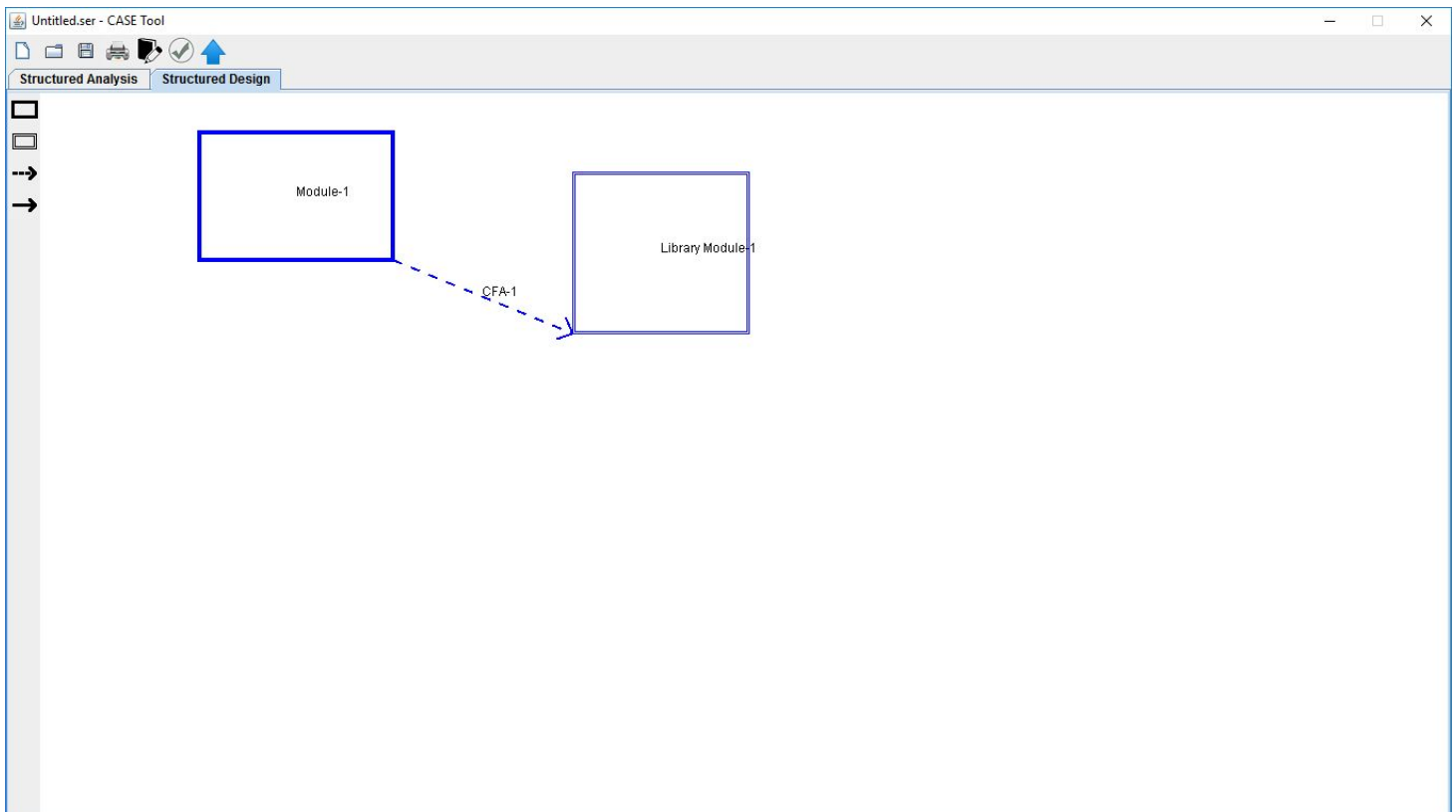
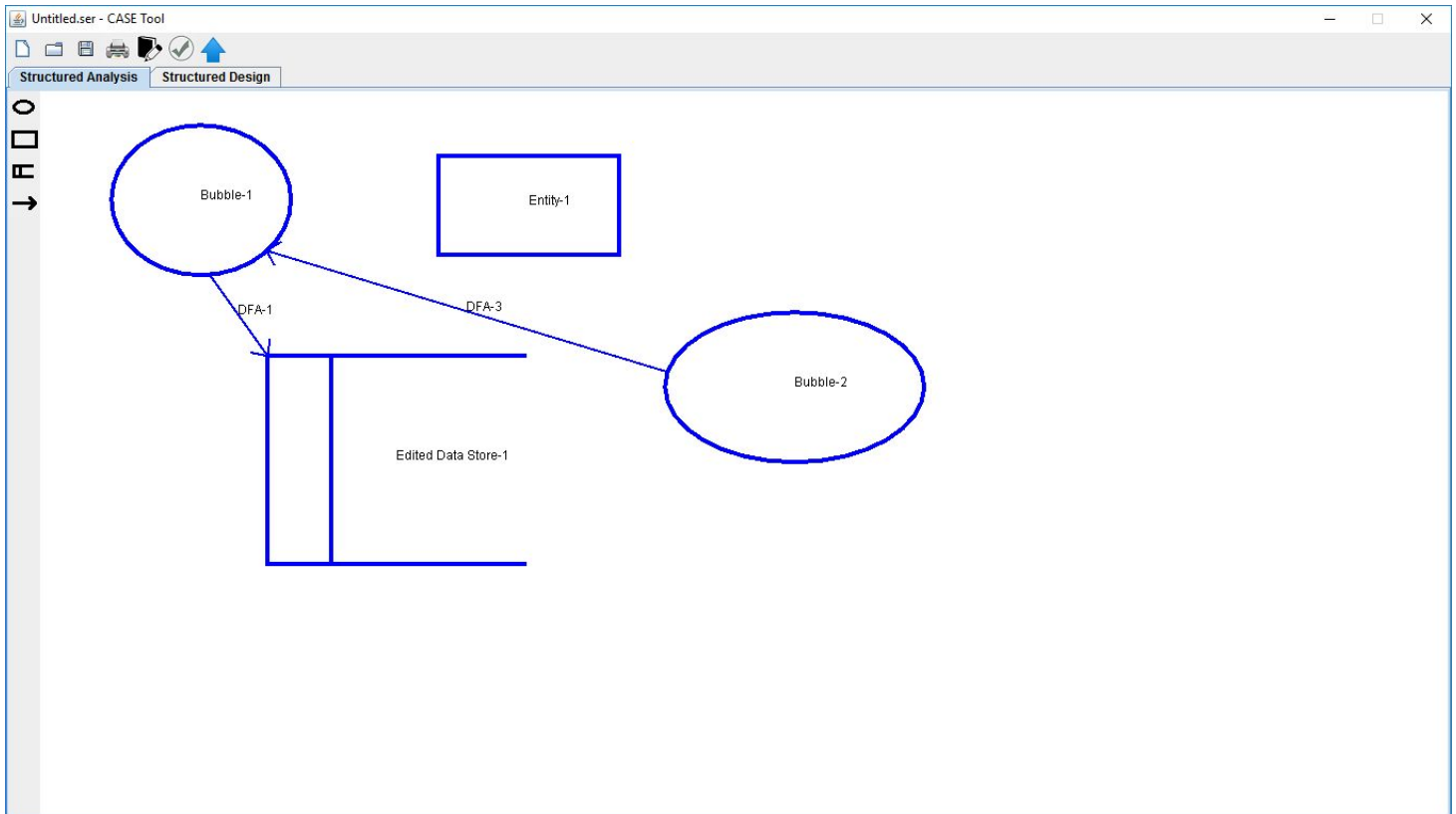
After clicking button Open :-



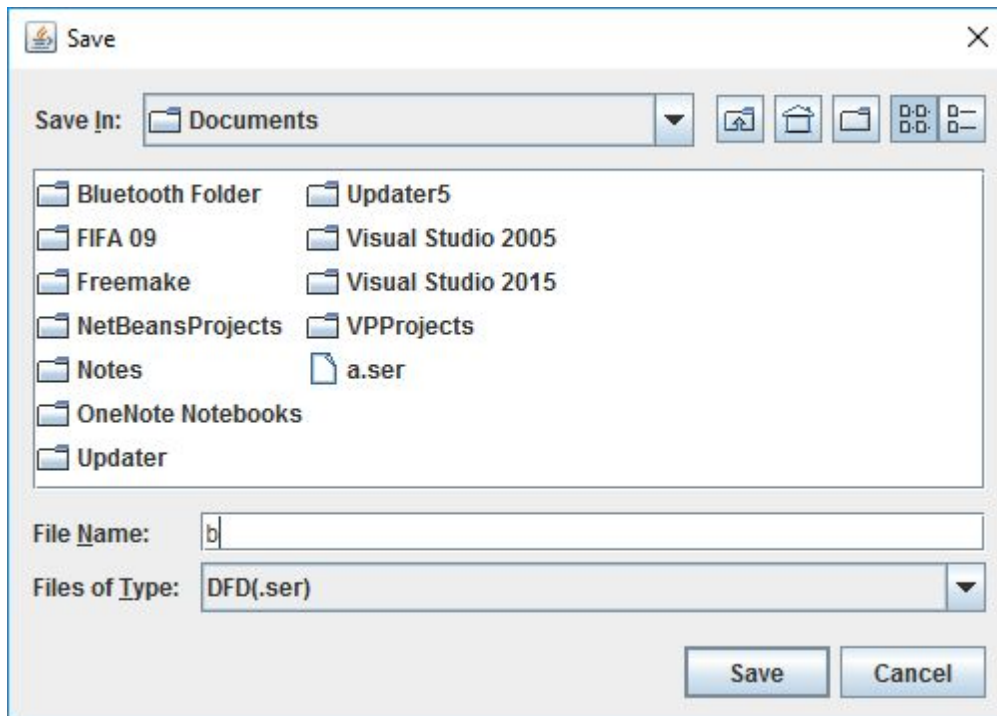
Result : The Open button performed correctly.

BBT for Save

Before clicking Save button :-



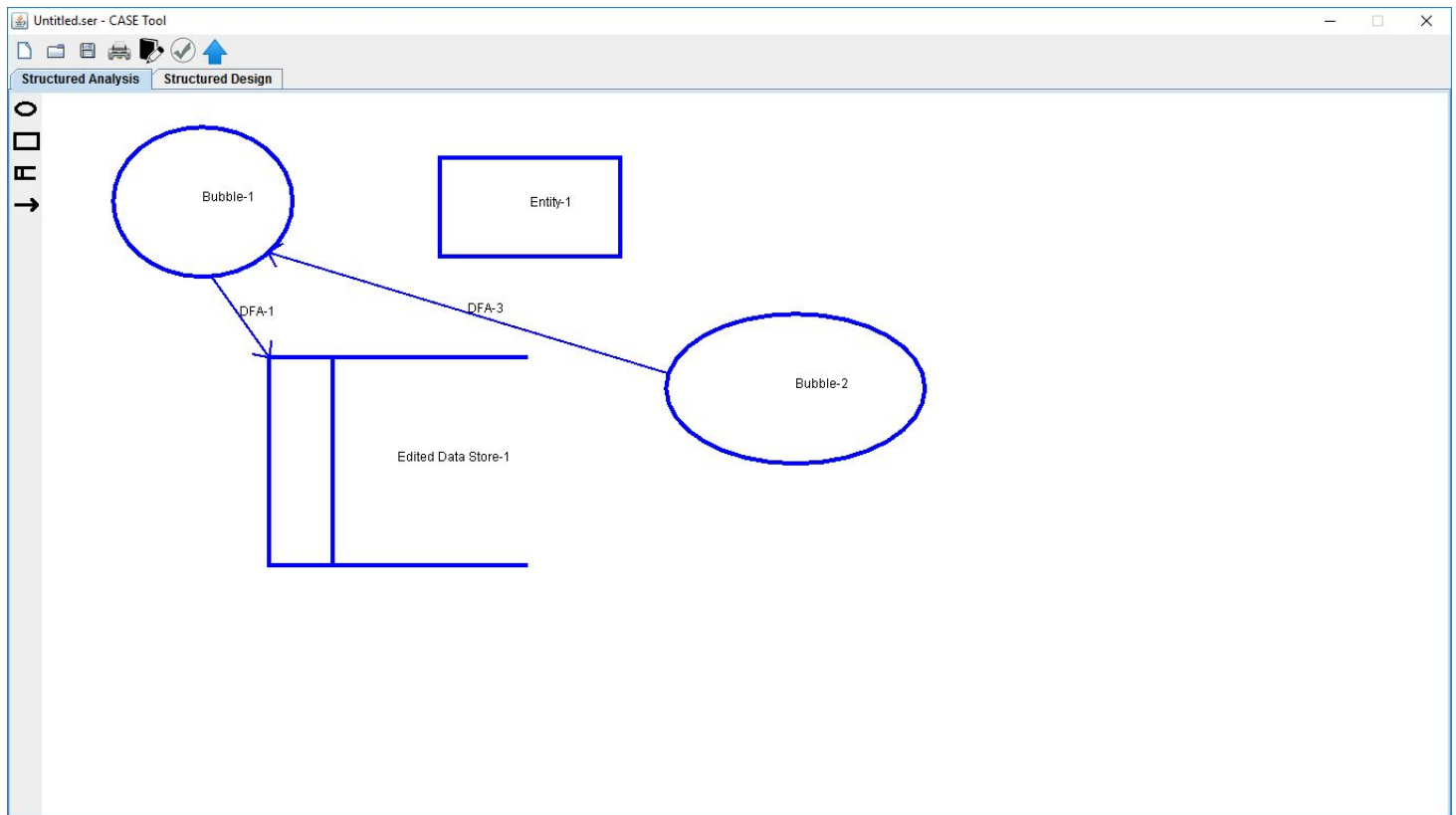
After clicking button Save :-



Result : The Save button performed correctly.
Checked by clicking new and the opening b.ser again.

