

Part	Type	#	Description	Resource	Path	File
Initial Circle creation	FXML	000	Complete EditorFrame.fxml with all fxids and evt some "On Action"	EditorFrame.fxml	application	application/EditorFrame.fxml
	TODO	001	Figure#hasFillColor ...	Figure.java	figures	figures/Figure.java
	TODO	002	Figure#getFillColor	Figure.java	figures	figures/Figure.java
	TODO	003	Figure#setFillColor ...	Figure.java	figures	figures/Figure.java
	TODO	004	Figure#hasEdgeColor ...	Figure.java	figures	figures/Figure.java
	TODO	005	Figure#getEdgeColor ...	Figure.java	figures	figures/Figure.java
	TODO	006	Figure#setEdgeColor ...	Figure.java	figures	figures/Figure.java
	TODO	007	Figure#setLineType ...	Figure.java	figures	figures/Figure.java
	TODO	008	Figure#setLineWidth ...	Figure.java	figures	figures/Figure.java
	TODO	009	Figure#isSelected ...	Figure.java	figures	figures/Figure.java
	TODO	010	Figure#applyParameters ...	Figure.java	figures	figures/Figure.java
	TODO	011	Figure#updateSelectionFrame ...	Figure.java	figures	figures/Figure.java
	TODO	012	Figure#equals(Object) ...	Figure.java	figures	figures/Figure.java
	TODO	013	Controller#initialize: setting up #drawingModel	Controller.java	application	application/Controller.java
	TODO	014	Controller#initialize: Binds properties of UI elements to #drawingModel ...	Controller.java	application	application/Controller.java
	TODO	015	Controller#initialize: Setting up #historyManager ...	Controller.java	application	application/Controller.java
	TODO	016	Setup #shapeTypeComboBox ...	Controller.java	application	application/Controller.java
	TODO	017	Setup #lineTypeComboBox ...	Controller.java	application	application/Controller.java
	TODO	018	Controller#initialize: Setup #useFillColor, #useEdgeColor, #fillColorPicker and #edgeColorPicker	Controller.java	application	application/Controller.java
	TODO	019	Controller#initialize: Setup #lineWidthSpinner with an new SpinnerValueFactory	Controller.java	application	application/Controller.java
	TODO	020	Controller#initialize: Setup #figuresListView with	Controller.java	application	application/Controller.java
	TODO	021	Controller#initialize: Setup #messagesLabel with empty or null message	Controller.java	application	application/Controller.java
	TODO	022	Controller#setTools ...	Controller.java	application	application/Controller.java
	TODO	023	AbstractCreationTool#createFigure	AbstractCreationTool.java	tools/creation	tools/creation/AbstractCreationTool.java
	TODO	024	AbstractCreationTool#updateFigure	AbstractCreationTool.java	tools/creation	tools/creation/AbstractCreationTool.java
	TODO	025	AbstractCreationTool#cancelFigure	AbstractCreationTool.java	tools/creation	tools/creation/AbstractCreationTool.java
	TODO	026	AbstractCreationTool#terminateFigure ...	AbstractCreationTool.java	tools/creation	tools/creation/AbstractCreationTool.java
	TODO	027	Drawing#initiateFigure ...	Drawing.java	figures	figures/Drawing.java
	TODO	028	CursorTool#mouseMoved	CursorTool.java	tools	tools/CursorTool.java
	TODO	029	CursorTool#mouseExited	CursorTool.java	tools	tools/CursorTool.java
InfoPanel	FXML		Complete InfoPanel.fxml with all fxids	InfoPanel.fxml	application/panels	application/panels/InfoPanel.fxml
	TODO	030	Drawing#fromShape	Drawing.java	figures	figures/Drawing.java
	TODO	031	FocusedFigureTool#mouseEnteredTarget ...	FocusedFigureTool.java	tools	tools/FocusedFigureTool.java
	TODO	032	InfoPanelController#fillInfoPanel Fill this panel's FXML attributes with data from figure	InfoPanelController.java	application/panels	application/panels/InfoPanelController.java
Toggle Edit Mode	TODO	033	InfoPanelController#clearInfoPanel Clears this panel's FXML attributes content	InfoPanelController.java	application/panels	application/panels/InfoPanelController.java
	FXML		insert fxid deleteButton (with Icon) triggering Controller#onDeleteSelectedAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert a MenuItem in #figureListView's ContextMenu triggering Controller#onDeleteSelectedAction	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert fxid moveUpButton (with Icon) triggering Controller#onMoveUpAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert fxid moveDownButton (with Icon) triggering Controller#onMoveDownAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert fxid moveTopButton (with Icon) triggering Controller#onMoveTopAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert fxid moveBottomButton (with Icon) triggering Controller#onMoveBottomAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		insert fxid applyStyleButton (with Icon) triggering Controller#onApplyStyleAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	TODO	034	Controller#initialize: Disable Edit mode buttons until edit mode is on:	Controller.java	application	application/Controller.java
