Picture to Html using Python

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

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Introduction

Our project "picture to html" is a true AI project which gives html codes for basic shaped pictures and stores the html codes into file. After running our project a window opens and it asks for the directory of the image which we have to store in the as html codes. After that it stores the html codes into file we can check that code or we can open that on browser by visiting in the directory.

Used Modules

➢ **Tkinter**
   We have used this library for making windows and providing buttons and entry box into it.

➢ **Open-CV**
   We have used this library for recognizing shapes and all and giving an outcome for every shape .

➢ **Numpy**
   We have used this library to store coordinates of shapes as array in any variable.

➢ **Web-browser**
   We have used this library displaying the web pages to the users.

Logic and Methods

➢ Firstly we have created a window using tkinter, also added a button and entry box to enter the directory of picture.

➢ For shape detection we have used open cv, in this firstly we have plotted a contour on the picture to know coordinates of the shapes after that we have stored the coordinates in an array using numpy. Then we have counted the no of shapes and stored that in a variable.

➢ After that we have defined attributes for web page i.e button,textarea,etc. we have compared our detected shape with our declared attributes and according to that we have stored their html codes in file. We have also declared html codes for declared attributes.

   Example, if it detects any button in picture it will compare it with declared button and after that it will store the html code for the same.

➢ While executing the code a tkinter window will open, which will ask for location of the picture after entering the location, there will appear same picture which we have entered to get html codes. The picture will contain name of shapes that will be written just over the shape.

   On the other hand webbrowser will save the codes into file for detected shapes.

Conclusion

In the field of AI there are lots of intelligences which have shown a tremendous efforts in various fields. Our project is also inspired by these intelligences and it has capacity to show great stuffs. By this project anyone can get html codes for his pictures he does not need to write codes by himself .Although our project contains limited features but in future we are damn sure to make this more efficient and reliable.

Work Distribution

Yuvraj Singh – Worked on webbrowser and numpy libraries To compare shapes and get codes for the same, also to store the codes into file.

Rishabh Gupta – Worked on tkinter library to make windows and also have written html codes for declared web page attributes.

Ashutosh Kumar – worked on open cv and numpy libraries to recognize the picture and to store the coordinates in a variable.

Note:
- In this project it was too difficult to detect shape and text at the same time it is limited to shapes.

- As it is an intelligence so in some of the cases it does not gives correct codes, error margin is 10%. It also varies upon devices.