RESCUE ROBOT

START

↓

intialising all the ports with init_devices() including lcd ports with lcd_init()

↓

wait to receive the signal from searchbot and get destination and type of medical routine required

return prioritized des

↓

shortest_path(int source, int destination) to get the path bot needed to travel to reach the destination found.

call to djikstr
based on the

↓

wait to receive clear flag from search bot

↓

Makeitright(int first_move) to decide and turn in the direction bot need to face in order to start travelling for destination(based upon the total turn it took in the last movement and first direction it need to take)

returning an array with the instruc
left/right/forward etc. to take

line following begins here

↓

taking sensor values from all the three white line sensors and sharp sensor placed in front

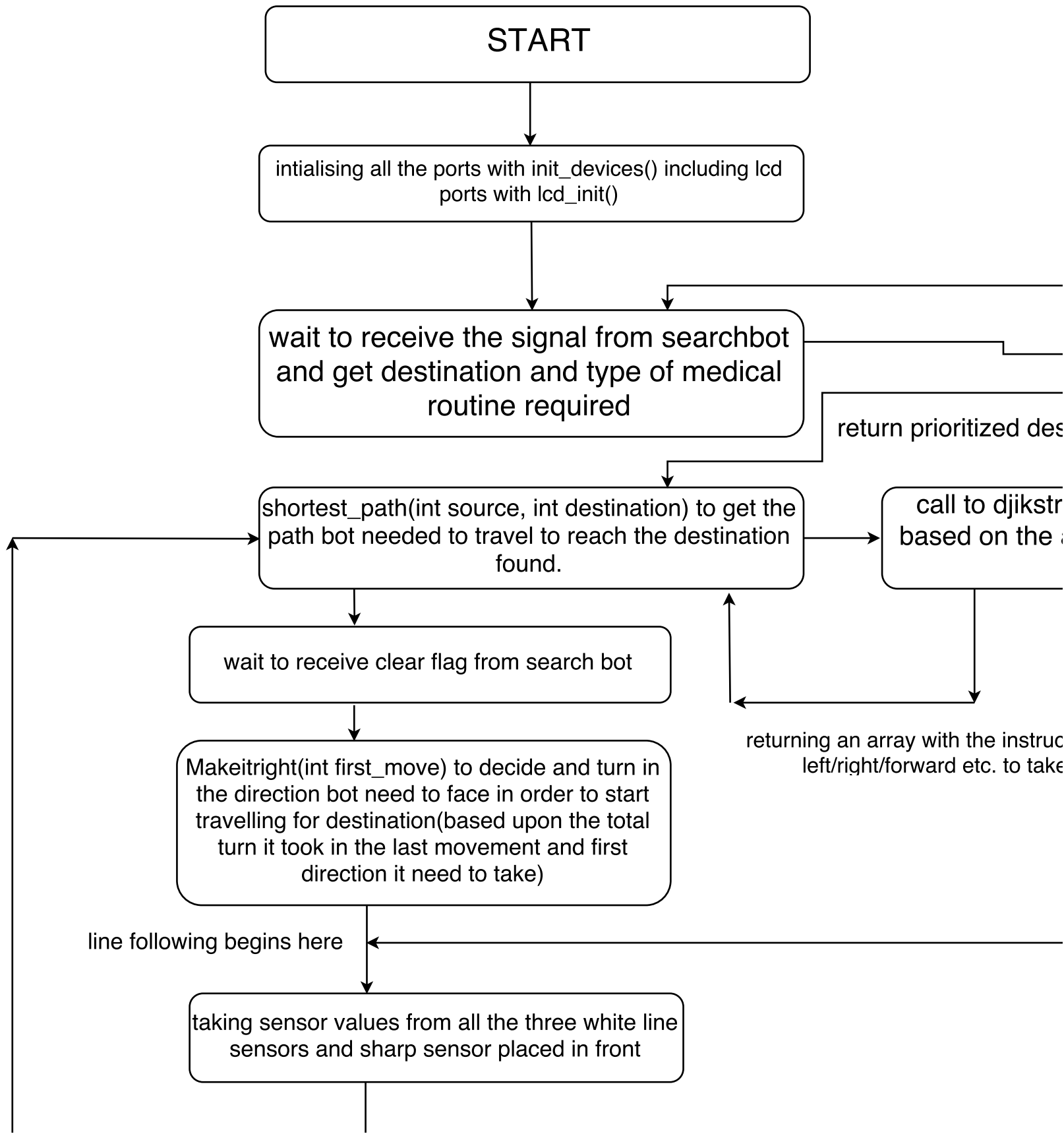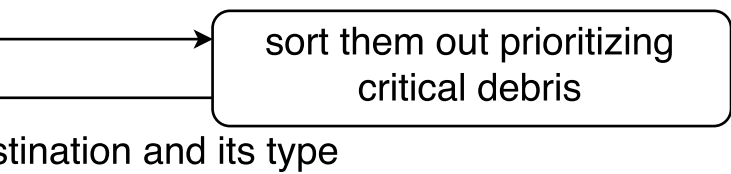↓

sort them out prioritizing
critical debris

stination and its type

a.cpp to use dijkstra algorithm
adjacent matrix provided for the
arena

ction of
e

if destination is not yet
reached

if there is any obstruction in the path(sharp value between 80-130)

if the blockage is not at destination node

make source the current node, remove the next node from matrix in dijkstra.cpp

wait for two second
detection routine and se
rout

no obstruction in path

standard line following till the all three black line are detected(joints in arena)
At joints take next order from array and set current as the current node.

if destination is reached

if received box was critical

start medical routine

if recieved box was minimal

l to complete critical
et destination to medical
tine

initiate drop() mechanism if the type received was minimal.

move servo to push a object down the queue

if received destination was for
medical camp