BBT for Print

Before clicking Print button :-

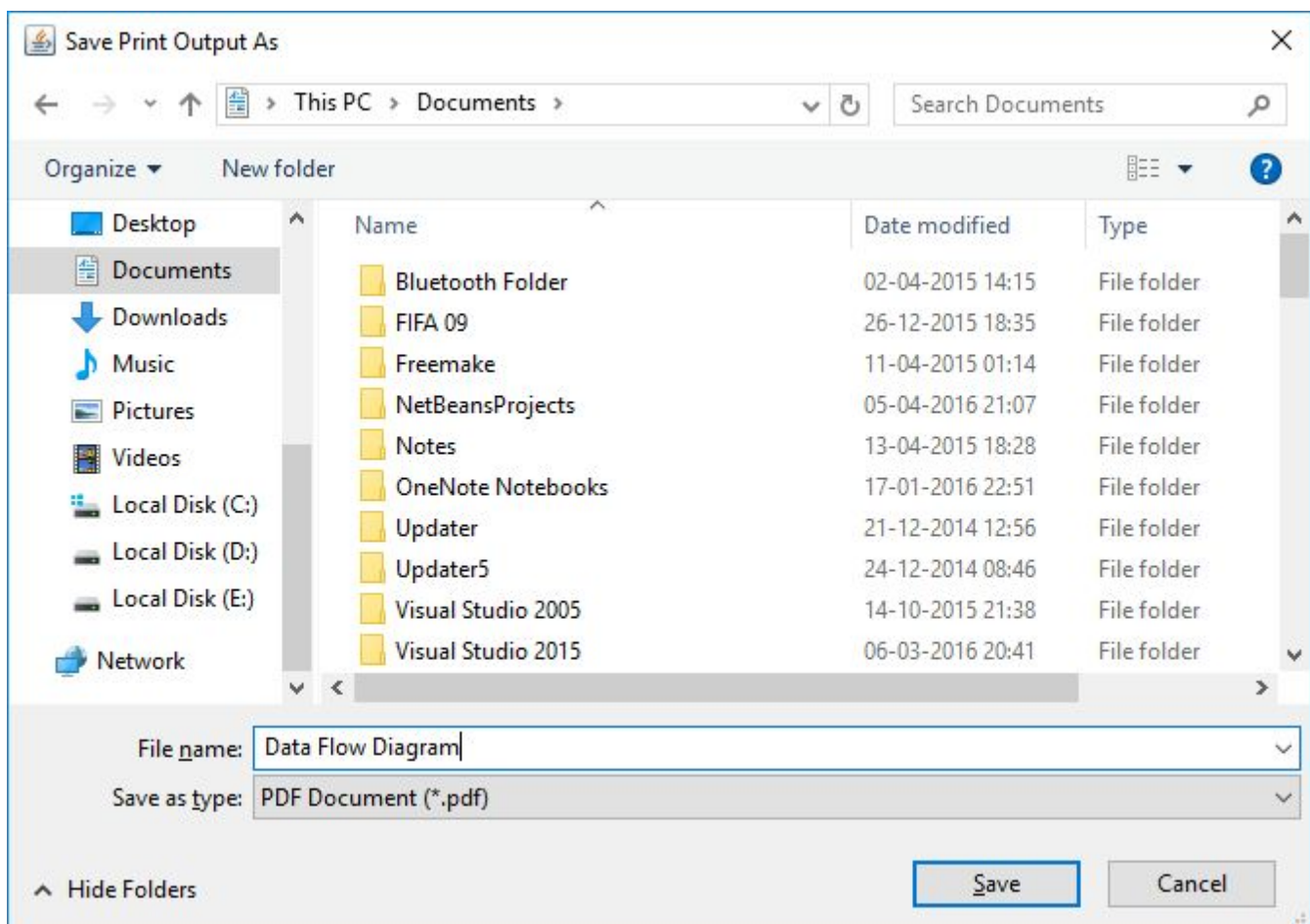
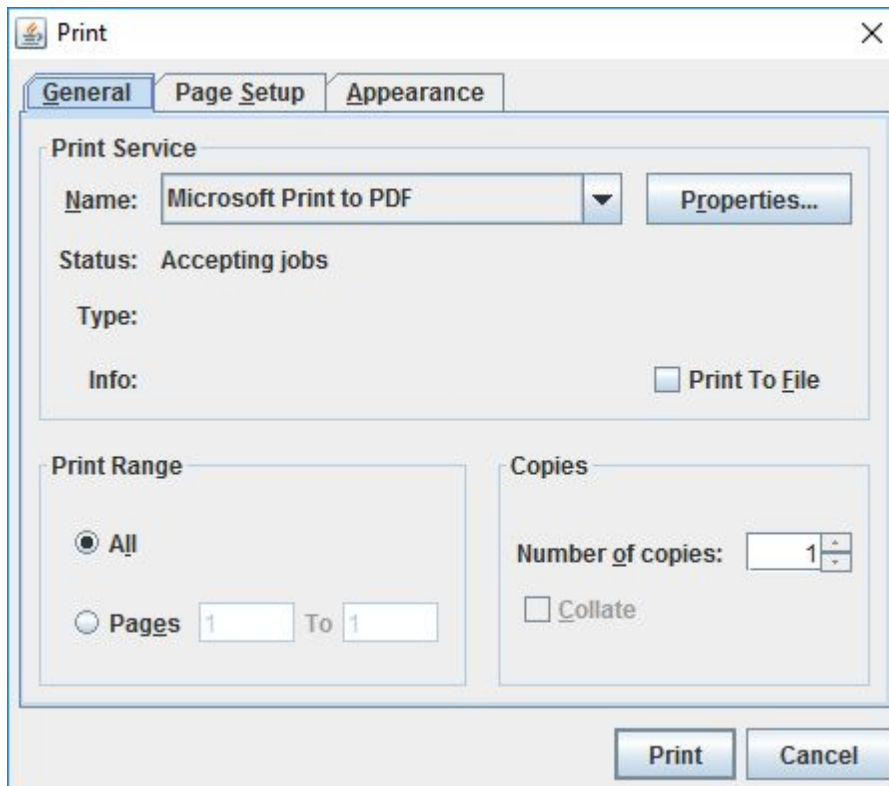


After clicking button Print :-

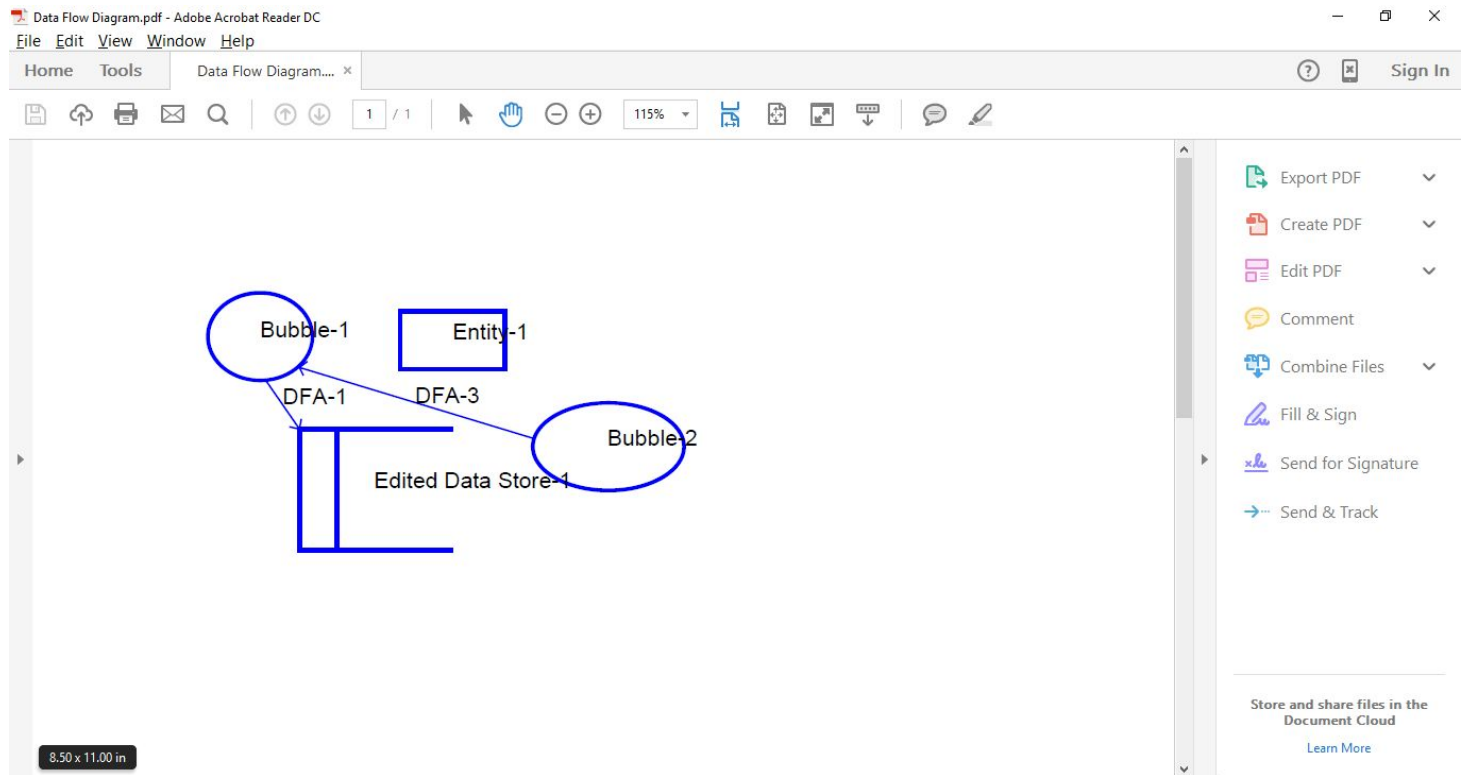
The 'Page Setup' dialog box is open, showing the following settings:

- Media**:
 - Size: Letter
 - Source: Automatically Select
- Orientation**:
 - ☒ Portrait
 - ☐ Landscape
 - ☐ Reverse Portrait
 - ☐ Reverse Landscape
- Margins**:
 - left (mm): 25.4
 - right (mm): 25.4
 - top (mm): 25.4
 - bottom (mm): 25.4

