Image To Code

Introduction

- Imagine yourself as a doctor in college and you ask your students to write a code for an exam. How are you going to make sure the code can be compiled without errors or run perfectly. It will be hard for you. But not anymore……..

- Image to code project aims to convert images containing handwriting text-code to an actual source file which can be compiled directly.

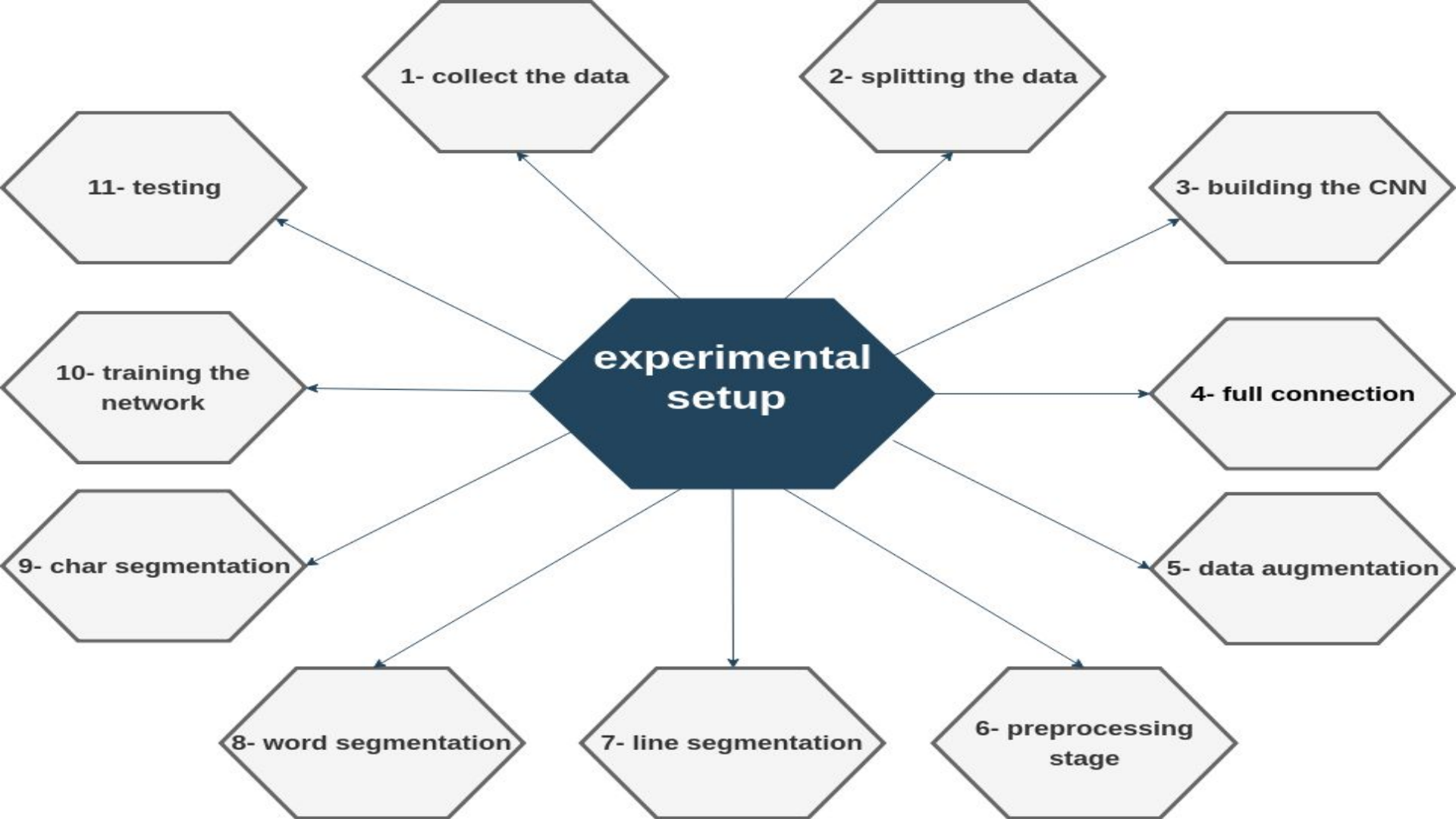
Project Objectives

- To study a machine learning model for image classification.
- To create the data obtaining text-code.
- To apply a deep learning algorithm (convolutional neural network) for image processing.
- To analyze the results based on the model developed.

Deep Learning Algorithm

Convolutional Neural Network (CNN)

- One of the most popular techniques used in improving the accuracy of image classification
- A special type Neural Networks that works in the same way of a regular neural network except that it has a convolution layer at the beginning.
- It breaks up the image into a number of tiles,then the machine tries to predict what each tile is.
- the computer tries to predict what’s in the picture based on the prediction of all the tiles.


experimental setup
1- collect the data
2- splitting the data
3- building the CNN
4- full connection
5- data augmentation
6- preprocessing stage
7- line segmentation
8- word segmentation
9- char segmentation
10- training the network
11- testing