

Project Title: Shape's Photo Album: Part 2

Project Description

This project creates either an HTML file or an interactive GUI to view shape graphics as input by a .txt file containing information on the shapes to exist in each image.

How to Use the Project

1. Choose a .txt file with information on the type of shapes you want.

Format:

snapshot Turn on the Lights! ←Description of image

shape background rectangle 0 0 800 800 33 94 248 ←Description of shape

2. Choose the type of format you wish the images to be displayed in (Web or Graphic, with size or export filename)

3. Enter the filename of the txt file and view the display type as arguments at program launch in the format:

MyProgram -in buildings.txt -out myWeb.html -v web

MyProgram -in buildings.txt -v graphical 800 800

Class/Interface Changes

Refactored:

- Description content restriction removed from ShapeCanvas, allowing Canvas to have blank descriptions

- Added IAlbum Interface - allows standard contract for album creation

- Added getType method for IShape to get specific shape type - used during both views for shape creation (was already an attribute of shapes, just no getter), and opens the potential for more shapes to be added and easily distinguished

Removed:

- getTimestamp method - unnecessary, not used except to get specific string day-month-year format, not used for any purpose of creating HTML content or GUI and a repeat of information already available via a snapshot

- Full removal of Color Enum, switch to Java's Color Class, it is more flexible and can be used to build objects in Java Swing and find colors in HTML/CSS. The Color Enum couldn't do very much when it came to creating views.

New Classes/Interfaces

PhotoAlbumMain - Controller running the whole program

- ReadShapeData - parses txt file for album

- InputController - parses command lines to determine what txt file and view to use

IShapeDataReader - Interface contract for reading a txt file

IController - Interface contract for running PhotoAlbumMain controller

BuildShapeHTML - Builds HTML file view

BuildShapeGUI - Builds GUI view

- ImagePanel - Build 2D graphic images

- SwingView - Build GUI view window for album info

Future Plans/Issues Encountered

This project allows users to view an album of 2D images in either HTML form or GUI form. One issue I encountered was parsing the string args from the command line to figure out what file to use and what type of view to show. I believe using active user input would be a better experience. In the future, I would switch my "InputController" class to run via a Scanner and request input from the user on which txt file they wanted to use and which viewer they wanted. I would also like to add an option within the GUI to build your own images and have them added to the album. With the export to HTML file option I included, any changes made via the GUI could then also be made into an HTML file.

An additional issue is the specific formatting requirements for a TXT file to be able to be read and have all the information. I would like to refactor the program to accept a wider variety of files and possibly read a broader style to get the shape information. The need for a TXT file could be removed entirely if functionality is added to a GUI to create and alter shapes as well.