Buttons: OK, Cancel



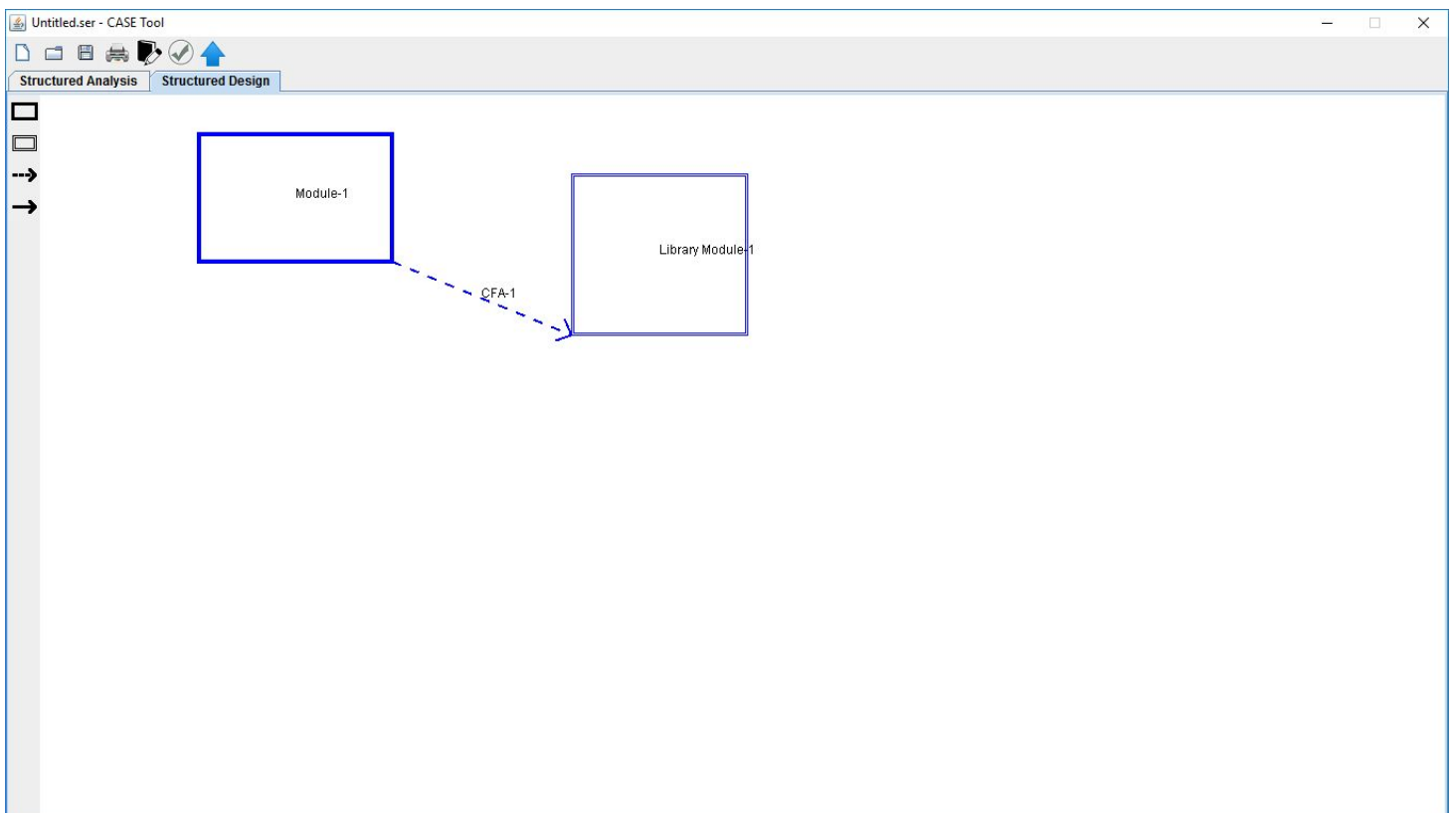
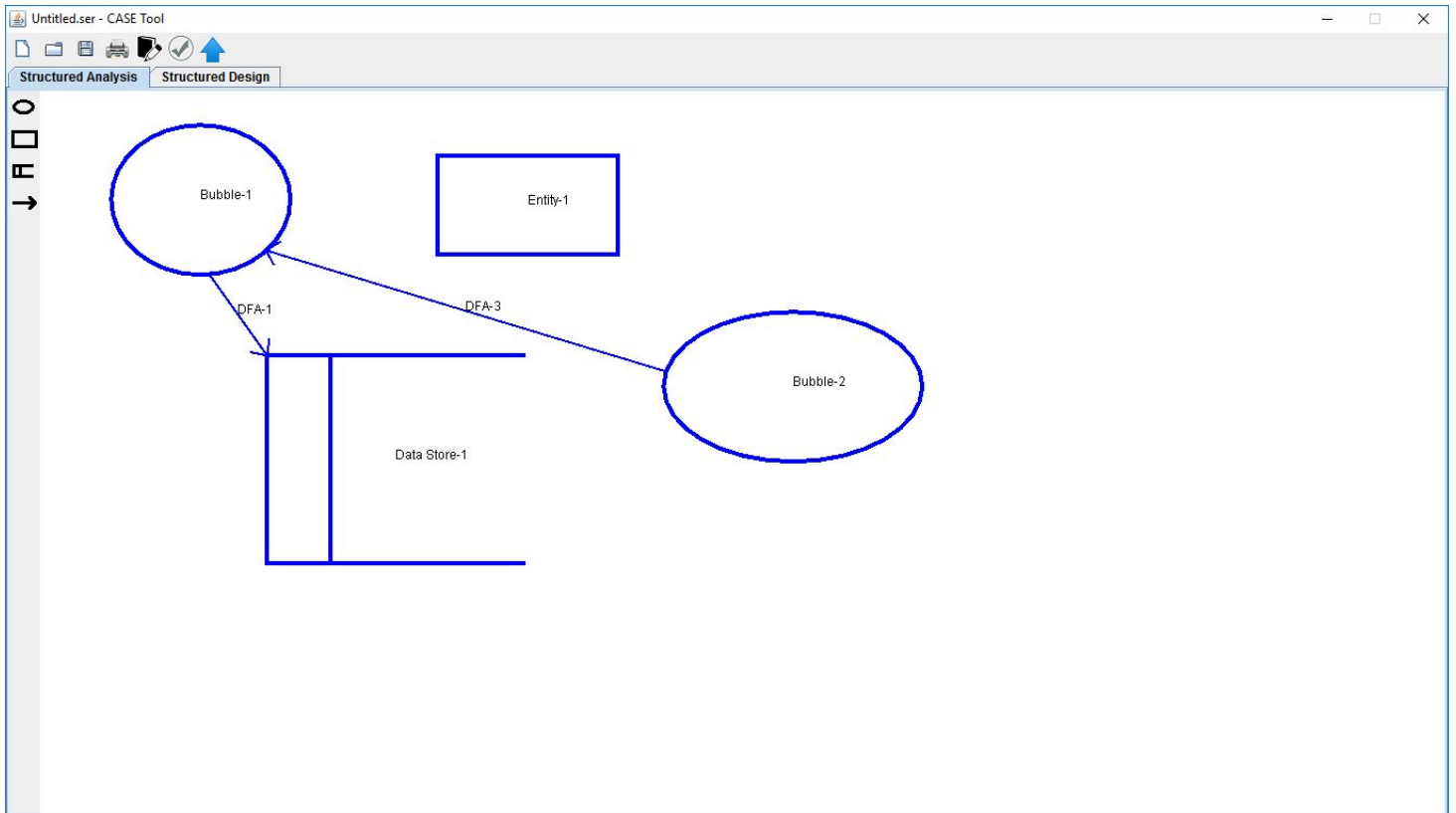
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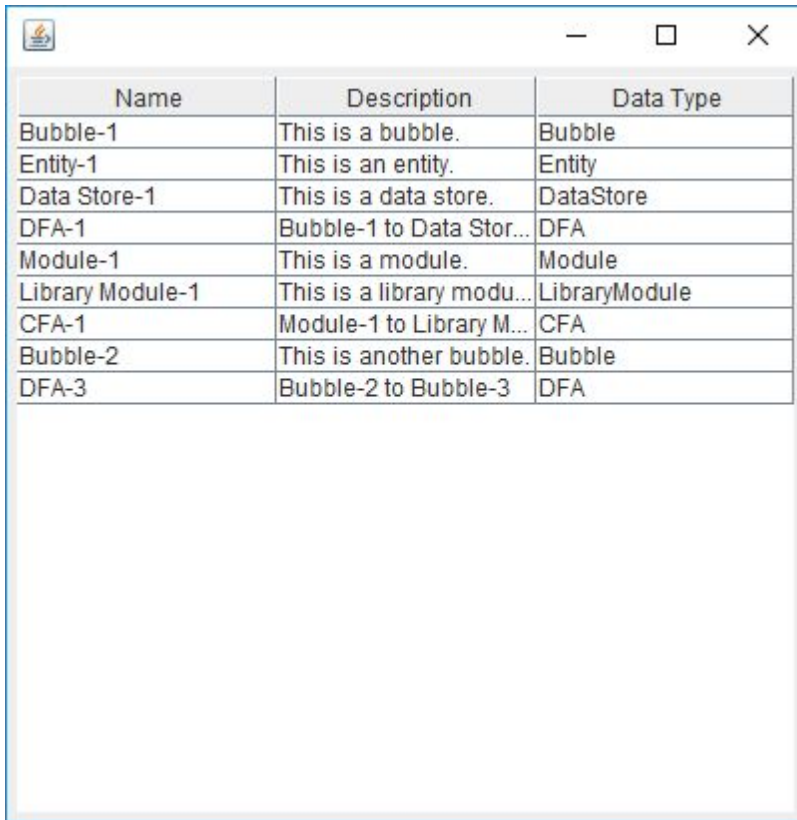
Result : The Print button performed correctly.

BBT for ViewDD

Before clicking button ViewDD :-



After clicking button ViewDD :-

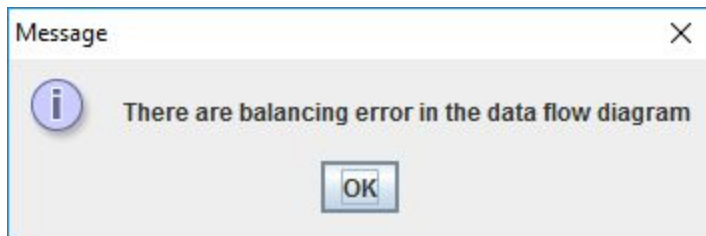


Name	Description	Data Type
Bubble-1	This is a bubble.	Bubble
Entity-1	This is an entity.	Entity
Data Store-1	This is a data store.	DataStore
DFA-1	Bubble-1 to Data Stor...	DFA
Module-1	This is a module.	Module
Library Module-1	This is a library modu...	LibraryModule
CFA-1	Module-1 to Library M...	CFA
Bubble-2	This is another bubble.	Bubble
DFA-3	Bubble-2 to Bubble-3	DFA

Result : The ViewDD button performed correctly.

