ArtistAssistant

<<Interface>>
IObservable<T>
+Subscribe(IObserver) : IDisposable

<<Interface>>
IObserver<T>
+OnCompleted() : void
+OnError(Exception) : void
+OnNext(T) : void

<<use>>

Command

<<Interface>>
ICommand
+DrawableObjectList : DrawableObjectList
+Execute() : void
+Undo() : void

<<create>>

CommandFactory
+GetCommandArgumentsObject() : CommandArguments
+CreateCommand(parameters : CommandArguments) : ICommand
+CheckParameters(parameters : CommandArguments) : bool

<<use>>

AddCommand
-addedObject : DrawableObject

MoveCommand
-movedObject : DrawableObject
-previousLocation : Point?
-newLocation : Point?

<<enumeration>>
CommandType
Add
Remove
Select
Deselect
Scale
Move
Duplicate
BringToIndex

BringToIndexCommand
-startIndex : int
-targetIndex : int

ScaleCommand
-scaledObject : DrawableObject
-previousSize : Size?
-newSize : Size?

DeselectCommand
-deselectedObject : DrawableObject

SelectCommand
-selectedObject : DrawableObject
-previouslySelectedObject : DrawableObject

DuplicateCommand
-duplicate : DrawableObject

RemoveCommand
-removedObject : DrawableObject
-originalIndex : int
-wasSelected : bool

<<create>>

CommandArguments
+CommandType : CommandType
-DrawableObjectList : DrawableObjectList
-AffectedDrawableObject : DrawableObject
-Location : Point?
-Size : Size?
-StartIndex : int?
-TargetIndex : int?

DrawableObject

StateFactory
-intrinsicStates : Dictionary<ImageType, IntrinsicState>
+Create(imageType : ImageType, location : Point, size : Size) : State

<<create>>

State
+ImageType : ImageType
+Image : Image
+Location : Point
+Size : Size
+Selected : bool
+Select() : void
+Deselect() : void
+Draw(graphics : Graphics) : void

DrawableObject
-drawableObjectCount : int
-Id : int
-Image : Image
-ImageType : ImageType
-Location : Point
-Selected : bool
-Size : Size
+Select() : void
+Deselect() : void
+Draw(graphics : Graphics) : void
+Notify()

DrawableObjectList
-observers : List<IObserver>
-unsubscribers : List<IDisposable>
+RenderOrder : List<DrawableObject>
-SelectedObject : DrawableObject
+GetIdFromLocation(location : Point) : int
+GetObjectFromLocation(location : Point) : DrawableObject
+BringToIndex(startIndex : int, targetIndex : int) : void
+Notify() : void

Observes

<<use>>
Observes

CompleteState

IntrinsicState

ExtrinsicState
+Location : Point
+Size : Size

<<enumeration>>
ImageType
Cloud
Mountain
Rain
Tree
Pine
Pond

ImagePool
-uniqueInstance : ImagePool
-poolLock : object
-pool : Dictionary<ImageType, Image>
+Count()
+GetImage(imageType : ImageType) : Image

Drawing
-unsubscriber : IDisposable
-BackgroundImage : Bitmap
+Size : Size
+RenderedDrawing : Bitmap
+SelectionPen : Pen
+Dispose() : void
-Render()

<<use>>

<<enumeration>>
DrawingMode
Add
Move
Select
None

BackendWrapper
-undoStack : Stack<ICommand>
+RenderedDrawing : Image
+ListCloudFiles() : List<string>
+SaveToCloud(fileName : string, wrapper : BackendWrapper) : bool
+DownloadFromCloud(fileName : string) : BackendWrapper
+Add(imageType : ImageType, location : Point, size : Size)
+BringToFront() : void
+SendToBack() : void
+Deselect() : void
+Duplicate() : void
+Move(location : Point) : void
+Remove() : void
+Scale(size : Size) : void
+Select(location : Point) : void
+Undo() : void
+ClearAndStartNewDrawing(backgroundImage : Image, size : Size) : void
+GetSizeOfSelectedItem() : Size?
+GetLocationOfSelectedItem() : Point?
-ExecuteCommand(parameters : CommandArguments) : void

Storage

CloudManager
-user : string
-key : string
-bucket : string
-client : IAmazonS3
+Upload(jsonFile : string, imageFile : string, key : string) : void
+Download(jsonFile : string, imageFile : string, key : string)
+Delete(keys : List<string>)
+ListFiles() : List<string>
-GetAWSAuthenticationUser() : string
-GetAWSAuthenticationKey() : string

DrawableObjectSerializer
+Serialize(drawableObjectList : DrawableObjectList) : string
+Deserialize(string jsonString) : DrawableObjectList

Program
+Main() : void

<<use>>

ArtistAssistantForm

<<use>>

Form