Car plates image reader.

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Abstract

As the input we get a image of the car Plate and as the output we provide a txt file with the data from the plate .
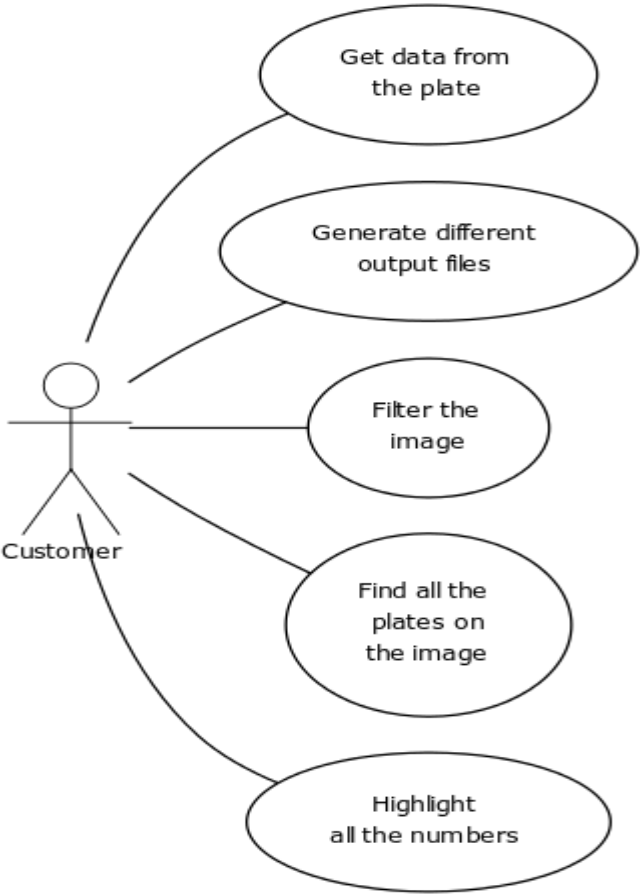
Requirements:

M	Read the image of the plate, generate text file
S	Provide the text file with the correct data from the image
C	Filtering not important text/pixels of the image, different output formats,Highlight all the numbers on the plate
W	Finding car plates on any image

Main scenario:
1. User provides the image of car plate.
2. Program analyses the image.
3. Program generates text file with the correct data from the image.

Use case diagram:

Use cases description

Case	UC-Get data from the plate
Name	Get data from the plate
Actor	User
Initial Condition	Image loaded
Description	1. Program analyses the image 2. Program generates text file with the correct data
Alternative	1A. Program fails to analyze the image 2A. Program generates text file with error message

Case	UC-Generate different output files
Name	Generate different output files
Actor	User
Initial Condition	Data is ready
Description	1. User chooses output format 2. Program generates file with the correct format containing the output
Alternative	1A. User chooses format that is not implemented 2A. Program displays an error

Case	UC-Filter the image
Name	Filter the image
Actor	User
Initial Condition	Image loaded
Description	1. Program filters the image from the not important pixels
Alternative	1A. Program fails to filter the image 2A.Program displays an error

Case	UC-Find all the plates on the image
Name	Find all the plates on the image
Actor	User
Initial Condition	Image loaded
Descriptions	1. System looks for all plates that are contained in the image
Alternative	-

Case	UC-Highlight all the numbers
Name	Hightlight all the numbers
Actor	User
Initial condition	Image loaded and analyzed
Description	1. Program highlights the area of image that was analyzed 2. Program displays the highlightes image to the user
Alternative	1A. Program didn't find any data to analyze on the image. 2A. Program displays image without any highlights