BRAILLE CONVERTER

INTRODUCTION:

There are so many books in this world, so many libraries but hardly any of them has any facility for blind people. so what we plan to do is to make a device which will convert a book in braille language and display it just like an ebook.

WORKING:

The device will scan a reading material and then parse it into the braille format.The output will be like the interface mechanism shown in this video mit tangible mediabut the application shown in this video are superfluous for an braille interface, the video was only to convey the idea. Braille display.Our project may look like this.

The display part will work like a dot matrix printer.There will be groups of six dots (like the ones used in braille) in a row and 4 such rows.Each row will have a mechanism like a dot matrix printhead, which will go to each character (with the help of motors) and solenoid controlled by arduino board will push an array of six pin at a time to create a character.

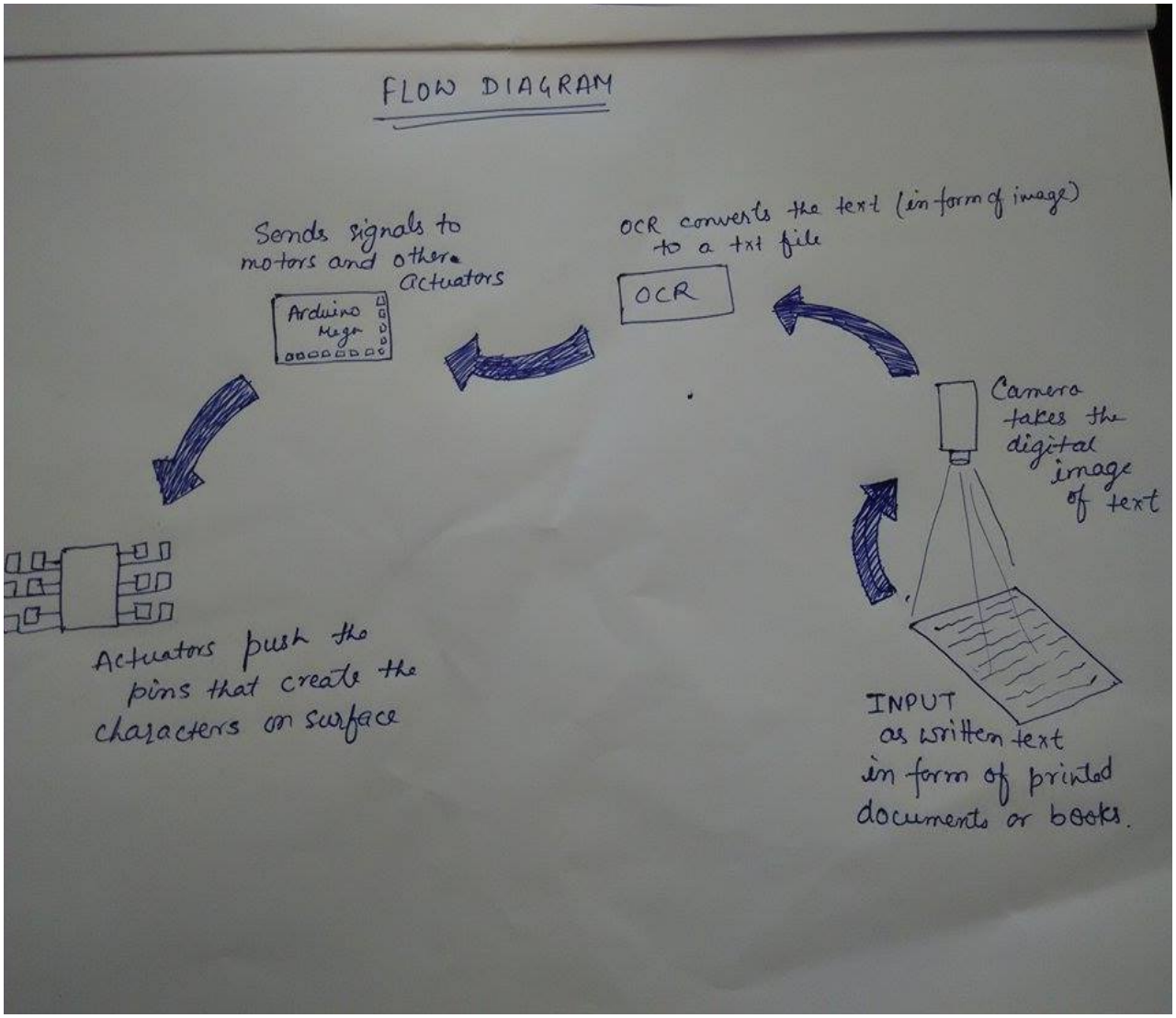
Things to be used-

- OCR-(Tesseract Library).
- Arduino.

Workshop Needed for:

- Image processing.
- Arduino.

Detailed Flow Diagram:



MATERIAL REQUIRED AND ESTIMATED COST:

Arduino mega board	------	1100
Camera	------	800
connectors	------	250
stepper motors - 5pc	------	2000
solenoids - 30	------	2000
aluminium wires	-----	200
metals and plastics	-------	2000
misc	-------	1000

TOTAL ESTIMATED COST ------- Rs-8000-11000.

IMPLEMENTATION :

Week 1
To learn Image processing,arduino programming and to figure out the mechanism of actuator.
Week 2
To initiate the mechanical work.
Week 3
To initiate coding and image processing stuff.
Week 4
To fix error if any.

TEAM:

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