



ISEL / ADEETC

Informatics and Multimedia Engineering

Multimedia Authoring

4th Laboratory Work

Multimedia Authoring

FotoPrint

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Introduction

This work aims to familiarize the techniques used in JavaScript to draw objects on the canvas and the development of applications in JavaScript following the paradigm of object oriented programming.

The goal is to implement an HTML5 / JavaScript application to build photos for printing composed of real images (raster) and objects drawn on canvas. The application must have at least the following functionalities:

- 1 - Insert images, text and objects on the canvas;
- 2 - Remove elements from canvas;
- 3 - Print photo (generate URL with a canvas image);
- 4 - Choose the object color;
- 5 - Change the background color of the canvas (Optional);
- 6 - Drag & Drop of objects on canvas;
- 7 - Change the size of the objects (Optional).

Below is a link to the w3schools website that should be consulted during the development of the work.

<http://www.w3schools.com/>

Objectives

The development of the application will be divided into two parts:

- 1st - Implementation of several objects on the canvas;
- 2nd - Development of the application interface.

At the end of the first lesson the student must have at least 3 classes that allow drawing on the canvas the 3 objects indicated below (class with the draw () and mouseOver () methods). The code with the application developed must be delivered until November 26, 2017 using the Moodle platform.

Laboratory work

Objects Implementation on canvas - Part 1

1. Implement in JavaScript a class for each of the following figures that allows you to draw and move the figures on canvas:



a)



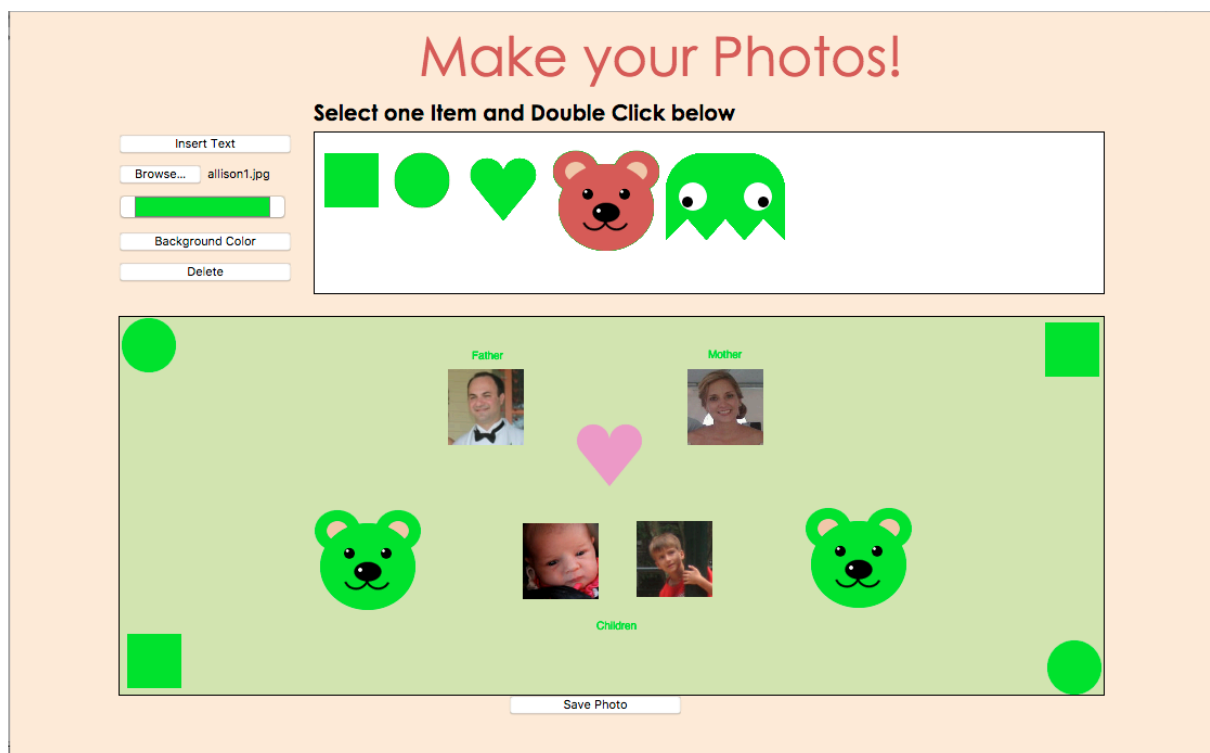
b)

Note: The color of the objects should be variable. Classes must follow the hierarchical structure of objects provided by the teacher (FotoPrint_Students.zip).

2. Repeat the previous question for an object of your choice different from the previous one.

User Interface Development - Part 2

3. With the code of the previous figures and the code provided by the teacher develop an application with the features indicated above and with an interface similar to the following figure:



Tip: Left-clicking an item in the top panel to select an object and double click in the panel below to draw the item selected.