	TODO	035	Controller#onEditAction: Set Tools according to selected	Controller.java	application	application/Controller.java
Transform Tool	TODO	036	Controller#onEditAction: if creation mode then turn off filtering	Controller.java	application	application/Controller.java
	TODO	037	Controller#onEditAction: Enable / Disable edit mode buttons	Controller.java	application	application/Controller.java
	TODO	038	TransformTool#mousePressed ... Initialize motion	TransformTool.java	tools	tools/TransformTool.java
	TODO	039	TransformTool#mouseDragged: Apply translation on #figureRoot	TransformTool.java	tools	tools/TransformTool.java
	TODO	040	TransformTool#mouseDragged: Apply rotation on #figureRoot	TransformTool.java	tools	tools/TransformTool.java
	TODO	041	TransformTool#mouseDragged: Apply scale on #figureRoot	TransformTool.java	tools	tools/TransformTool.java
	FXML		insert fxid undoButton (with Icon) triggering onUndoAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
History Manager	FXML		insert fxid redoButton (with Icon) triggering onRedoAction in the ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	TODO	042	Controller#onUndoAction ...	Controller.java	application	application/Controller.java
	TODO	043	Controller#onRedoAction ...	Controller.java	application	application/Controller.java
	TODO	044	Memento#equals ...	Memento.java	history	history/Memento.java
	TODO	045	HistoryManager#setSize: Trim #undoStack & #redoStack if required	HistoryManager.java	history	history/HistoryManager.java
	TODO	046	HistoryManager#record ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	047	HistoryManager#undo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	048	HistoryManager#redo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	049	HistoryManager#pushUndo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	050	HistoryManager#popUndo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	051	HistoryManager#pushRedo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO	052	HistoryManager#popRedo ...	HistoryManager.java	history	history/HistoryManager.java
	TODO			Controller.java	application	application/Controller.java
Clear	FXML		insert fxid clearButton triggering Controller#onClearAction in ToolBar	EditorFrame.fxml	application	application/EditorFrame.fxml
	TODO	053	Controller#onClearAction	Controller.java	application	application/Controller.java
Selection Tool	TODO	054	Drawing#updateSelection ...	Drawing.java	figures	figures/Drawing.java
	OPT		Drawing#setMemento: Refresh Selection when a Memento is set in Drawing by adding for (int i = 0; i < figures.size(); i++) { Figure figure = get(i); updateSelection(i, figure.isSelected()); }	Drawing.java	figures	figures/Drawing.java
	TODO	055	SelectionTool#mouseClicked ...	SelectionTool.java	tools	tools/SelectionTool.java
	TODO	056	Drawing#onChange ...	Drawing.java	figures	figures/Drawing.java
Controller's actions depending on Selection	OPT		Create a private List<Figure> getSelectedFigures() utility method to retrieve selected figures from figuresListView.getSelectionModel()	Controller.java	application	application/Controller.java
	OPT		Create a private List<Integer> getSelectedFiguresIndices() utility method to retrieve selected figures indices from figuresListView.getSelectionModel()	Controller.java	application	application/Controller.java
	OPT		Create a private void setSelectedFiguresIndices(List<Integer> indices) to update selected figures indices in figuresListView (because theses indices might change when moving figures up or down)	Controller.java	application	application/Controller.java
	TODO	056	Drawing#onChange ...	Drawing.java	figures	figures/Drawing.java
	TODO	057	Controller#onDeleteSelectedAction ...	Controller.java	application	application/Controller.java
	TODO	058	Controller#onMoveUpAction ...	Controller.java	application	application/Controller.java