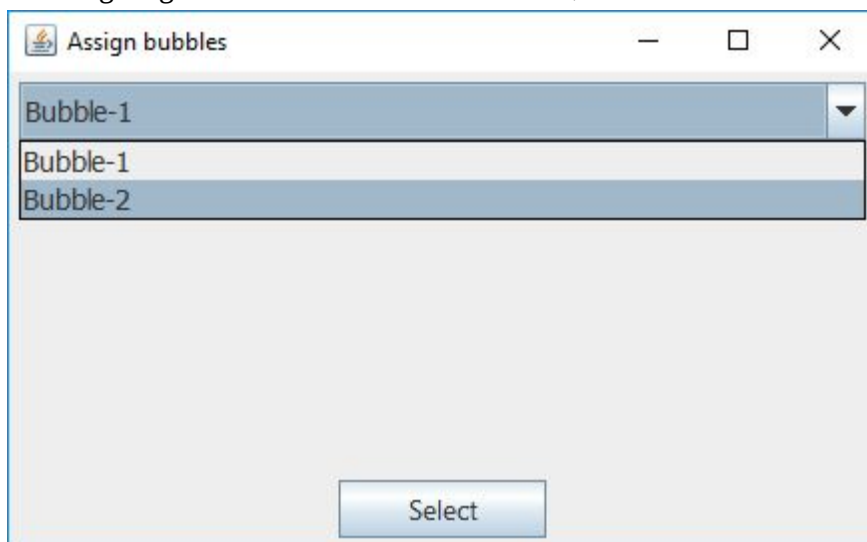
BBT for CheckBalancingError, Assign Bubbles/Modules, Hierarchy and Up level

Before assigning modules to some bubbles, on clicking CBE :-

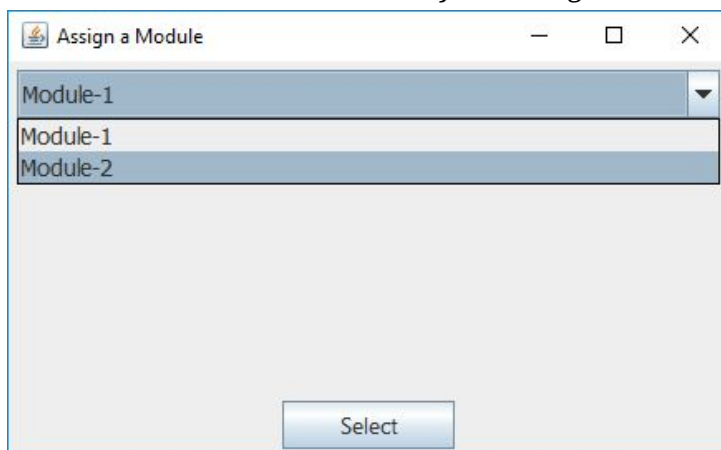


(When balancing error is present)

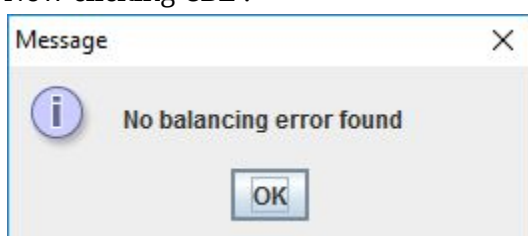
On assigning all bubbles to some modules (more than one bubbles can be assigned to one module) :-



Also all the bubbles can be one by one assigned to modules (one bubble can be assigned only one module) :-



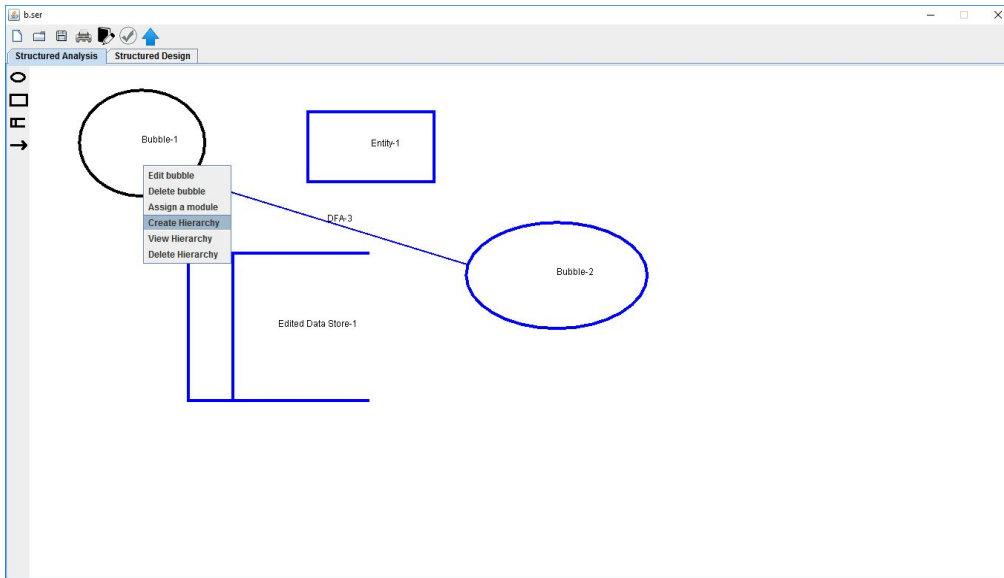
Now clicking CBE :-



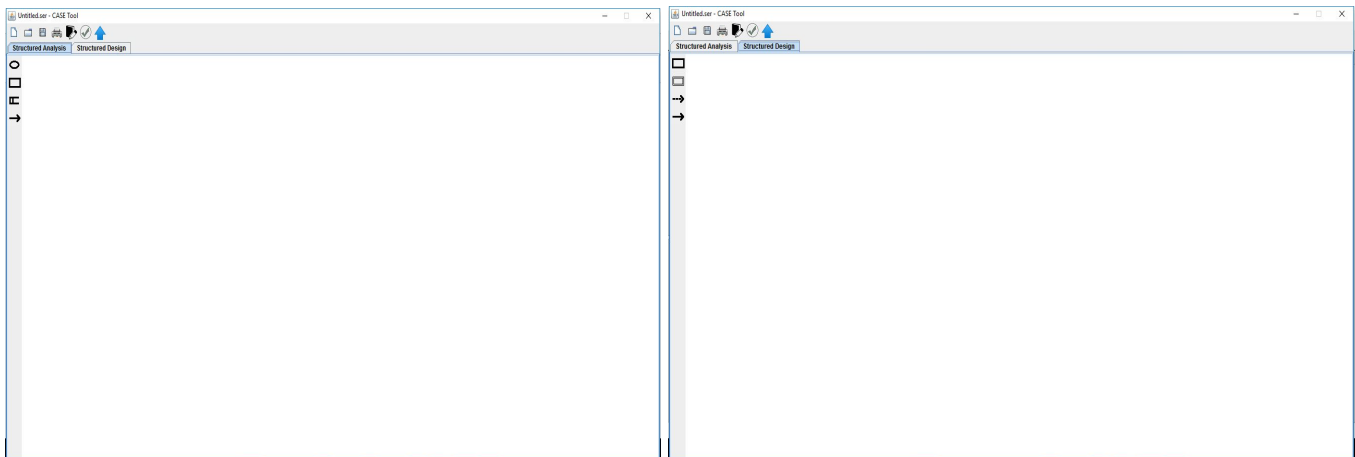
(When there are no balancing error)

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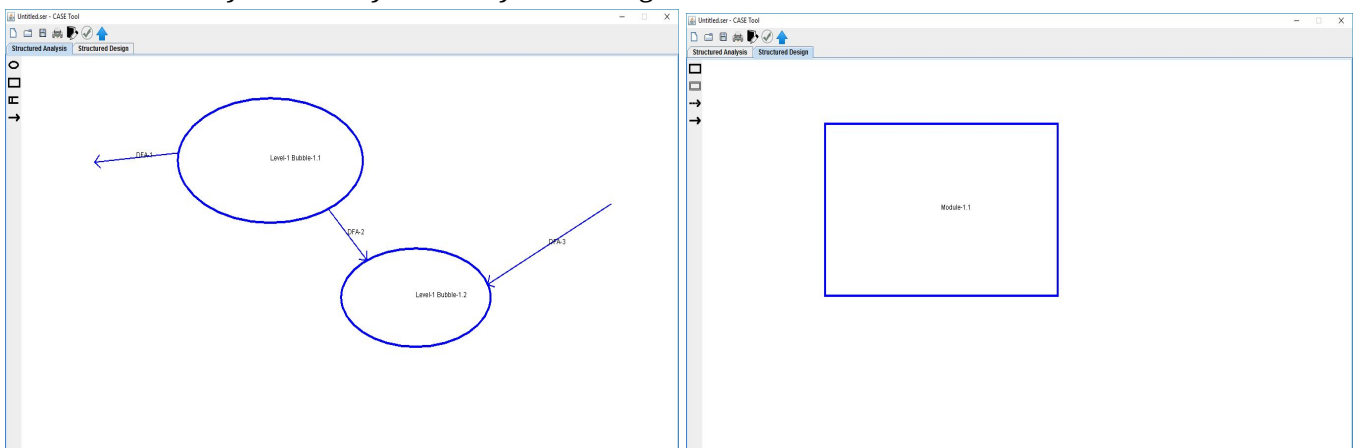
Now, creating hierarchy, before clicking button create Hierarchy :-



