

# brain storming :- core of bmp prog

Date

## #on Bmp#

# main user steps and program #

→ main menu:

- Edit Image → see Image Specification
- Quit + (dump log) → About
- later do enhancing error handling

→ Inside Edit Image:

- ① Import your original Image (.bmp) ~~or read background~~
- ① check.magic-sign()
- and ② check.is-compressed()
- and ③ ~~check.is-padded()~~ check.is-padded()
- and ④ check.correct\_offset()
- extra ⑤ check.DIB-header-size()
- ⑥ check.

later auto predict back ground auto

original back ground menu:

white (+ range) → all channels if all same value

black

\* ② Import desired background (inside)

- ① check size()
- ② Resize()
- ③ Alert Aspect ratio()

→ Import new background

→ Quit

③ \* final menu

\* save and quit

~~restart~~

\* original menu

→ quit

→ restart





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# Assumptions

\* detect back ground core mechanics:-

→ \* blocks of  $4 \times 4$  pixels (assumption)  
average of them must be in whitish  
Accepted Range

or

Set another  
Accepted Range  
or formula

check on  
 $1 \times 1$  block  
pixels

\* Algorithm will work from outside  
"borders" to inside stopping and  
marking person border pixels.

\* Will go row by row

\* Colms will start incrementing from  
both sides with 2 pointers

\* Stop if found pixel or block  
Average not in range and mark  
this not (whitish pixel)

\* or stop if  $\text{pointer1\_idx} ==$   
 $\text{pointer2\_idx}$

\* we could do it in recursion  
but it's only necessary if we  
start inside out!

\* between legs will not be detected.

for Whitish  
Back ground  
663

688

714

688

663

688

714

688

663

688

714

765

672

688

688

So Range:-

765

Sum of 3 665  
channels?

\* Special

\* Cases

\* also  
Accept thento be  
whitish:

192 \* 3

160 \* 3

188 \* 3



# Assumptions

\* ~~Image that can't~~ \* program not capable to process:-

- \* Multiperson Images.
- \* Shadows (minimize them as possible)
- \* Flaying "scattered" long hair
- \* Whisker hair - clothes - shoes "cloth could have white from inside not borders"
- \* Images with person wearing shorts  
"please wear pant it's cold inside cpp"
- \* if persons full body in Image

~~What's~~ What's between hands, legs will not be detected

→ "only hands can be detected if we used Recursion"

→ legs could be detected if we scanned between

each single pixel → higher blue gap  
many noise will appear

maybe

↓ solve

it with

filters

(weine

or

median

filter)

→ So please close your

Legs, and hand is

(no closed loops)

inside your body



→ can't detect



→ can't detect

\* Possible solution ⇒ add some rows under legs so recursion works



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## \* basic classes

→ Elements ~~class~~, ~~header class~~  
~~bmb-mob class~~

~~Image~~ - process class (parent)

↓  
back ground  
detector class

↓  
method

↓  
filter  
class

→ Also Log class (later)

end of draft  
on bmp proj.

2/Dec/22