	TODO	059	Controller#onMoveDownAction ...	Controller.java	application	application/Controller.java
	TODO	060	Controller#onMoveTopAction ...	Controller.java	application	application/Controller.java
	TODO	061	Controller#onMoveBottomAction ...	Controller.java	application	application/Controller.java
	TODO	062	Controller#onApplyStyleAction ...	Controller.java	application	application/Controller.java
FigureTypeCell for shapeTypeComboBox	TODO	063	Drawing#clearSelection ...	Drawing.java	figures	figures/Drawing.java
	TODO	064	Controller#onClearSelectionAction ...	Controller.java	application	application/Controller.java
	NEW		Create a new FigureTypeCell.fxml by customizing existing FigureCell.fxml	FigureTypeCell.fxml	application/cells	application/cells/FigureTypeCell.fxml
	NEW		Create a new FigureTypeCell.java by customizing existing FigureCell.java	FigureTypeCell.java	application/cells	application/cells/FigureTypeCell.java
LineTypeCell for lineTypeComboBox	NEW		Create a new FigureTypeCellController.java by customizing existing FigureCellController.java	FigureTypeCellController.java	application/cells	application/cells/FigureTypeCellController.java
	TODO	065	Controller#initialize: if you have provided a FigureTypeCell with its controller ... shapeTypeComboBox.setButtonCell(new FigureTypeCell()); shapeTypeComboBox.setCellFactory(combobox -> new FigureTypeCell());	Controller.java	application	application/Controller.java
	NEW		Create a new LineTypeCell.fxml by customizing existing FigureCell.fxml	LineTypeCell.fxml	application/cells	application/cells/LineTypeCell.fxml
	NEW		Create a new LineTypeCell.java by customizing existing FigureCell.java	LineTypeCell.java	application/cells	application/cells/LineTypeCell.java
Il Color & fgeCol	NEW		Create a new LineTypeCellController.java by customizing existing FigureCellController.java	LineTypeCellController.java	application/cells	application/cells/LineTypeCellController.java
	TODO	066	Controller#initialize: If you have provided a LineTypeCell CustomCell and its controller ... lineTypeComboBox.setButtonCell(new LineTypeCell()); lineTypeComboBox.setCellFactory(combobox -> new LineTypeCell());	Controller.java	application	application/Controller.java
Il Color & fgeCol	TODO	067	Controller#onCheckColorsConsistencyAction: fill color case	Controller.java	application	application/Controller.java

Part	Type	#	Description	Resource	Path	File
Useful useful useful	TODO	068	Controller#onCheckColorsConsistencyAction: edge color case	Controller.java	application	application/Controller.java
			Read SizeDialogPane documentation	SizeDialogPane.java	application/panels	application/panels/SizeDialogPane.java
Set History Size	TODO	069	Controller#onSetHistorySizeAction ... pop a SizeDialogPane and set #historyManager's size	Controller.java	application	application/Controller.java
	TODO	070	Controller#onSetLoggerLevelUpToInfoAction ... Level.INFO	Controller.java	application	application/Controller.java
Set Logger Levels	TODO	071	Controller#onSetLoggerLevelUpToWarningAction ... Level.WARNING	Controller.java	application	application/Controller.java
	TODO	072	Controller#onSetLoggerLevelUpToSevereAction ... Level.SEVERE	Controller.java	application	application/Controller.java
Set Buttons Display	TODO	073	Controller#onSetLoggerLevelOffAction ... Level.OFF	Controller.java	application	application/Controller.java
	TODO	074	Controller#onDisplayButtonsWithGraphicsOnlyAction ...	Controller.java	application	application/Controller.java
Ellipse	TODO	075	Controller#onDisplayButtonsWithTextAndGraphicsAction ...	Controller.java	application	application/Controller.java
	TODO	076	Controller#onDisplayButtonsWithTextOnlyAction ...	Controller.java	application	application/Controller.java
Rectangle	NEW		Create class Ellipse	Ellipse.java	figures	figures/Ellipse.java
	TODO	077	FigureType#getFigure ELLIPSE case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
RoundedRectangle	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	TODO	079	Controller#onShapeChangedAction ...	Controller.java	application	application/Controller.java
Polygon	NEW		Create class Rectangle	Rectangle.java	figures	figures/Rectangle.java
	TODO	080	FigureType#getFigure RECTANGLE case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