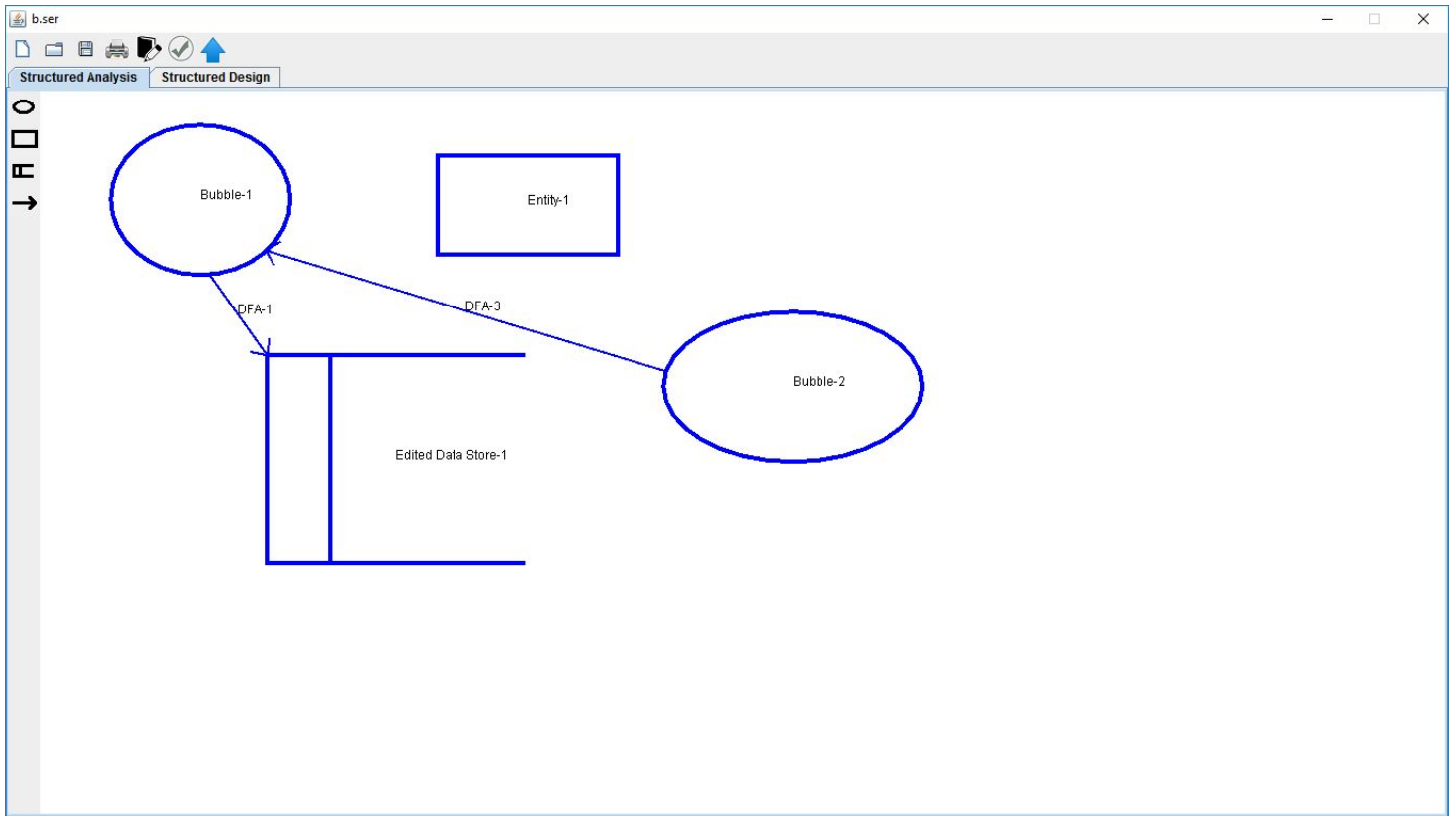
After clicking create Hierarchy :-



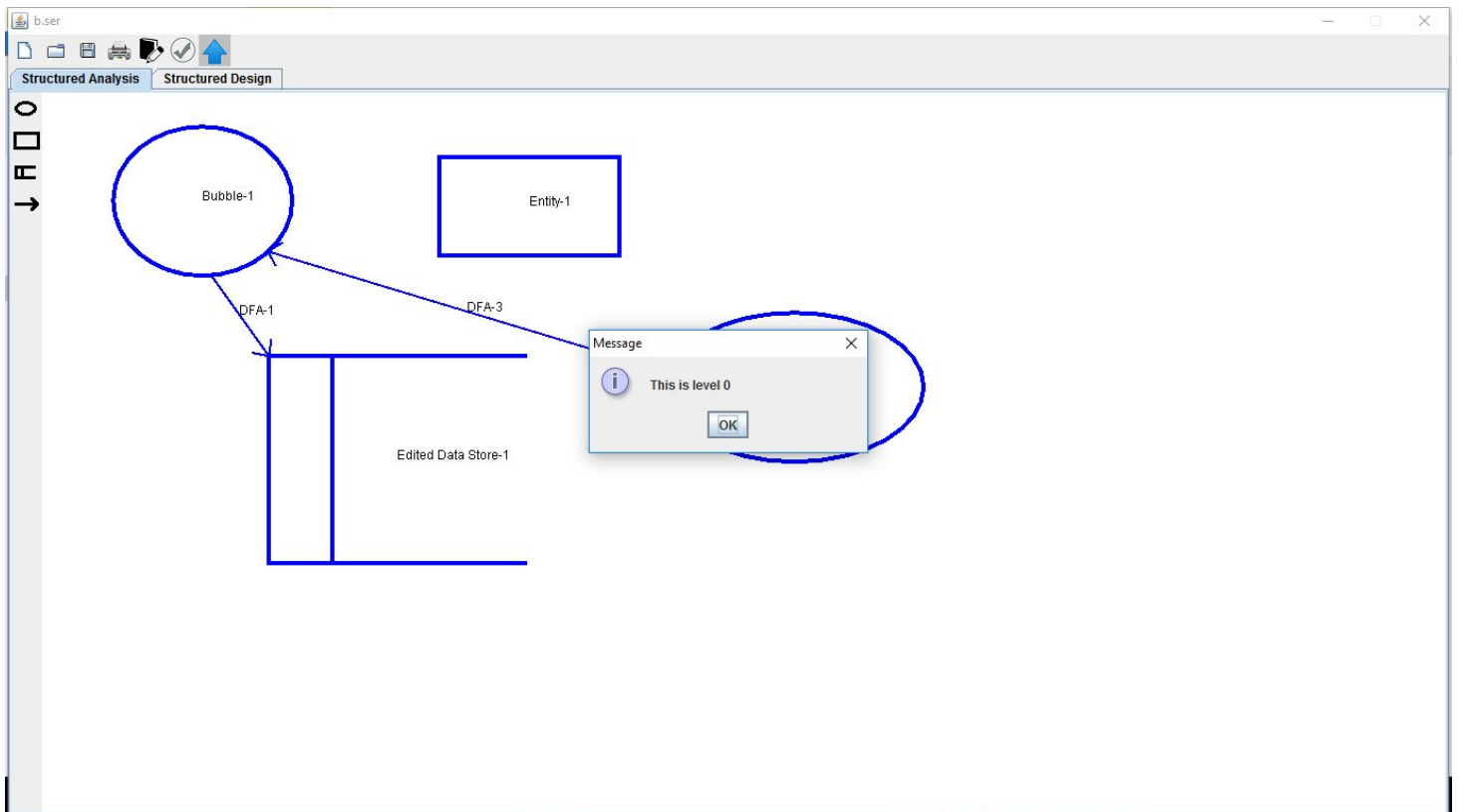
Now, we create system analysis and system design here :-



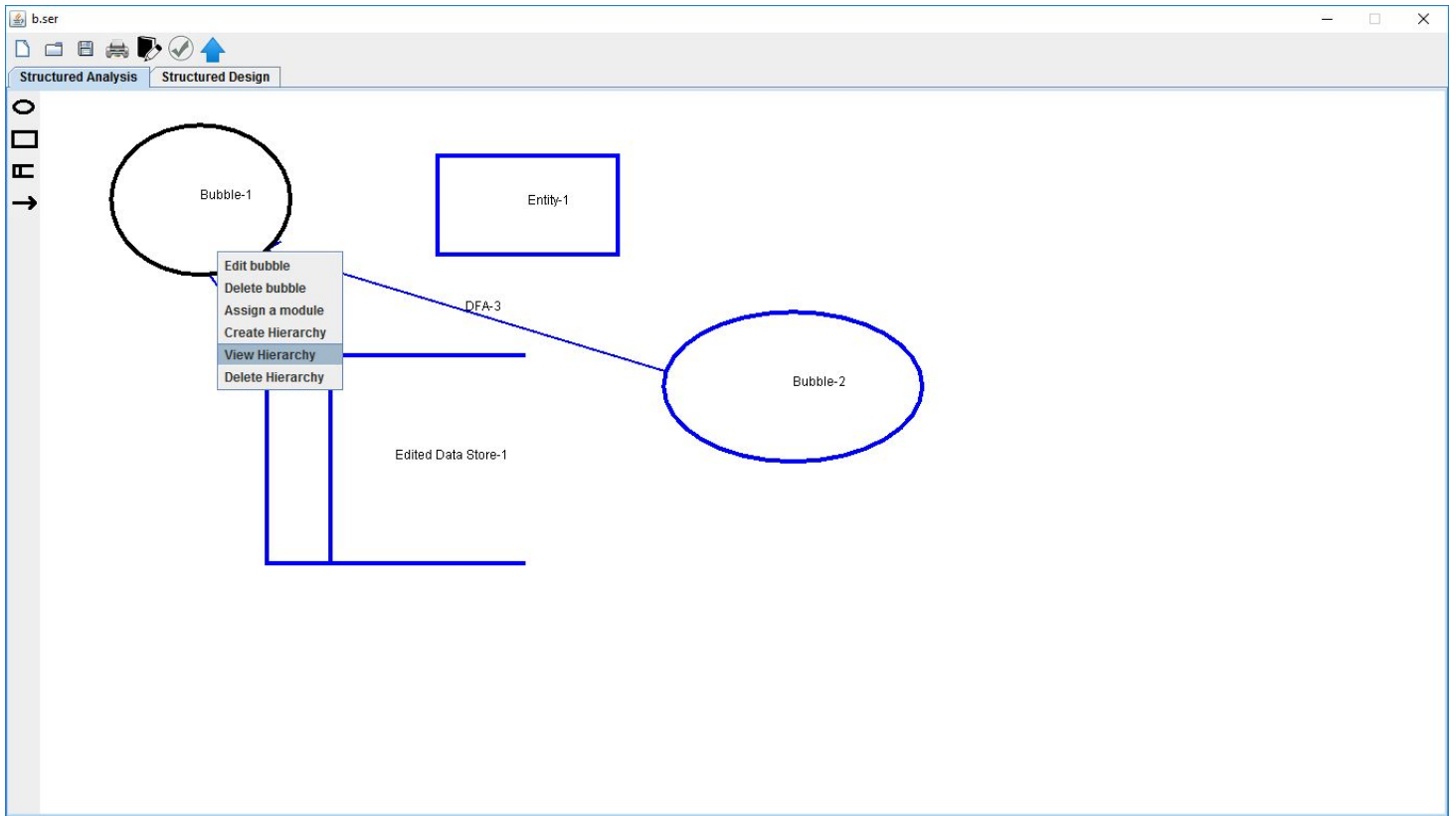
On clicking Up level :-



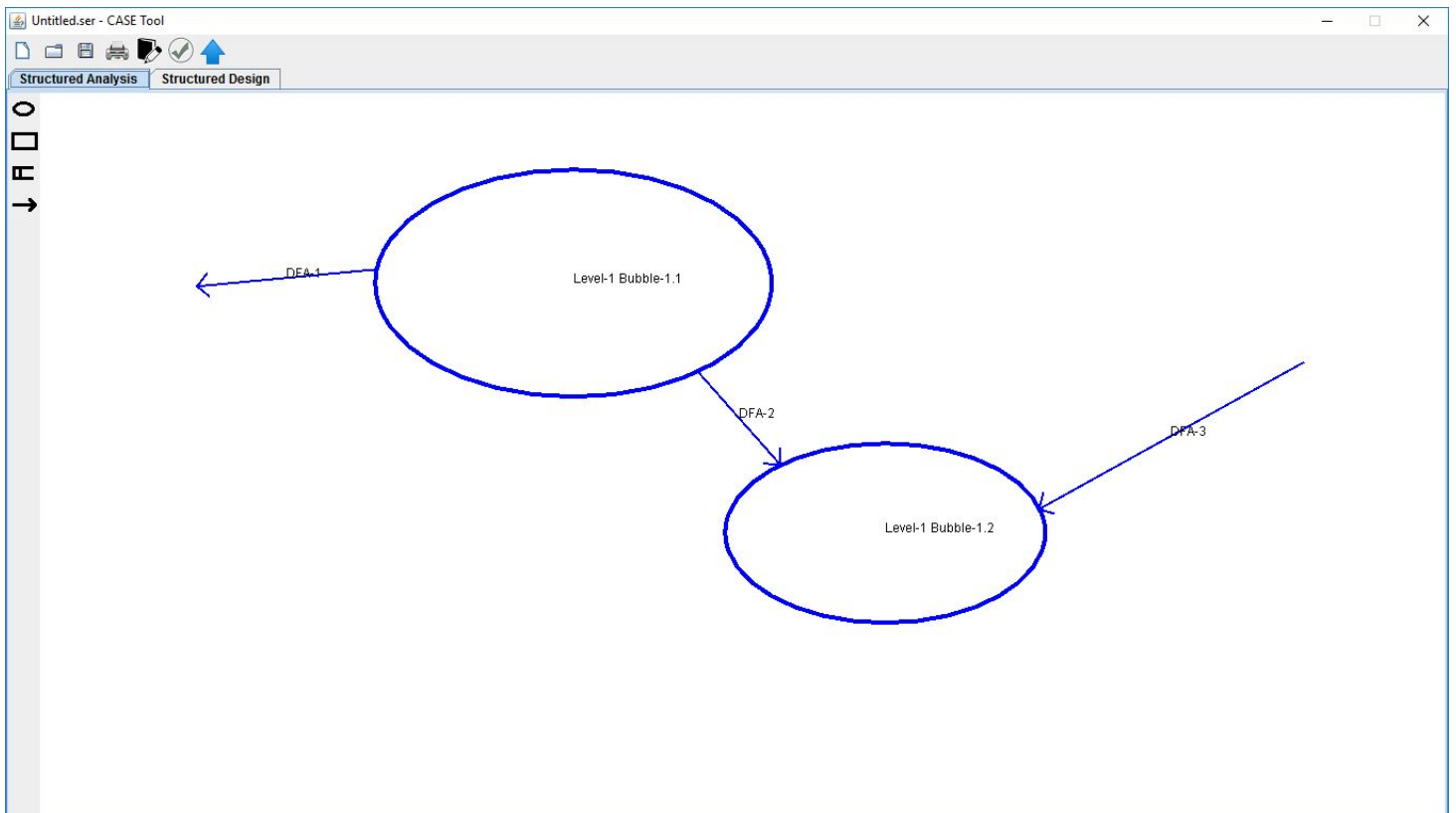
At level 0 clicking up level would result in showing error message :-



