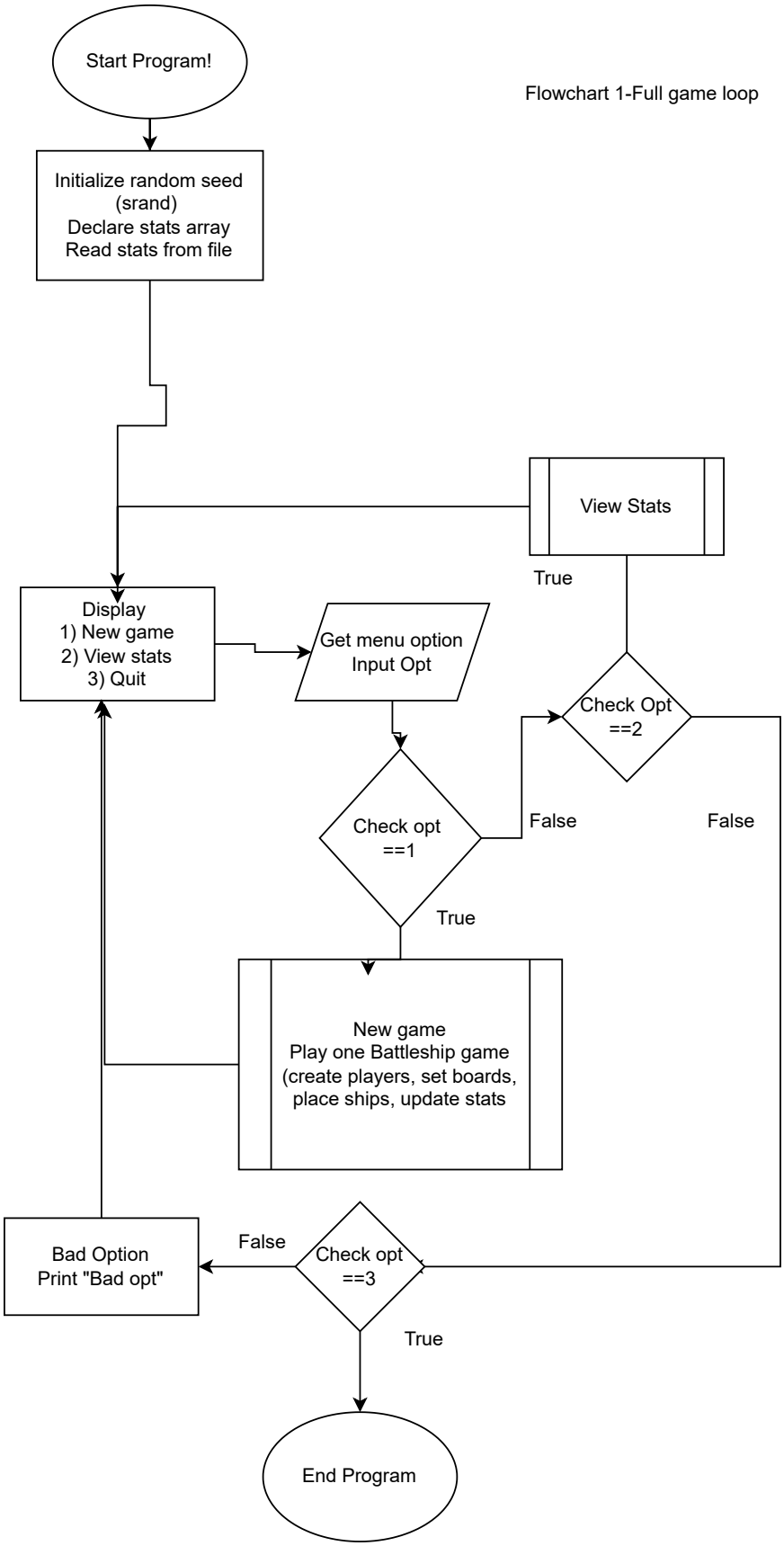
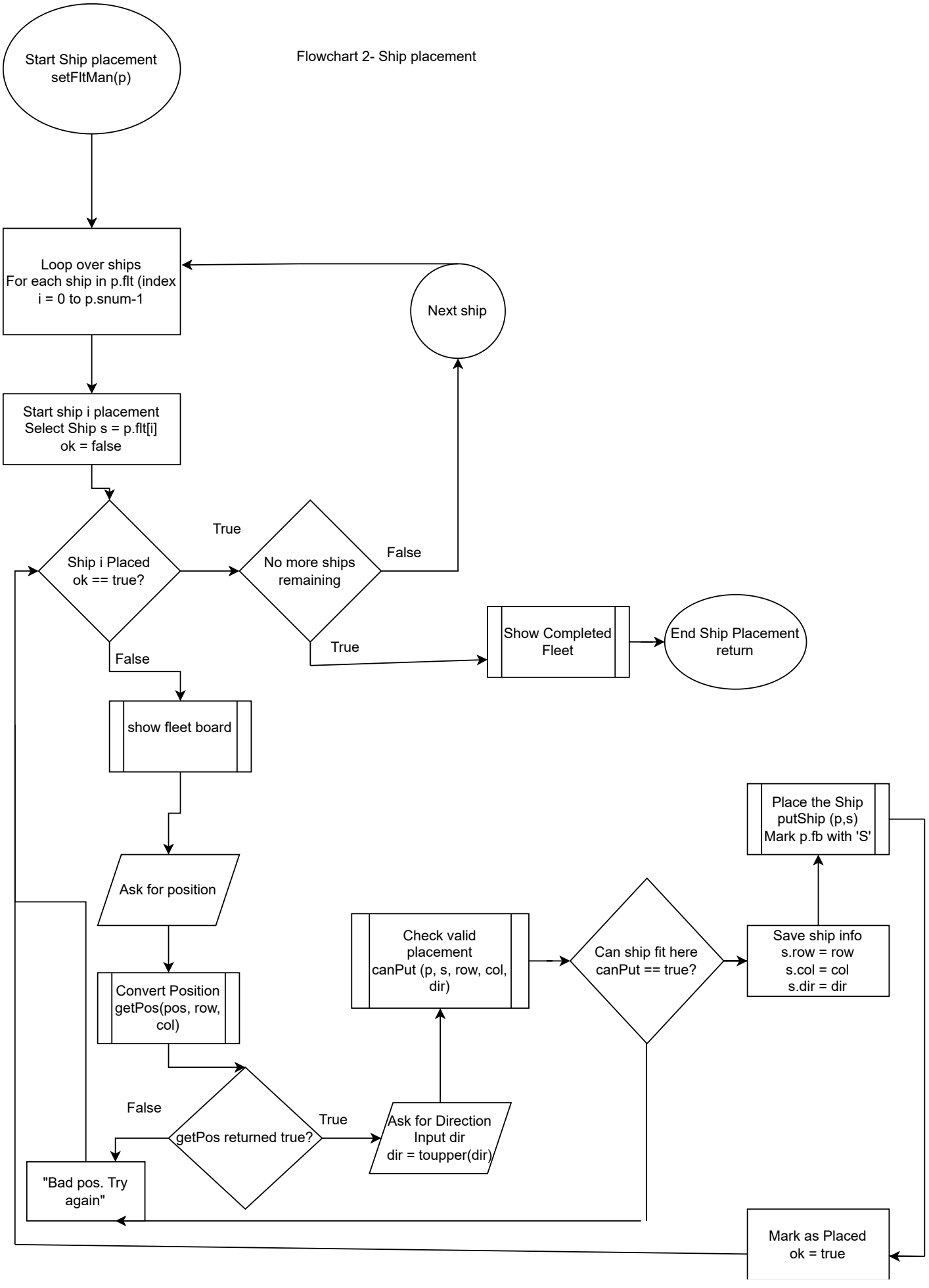
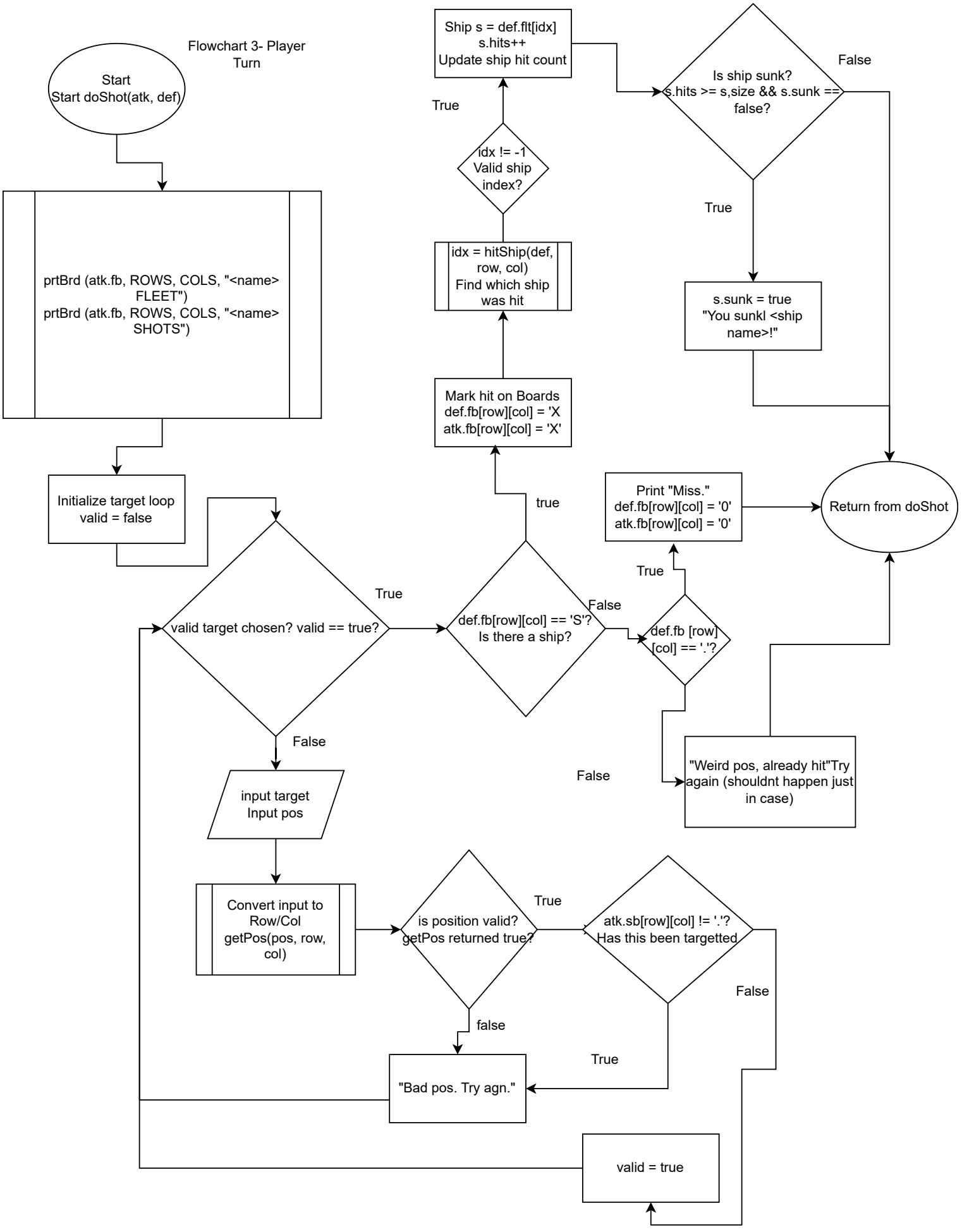


Flowchart 1-Full game loop

Flowchart 2- Ship placement




Flowchart 3- Player Turn
Start
Start doShot(atk, def)
prtBrd (atk.fb, ROWS, COLS, "<name> FLEET")
prtBrd (atk.fb, ROWS, COLS, "<name> SHOTS")
Initialize target loop
valid = false
valid target chosen? valid == true?
True
False
input target
Input pos
Convert input to Row/Col
getPos(pos, row, col)
is position valid?
getPos returned true?
True
false
atk.sb[row][col] != '.'?
Has this been targetted
True
False
"Bad pos. Try agn."
valid = true
def.fb[row][col] == 'S'?
Is there a ship?
true
False
def.fb [row] [col] == '.'?
True
False
"Weird pos, already hit"Try again (shouldnt happen just in case)
Print "Miss."
def.fb[row][col] = '0'
atk.fb[row][col] = '0'
Return from doShot
Mark hit on Boards
def.fb[row][col] = 'X
atk.fb[row][col] = 'X'
idx = hitShip(def, row, col)
Find which ship was hit
idx != -1
Valid ship index?
True
Ship s = def.flt[idx]
s.hits++
Update ship hit count
Is ship sunk?
s.hits >= s,size && s.sunk == false?
False
True
s.sunk = true
"You sunkl <ship name>!"