

UML-Editor Third Iteration
 Specifications: Use Cases
 12/2/2016

Team FiVe:
 Ryan Peterson
 Eric Dougherty
 Kelsey Fulton
 Timothy Kettering
 Matt McAnulty



UML-EDITOR USE CASES

| Title | User Action | Software Reaction |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Make a Class Box | Operator clicks class button. | - Class Box Appears. |
| Name a Class Box | Operator selects class box and clicks 'add class name'. | - Class Box field becomes editable - User can type inside the field - Field is updated. |
| Add Attribute(s) to a Class Box | Operator selects class box and clicks 'add attribute'. | - Class Box field becomes editable - User can type inside the field - Field is updated. |
| Add Operation(s) to a Class Box | Operator selects class box and clicks 'add operation'. | - Class Box field becomes editable - User can type inside the field - Field is updated. |
| Add Miscellaneous notes or info to a Class Box | Operator selects class box and clicks 'add miscellaneous'. | - Class Box field becomes editable - User can type inside the field - Field is updated. |
| Moving a Class Box | Operator clicks and holds on a class box. Then moves mouse (while still holding mouse button) | - Grid appears in the background. - Class Box becomes movable. - Class Box tracks with the mouse. |

| | | |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Selecting a Class Box | Operator clicks/selects a class box. | - Relation and Delete buttons appear in toolbar. |
| Deleting a Class Box | Operator clicks delete button when Class Box is selected. | - Selected Class Box object destroyed - Class Box is deleted from the screen. |
| Creating a Relation (Default type is Association) | When a Class Box is selected user clicks the 'Add Relation' button. | - A relation appears pointing from the selected object to the mouse cursor. |
| Binding a Relation to a Class Box | When a Class Box is selected user clicks the 'Add Relation' button, and then clicks another Class Box. | - A relation appears pointing from the selected object to the mouse cursor, - Then it tracks to the selected Class Box |
| Deleting a Relation | Operator selects Relation object and clicks delete. | - Selected Relation object is destroyed - Relation disappears from work space. |
| Selecting a Relation | Operator clicks on a relation | - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar. |
| Labeling the Relation | Operator selects relation and clicks 'add text here'. | - Editable text box appears - User can type inside the field - Field is updated. |
| Selecting and Making a Relation Double Ended | Operator clicks on a relation, and clicks the 'Double Ended' button icon. | - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrows appear on both ends upon button icon being clicked. |
| Selecting and Making a Relation Single Ended | Operator clicks on a relation, and clicks the 'Single Ended' button icon. | - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow appears on one end of the line upon button icon being clicked. |

| | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flip a Relation | Operator clicks on a relation, and clicks the 'Flip Relation' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow appears on the opposite end of the line upon button icon being clicked. |
| Selecting and Making a Relation Line a Dependency Line | Operator clicks on a relation, and clicks the dotted 'Dependency Line' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation line becomes dotted upon button icon being clicked. |
| Selecting and Making a Relation Line an Association Line | Operator clicks on a relation, and clicks the solid 'Association Line' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation line becomes solid upon button icon being clicked. |
| Selecting and Making a Relation Arrow into a Aggregation Arrow | Operator clicks on a relation, and clicks the solid 'Aggregation Arrow' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow head becomes a hollow diamond upon button icon being clicked. |

| | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Selecting and Making a Relation Arrow into a Composition Arrow | Operator clicks on a relation, and clicks the solid 'Composition Arrow' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow head becomes a solid diamond upon button icon being clicked. |
| Make a Relation Arrow into a Generalization Arrow | Operator clicks on a relation, and clicks the solid 'Generalization Arrow' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow head becomes a hollow triangle upon button icon being clicked. |
| Make a Relation Arrow into an Association Arrow | Operator clicks on a relation, and clicks the solid 'Association Arrow' button icon. | <ul style="list-style-type: none"> - Relation color changes to white signifying that it is selected. - Relation manipulation icons appear in the toolbar when Relation is selected. - Relation arrow head becomes a open backed triangle upon button icon being clicked. |
| Deselect a Class Box | User has a Class Box selected and clicks anywhere in the work area outside of the Class Box that is not a Relation or a Class Box | <ul style="list-style-type: none"> - Selected Class Box is deselected. - Context buttons disappear from the toolbar. - Class Box is no longer backlit in white. |
| Deselect a Relation | User has a Relation selected and clicks anywhere in the work area outside of the Relation Line that is not a Relation or a Class Box | <ul style="list-style-type: none"> - Selected Class Box is deselected. - Context buttons disappear from the toolbar. - Class Box is no longer backlit in white. |

| | | |
|---------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clear UML Workspace | User Clicks 'File'. Then clicks 'New'. Then clicks 'Yes' or 'No' | <ul style="list-style-type: none"> - File menu drops down. - Warning Box Appears - If user clicks 'Discard Changes' any unsaved work is lost - If user clicks 'Save' UML-EDITOR work area can be saved. |
| Print UML Diagram | User Clicks 'File'. Then clicks 'Print'. | <ul style="list-style-type: none"> - File menu drops down. - UML-EDITOR work area is printed to a Printer, PDF or XPS file. |
| Save/Save As UML Diagram | User Clicks 'File'. Then clicks 'Save'. Or 'Save As' | <ul style="list-style-type: none"> - File menu drops down. - UML-EDITOR work area is saved to a file. |
| Open UML Diagram | User Clicks 'File'. Then clicks 'Open'. | <ul style="list-style-type: none"> - File menu drops down. - Warning Box Appears - If user clicks 'Discard Changes' any unsaved work is lost - If user clicks 'Save' UML-EDITOR work area can be saved. - UML-EDITOR opens a navigation box to find and select the diagram to be loaded into UML EDITOR. |
| Exit UML-EDITOR | User Clicks 'File'. Then clicks 'Exit'. | <ul style="list-style-type: none"> - File menu drops down. - Warning Box Appears - If user clicks 'Save and Exit' work area can be saved to a file. - If user clicks 'Discard Changes' - EDITOR closes down. - Unsaved work is lost. |

Program Notes:

1. All actions involving Class Boxes except 'Make a Class Box' can only be done when the target Class Box is selected.
2. All actions involving Relations except 'Creating a Relation' can only be done when the target Relation is selected.
3. Help/Text Assist: User can hover the mouse arrow over a buttons' icon on the toolbar for several seconds to make a text box appear detailing function of the button.
4. Once the 'Exit' button is pressed the only options are to 'Save and Exit' or 'Discard Changes'. The user cannot return to the work area.
5. When printing Diagrams the background color will print as white to save on ink and increase readability.
6. If a user places a Class Box against the edge of the visible workspace the workspace will automatically scale to increase the size of the diagram in order to accommodate the new diagram size and location of the Class Box. Scrollbars will appear along the bottom and right edge of the workspace area.