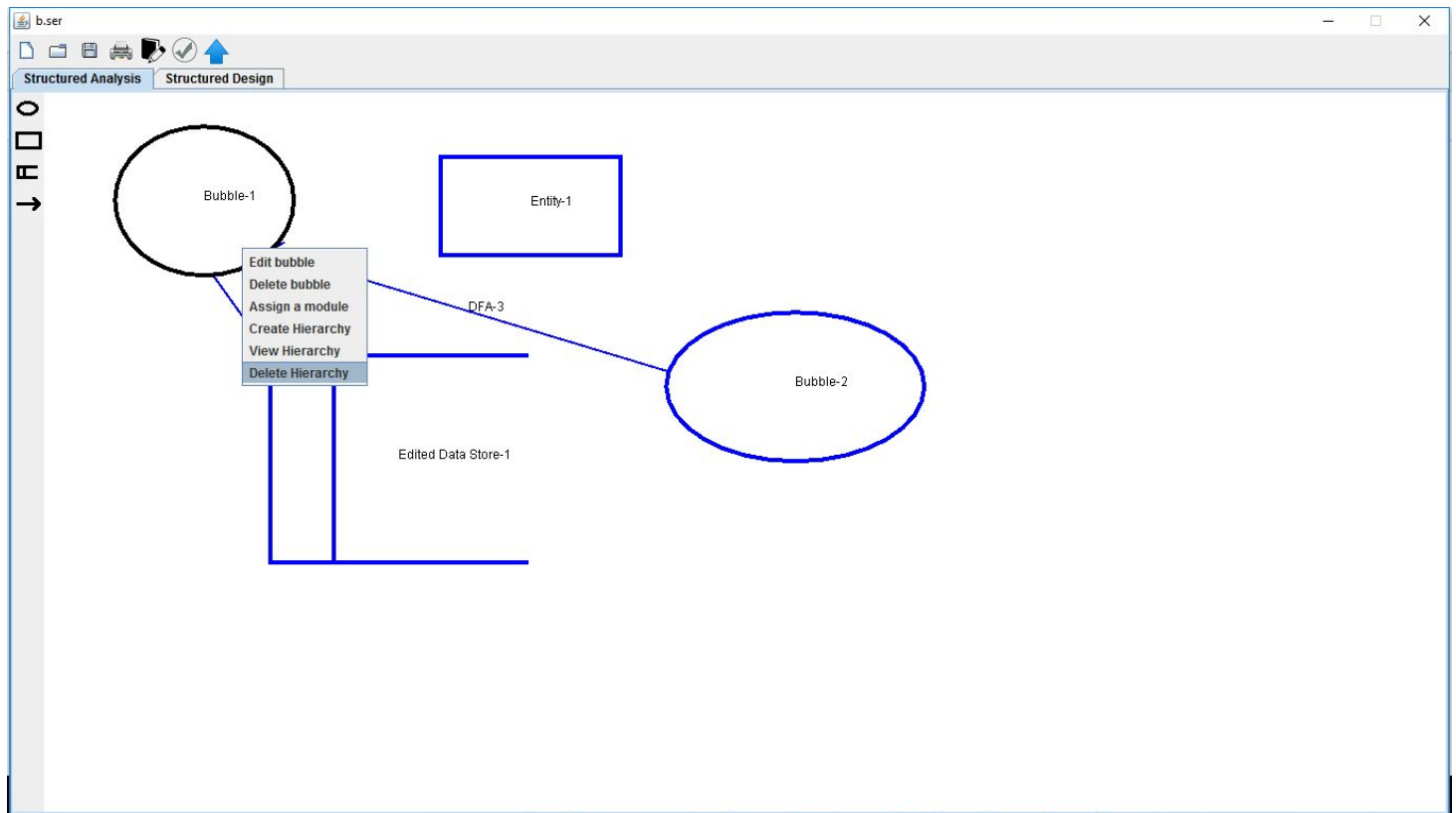
Before clicking view hierarchy :-



After clicking view hierarchy :-



Also hierarchy can be deleted :-



After deleting hierarchy, clicking view hierarchy result in :-

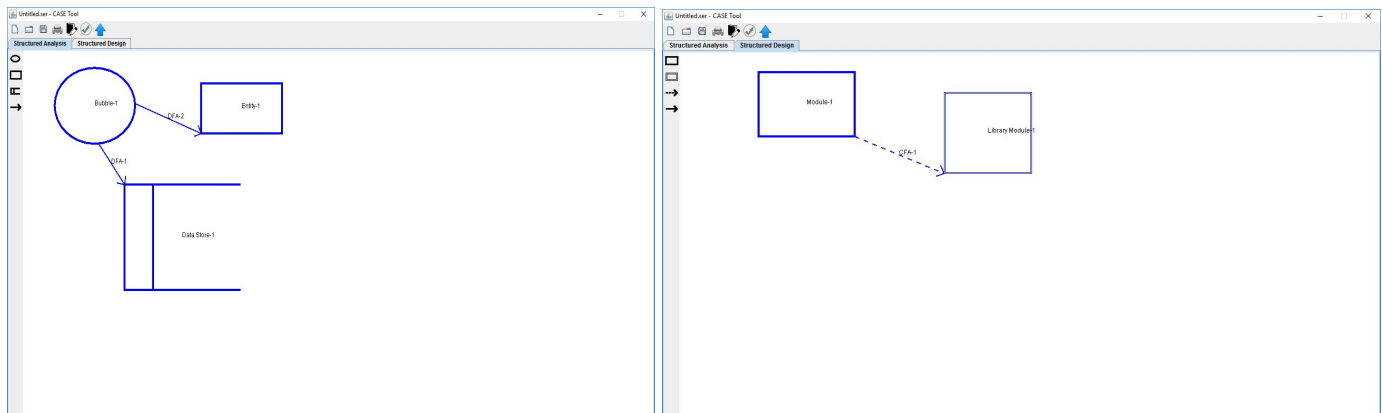


After clicking CBE button in this process at several steps, it shows the error message or no error message accordingly. If the modules and bubbles are assigned properly and the arrows are correct in accordance with the previous level, then No Balancing error message is displayed, otherwise Balancing Error Exists message is displayed.

Results : The CBE button, hierarchy, assign bubbles/modules, up level performed correctly.

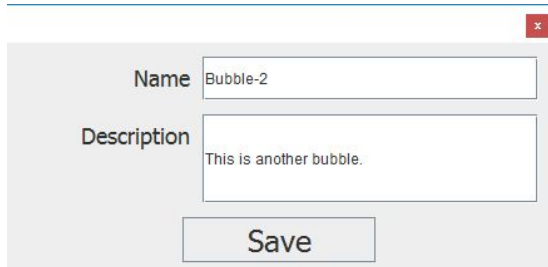
BBT for Create, edit and delete shapes and arrows and Data dictionary

Before clicking the respective shape buttons :-



Name	Description	Data Type
Bubble-1	This is a bubble.	Bubble
Entity-1	This is an entity.	Entity
Data Store-1	This is a data store.	DataStore
DFA-1	Bubble-1 to Data Stor...	DFA
DFA-2	Bubble-1 to Entity-1	DFA
Module-1	This is a module.	Module
Library Module-1	This is a library modu...	LibraryModule
CFA-1	Module-1 to Library M...	CFA

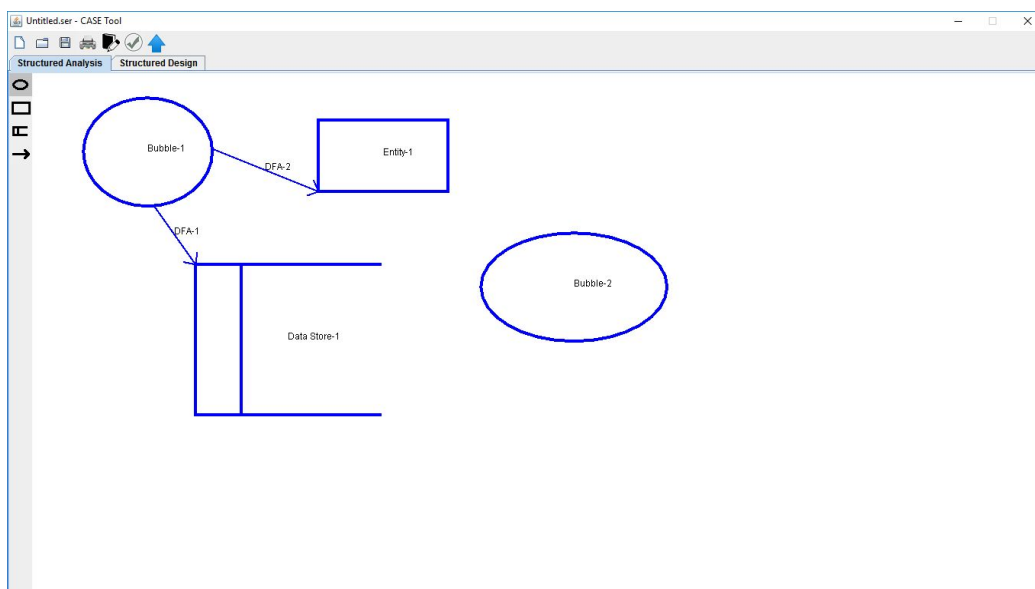
After dragging and drawing the bubble :-



Name: Bubble-2

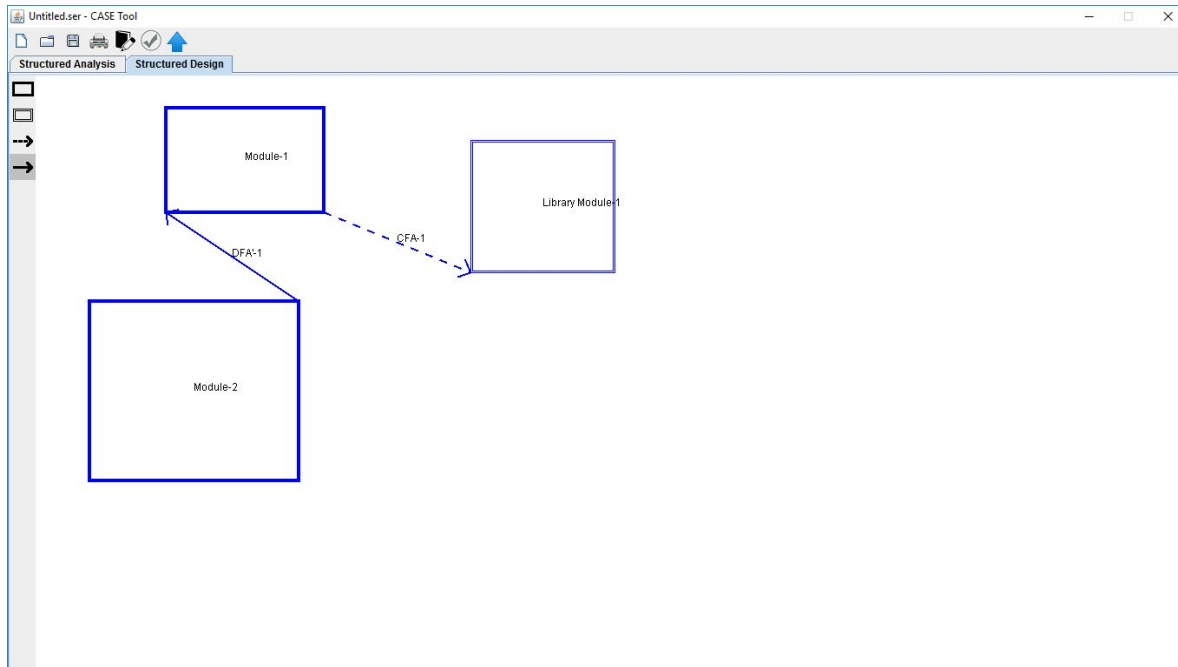
Description: This is another bubble.