Star	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	NEW		Create class RoundedRectangle	RoundedRectangle.java	figures	figures/RoundedRectangle.java
NGon	NEW		Create class RoundedRectangleShapeCreationTool to manage RoundedRectangle drawing with 3 steps (instead of 2 with RectangularShapeCreationTool)	RoundedRectangularShapeCreationTool.java	tools/creation	tools/creation/RoundedRectangularShapeCreationTool.java
	NEW		1. Initiate Figure 2. Drag to set Size and release 3. Do something to set Arc size			
Filtering	TODO	081	FigureType#getFigure ROUNDED_RECTANGLE case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
	TODO	082	FigureType#getCreationTool ROUNDED_RECTANGLE case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
Star	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	NEW		Create class Polygon	Polygon.java	figures	figures/Polygon.java
Filtering	NEW		Create class PolygonCreationTool to manage Polygon drawing with 2 steps	PolygonCreationTool.java	tools/creation	tools/creation/PolygonCreationTool.java
	NEW		1. Click to initiate a new Polygon 2. Click to add a point to the Polygon or Right click to terminate mouseMoved moves the last added point			
Filtering	TODO	083	FigureType#getFigure POLYGON case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
	TODO	084	FigureType#getCreationTool POLYGON case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
Filtering	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	NEW		Create class NGon	NGon.java	figures	figures/NGon.java
Filtering	NEW		Create class RegularPolygonCreationTool to manage NGon drawing with 3 steps	RegularPolygonCreationTool.java	tools/creation	tools/creation/RegularPolygonCreationTool.java
	NEW		1. Press to initiate Figure 2. Drag to set NGon's radius and release 3. Scroll to set number of sides and click to terminate			
Filtering	TODO	085	FigureType#getCreationTool NGON case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
	TODO	086	FigureType#getCreationTool NGON case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
Filtering	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	NEW		Create class Star	Star.java	figure	figure/Star.java
Filtering	NEW		Create class StarCreationTool to manage Star drawing with 4 steps	StarCreationTool.java	tools/creation	tools/creation/StarCreationTool.java
	NEW		1. Press to initiate Figure 2. Drag and release to set Star's outer radius 3. Drag and release to set Star's inner radius or Right Click to cancel inner radius step 4. Scroll to set number of branches and click to terminate			
Filtering	TODO	087	FigureType#getCreationTool STAR case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
	TODO	088	FigureType#getCreationTool STAR case ...	FigureType.java	figures/enums	figures/enums/FigureType.java
Filtering	TODO	078	FigureType#fromFigure add all other figures types	FigureType.java	figures/enums	figures/enums/FigureType.java
	NEW		Create new class EdgeColorFilter extends FigureFilter<Color> to filter figures based on their edge color (see existing FigureTypeFilter class for inspiration)	EdgeColorFilter.java	figures/filters	figures/filters/EdgeColorFilter.java
Filtering	NEW		Create new class FillColorFilter extends FigureFilter<Color> to filter figures based on their fill color	FillColorFilter.java	figures/filters	figures/filters/FillColorFilter.java
	NEW		Create new class LineTypeFilter extends FigureFilter<LineType> to filter figures based on their line type	LineTypeFilter.java	figures/filters	figures/filters/LineTypeFilter.java
Filtering	NEW		Create new class LineWidthFilter extends FigureFilter<Double> to filter figures based on their line width	LineWidthFilter.java	figures/filters	figures/filters/LineWidthFilter.java
	FXML		Add sub-menu "Shapes" to menu "Filtering" containing CheckMenuItems indicating the filtering state of each figure type (see #filterCirclesCheckMenuItem ... #filterStarsCheckMenuItem in Controller). Each of these CheckMenuItem should have "On Action" registered to Controller#onFilterChangedAction(ActionEvent event)	EditorFrame.fxml	application	application/EditorFrame.fxml
Filtering	FXML		Add sub-menu "Colors" to menu "Filtering" containing CheckMenuItems indicating the filtering state of fill and edge colors (see #filterFillColorCheckMenuItem and #filterEdgeColorCheckMenuItem in Controller). Each of these CheckMenuItem should have "On Action" registered to Controller#onFilterChangedAction(ActionEvent event)	EditorFrame.fxml	application	application/EditorFrame.fxml