Save



CASE Tool - Test Report

After dragging and drawing module :-

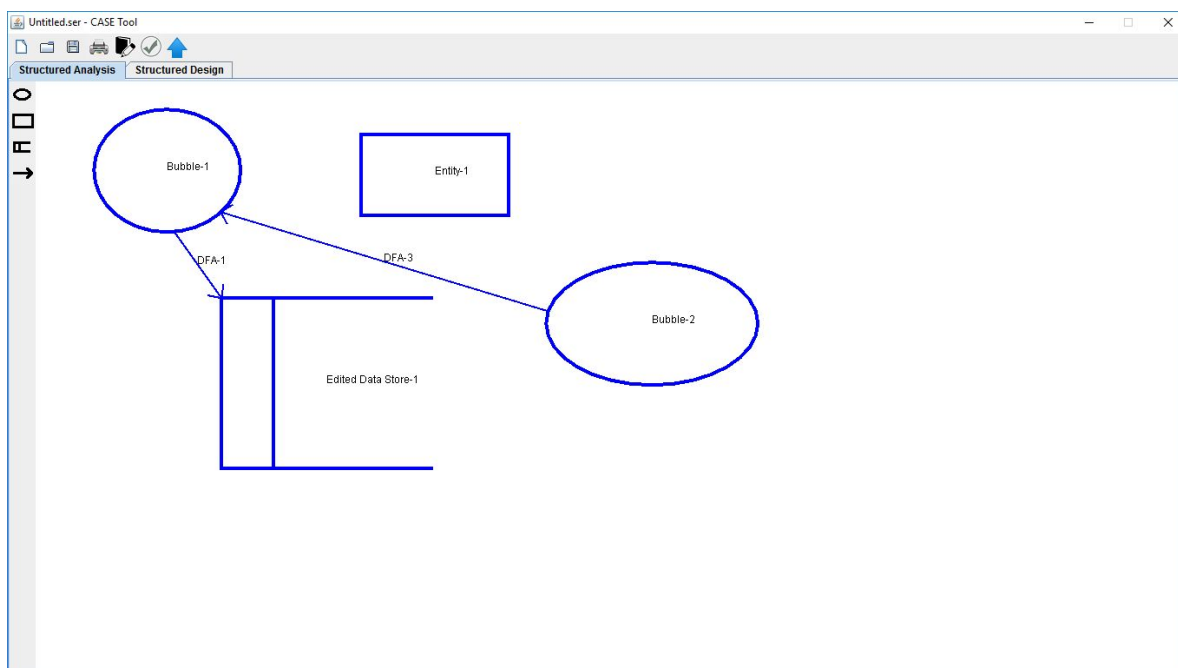


After clicking edit shape :-

The 'Edit Shape' dialog box is open, showing the following fields:

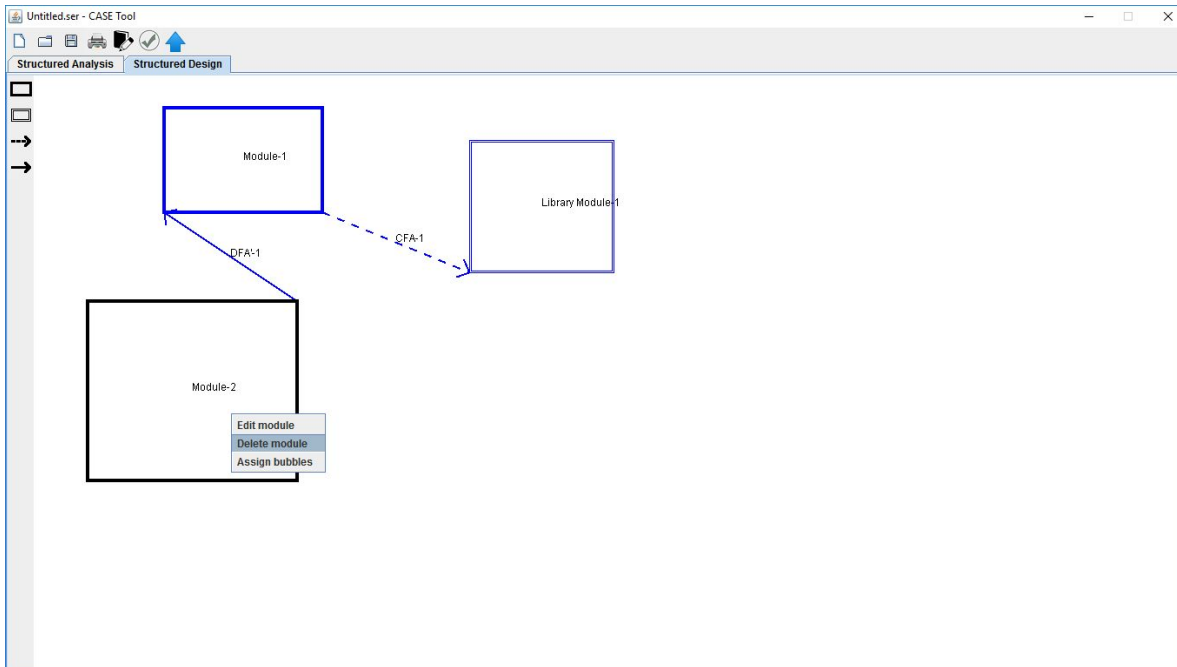
- Name:** Edited Data Store-1
- Description:** This is a data store.
- Save:** A button to save the changes.

The dialog has a red close button in the top right corner.