	FXML		Add sub-menu "Lines" to menu "Filtering" containing CheckMenuItems indicating the filtering state of line type and line width (see #filterLineTypeCheckMenuItem and #filterLineWidthCheckMenuItem in Controller). Each of these CheckMenuItem should have "On Action" registered to Controller#onFilterChangedAction(ActionEvent event)	EditorFrame.fxml	application	application/EditorFrame.fxml
Filtering	TODO	089	Controller#initialize Setup #figureTypesFilter and #figuresFilter according to selected states of the CheckMenuItems we just added	Controller.java	application	application/Controller.java
	TODO	089b	#filterLineWidthCheckMenuItem needs to be processed AFTER TODO 019 because #filterLineTypeCheckMenuItem needs to be set up first	Controller.java	application	application/Controller.java
Filtering	TODO	090	Add a #filterBySelectedMenuItem Menuitem FXML attributes corresponding to the MenuItem in ContextMenu of #listView below	Controller.java	application	application/Controller.java
	FXML		Add a fxid filterBySelected MenuItem in #figuresListView's ContextMenu triggering #onFilterChangedAction in the Controller	EditorFrame.fxml	application	application/EditorFrame.fxml
Filtering	TODO	091	Controller#initialize: Bind #filterToggleButton, #filterToggleCheckMenuItem and #filteringProperty properties so that when one changes the others also change.	Controller.java	application	application/Controller.java
	TODO	092	Drawing#refresh(): Refresh all JavaFX elements in (@link #root) by clearing all elements and re-adding each (@link Figure#root) in (@link #root)	Drawing.java	figures	figures/Drawing.java
Filtering	TODO	093	Drawing#refresh(Predicate<Figure> predicate) Refresh all JavaFX elements in (@link #root) by clearing all elements and re-adding each (@link Figure#root) in (@link #root) only if such figure is validated by the provided predicate	Drawing.java	figures	figures/Drawing.java
	TODO	094	Controller#onFilterAction: setup selected from source: source is no longer required, instead use #filteringProperty (bound above) to set selected.	Controller.java	application	application/Controller.java
Filtering	OPT		Evt change #filterToggleImage with either #emptyFilterImage or #filledFilterImage depending on selected state.	Controller.java	application	application/Controller.java
	OPT		Evt, disable all menu items related to filtering (except #filterToggleCheckMenuItem) if selected is false.	Controller.java	application	application/Controller.java
Filtering	TODO	095	Controller#onFilterAction: Replace #drawingModel in #figuresListView with ObservableList#filtered(#figuresFilter) if selected, otherwise re-set #drawingModel as content	Controller.java	application	application/Controller.java
	TODO	096	Controller#onFilterChangedAction: add FillColorFilter to #figuresFilter	Controller.java	application	application/Controller.java
Filtering	DONE	097	Controller#onFilterChangedAction: remove any filter containing color from #figuresFilter	Controller.java	application	application/Controller.java
	TODO	098	Controller#onFilterChangedAction: add EdgeColorFilter to #figuresFilter	Controller.java	application	application/Controller.java
Filtering	TODO	099	Controller#onFilterChangedAction: remove any filter containing color from #figuresFilter	Controller.java	application	application/Controller.java
	TODO	100	Controller#onFilterChangedAction: add LineTypeFilter(lineType) to #figuresFilter	Controller.java	application	application/Controller.java
Filtering	TODO	101	Controller#onFilterChangedAction: removes any filter containing lineType from #figuresFilter	Controller.java	application	application/Controller.java
	TODO	102	Controller#onFilterChangedAction: add LineWidthFilter(lineWidth) to #figuresFilter	Controller.java	application	application/Controller.java
Filtering	TODO	103	Controller#onFilterChangedAction: removes any filter containing lineWidth from #figuresFilter	Controller.java	application	application/Controller.java
	TODO	104	Controller#onFilterChangedAction: add a case for (source == filterBySelectedMenuItem) to setup #figureTypesFilter with types of selected figures in #listView	Controller.java	application	application/Controller.java