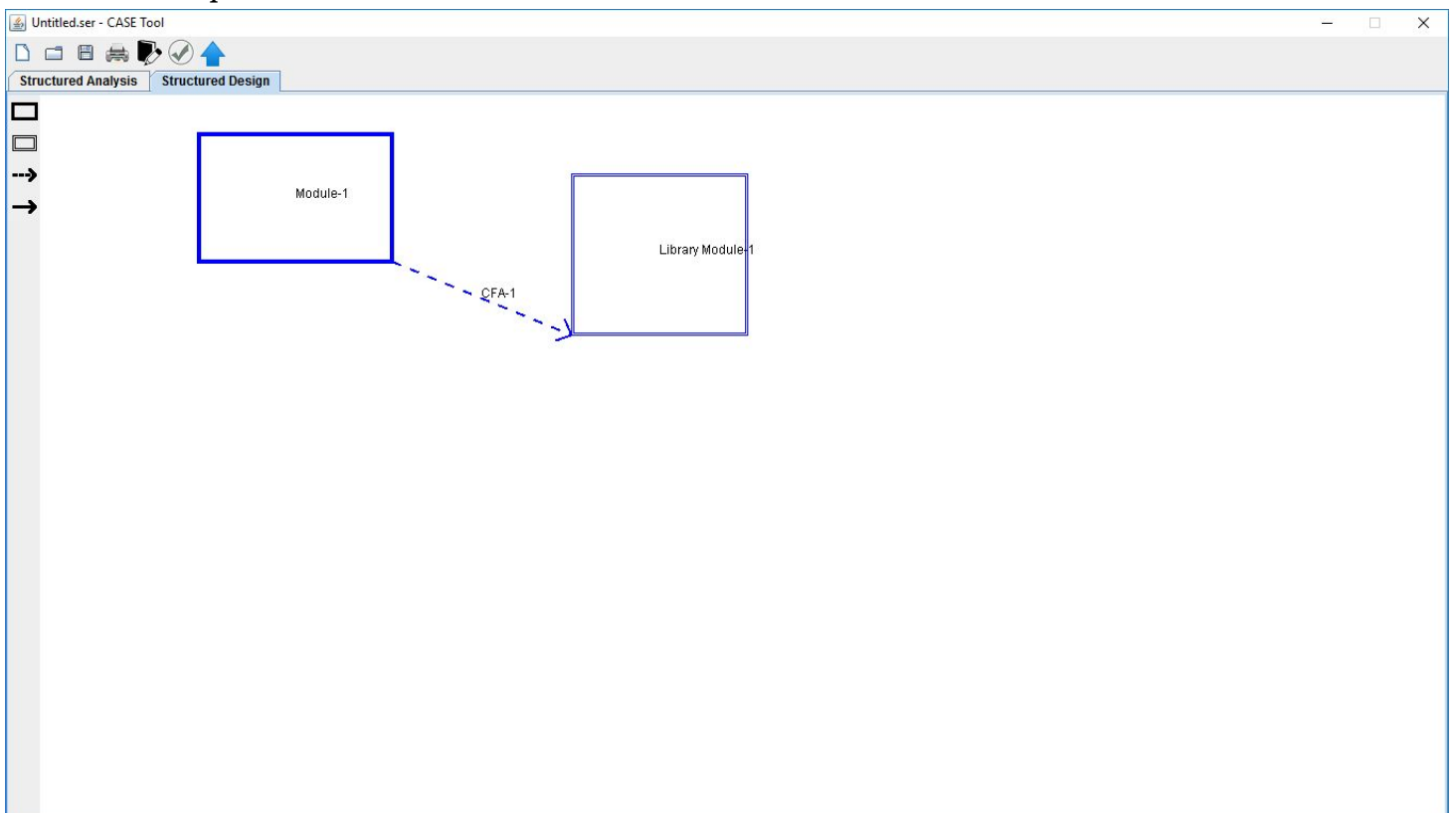


CASE Tool - Test Report

Before clicking delete shape button :-

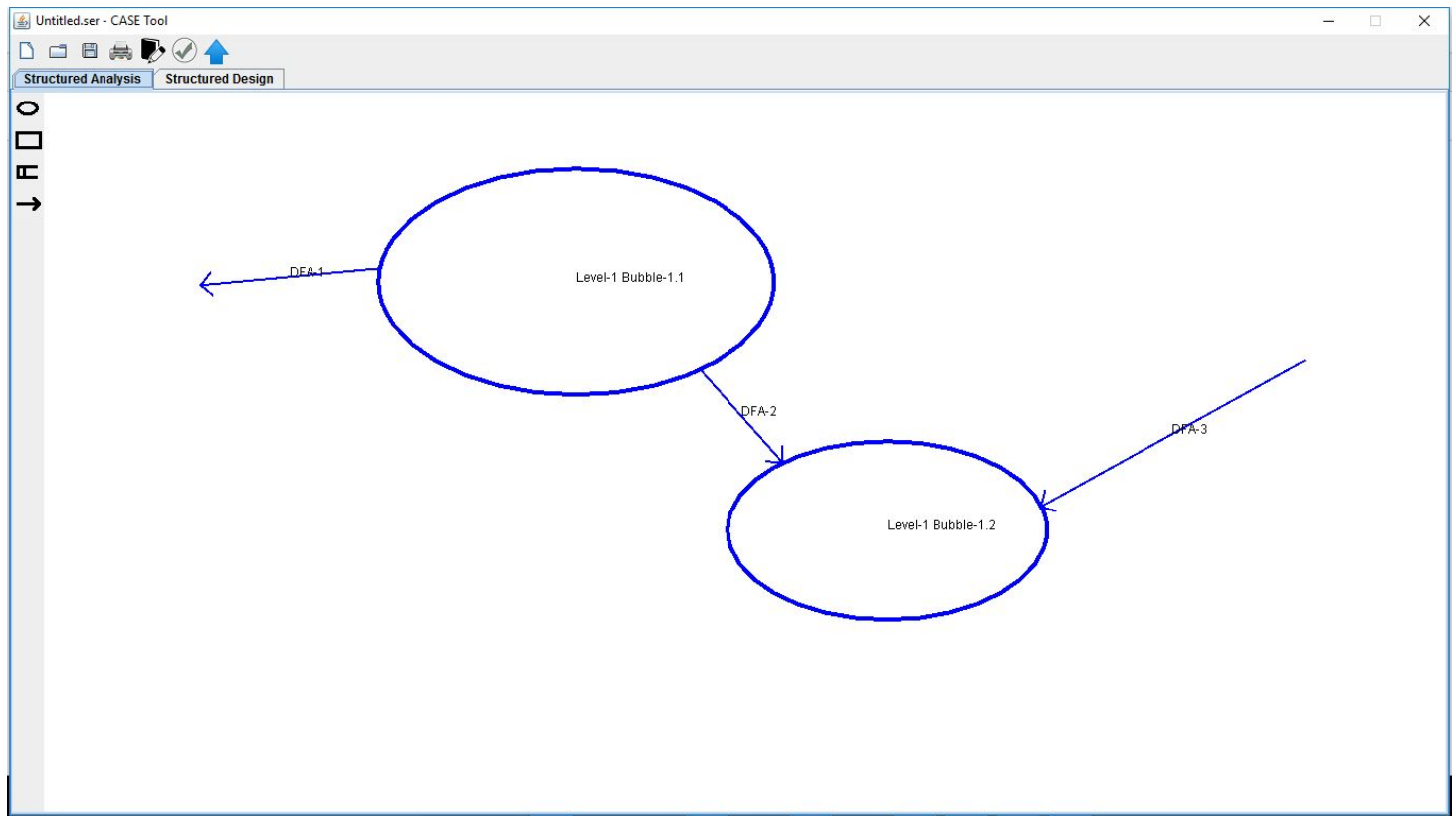


After delete shape :-

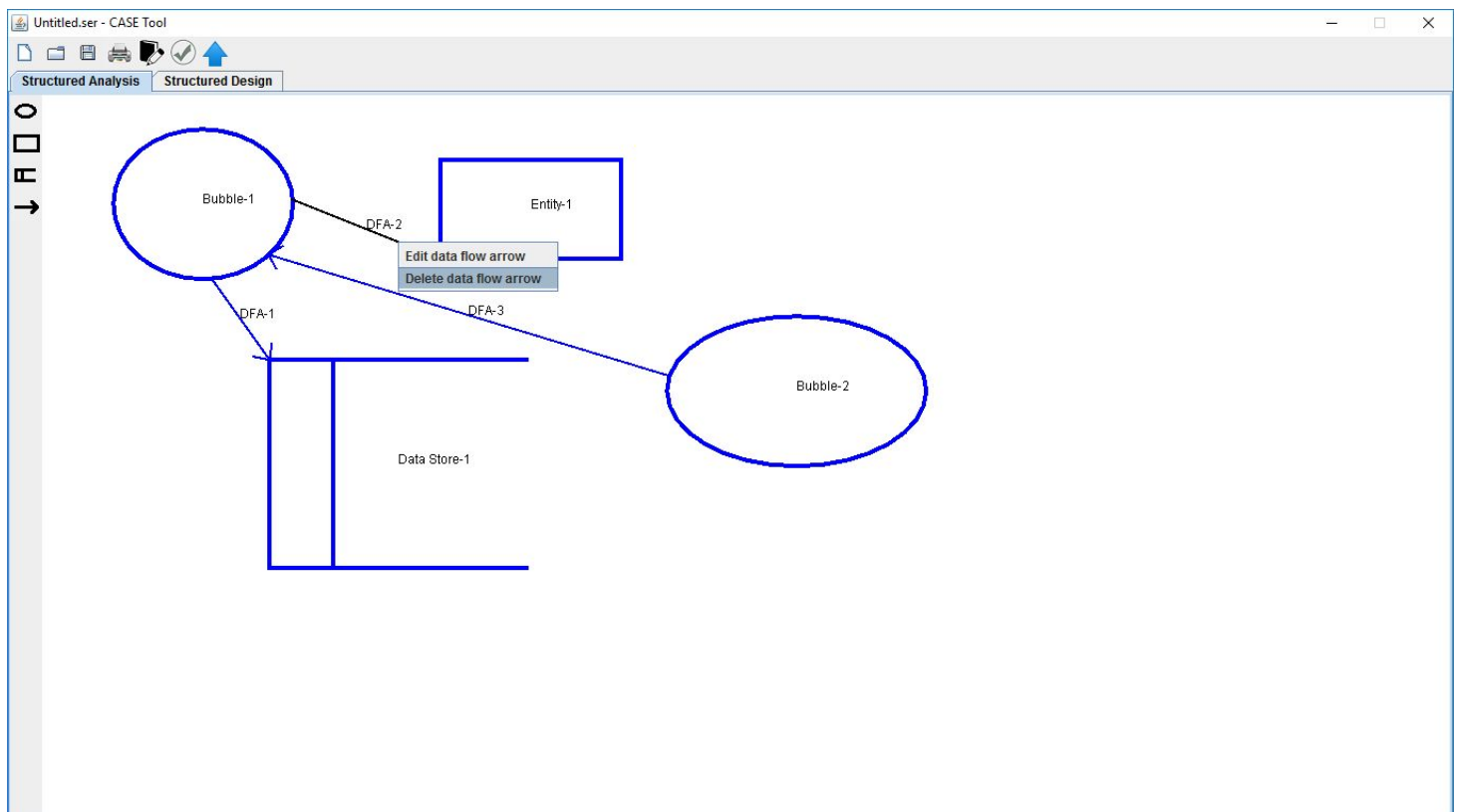


CASE Tool - Test Report

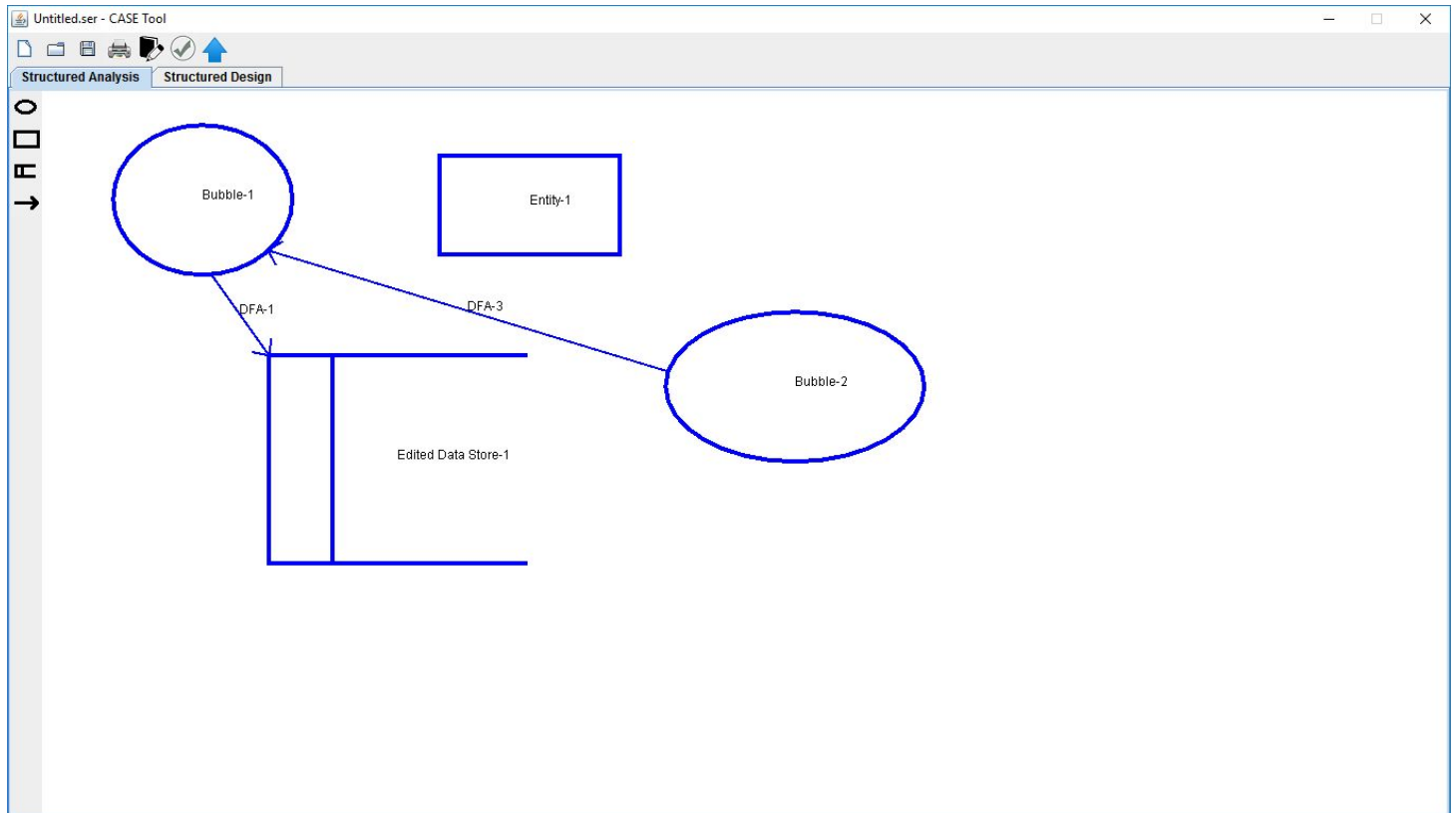
To draw an arrow one needs to start or end inside a shape (if in level 0 both the ends must be inside some shape). Example shown for level 1 where DFA-1 and DFA-3 have only one end point inside the shape.



Before delete arrow :-



After delete arrow :-



Updated data dictionary :-

Name	Description	Data Type
Bubble-1	This is a bubble.	Bubble
Entity-1	This is an entity.	Entity
Data Store-1	This is a data store.	DataStore
DFA-1	Bubble-1 to Data Stor...	DFA
Module-1	This is a module.	Module
Library Module-1	This is a library modu...	LibraryModule
CFA-1	Module-1 to Library M...	CFA
Bubble-2	This is another bubble.	Bubble
DFA-3	Bubble-2 to Bubble-3	DFA

Result : The create, edit and delete shape and arrow and data dictionary are working perfectly.

White Box Testing

We have created control flow graphs for various functions and generated our test cases in accordance to them.

New

Functionality	New
Method Invoked	newButtonClicked()
Expected Output	A new frame.
Actual Output	Shown in Black Box testing.
Result	Pass

Open

Functionality	Open
Method Invoked	openButtonClicked()
Expected Output	A previously saved DFD
Actual Output	Shown in Black Box testing.
Result	Pass

Save

Functionality	Save
Method Invoked	saveButtonClicked()
Expected Output	Save a created DFD in .ser format.
Actual Output	Shown in Black Box testing.
Result	Pass

Print

Functionality	Print
Method Invoked	printButtonClicked()
Expected Output	Print a created DFD.
Actual Output	Shown in Black Box testing.
Result	Pass

Create Shape

Functionality	Create a Bubble,module,Data store,library module,entity etc.
Method Invoked	Corresponding functions.
Expected Output	Create the shape.
Actual Output	Shown in Black Box testing.
Result	Pass

Edit Shape

Functionality	Edit a Bubble,module,Data store,library module,entity etc.
Method Invoked	Corresponding functions.
Expected Output	Edit the credentials of the shape.
Actual Output	Shown in Black Box testing.
Result	Pass

Delete Shape

Functionality	Delete a Bubble,module,Data store,library module,entity etc.
Method Invoked	Corresponding functions.
Expected Output	Delete the shape along with name and annotation and the corresponding arrows if required.
Actual Output	Shown in Black Box testing.
Result	Pass

Create Arrow

Functionality	Create a data flow arrow, control flow arrows.
Method Invoked	Corresponding functions.
Expected Output	Create the arrow in accordance with the level.
Actual Output	Shown in Black Box testing.
Result	Pass

Edit Arrow

Functionality	Edit a data flow arrow, control flow arrows.
Method Invoked	Corresponding functions.
Expected Output	Edit the credentials of the arrow.
Actual Output	Shown in Black Box testing.
Result	Pass

Delete Arrow

Functionality	Delete a data flow arrow, control flow arrows.
Method Invoked	Corresponding functions.
Expected Output	Delete the arrow along with name and annotation.
Actual Output	Shown in Black Box testing.
Result	Pass

View Data Dictionary

Functionality	View Data Dictionary.
Method Invoked	viewDD()
Expected Output	View Data Dictionary
Actual Output	Shown in Black Box testing.
Result	Pass

Create, view and delete Hierarchy

Functionality	Hierarchy
Method Invoked	Corresponding functions.
Expected Output	Create, view and delete hierarchy and show errors wherever required.
Actual Output	Shown in Black Box testing.
Result	Pass

Assign Bubbles/Modules

Functionality	Assign Bubbles/Modules
Method Invoked	Corresponding functions.
Expected Output	Assign more than one bubble to a module or one module to a bubble.
Actual Output	Shown in Black Box testing.
Result	Pass

Check Balancing Error

Functionality	Check Balancing Error
Method Invoked	CheckBE()
Expected Output	Check if all bubbles and modules are assigned and then check if arrows are in accordance to its previous level.
Actual Output	Shown in Black Box testing.
Result	Pass

Up One level

Functionality	Go one level up in the hierarchy
Method Invoked	goBack()
Expected Output	Go one level up in the hierarchy and show error message if level is 0.
Actual Output	Shown in Black Box testing.
Result	Pass