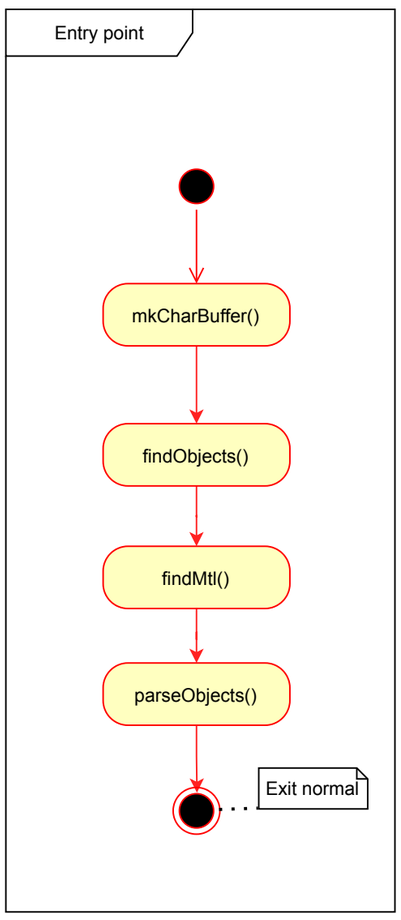
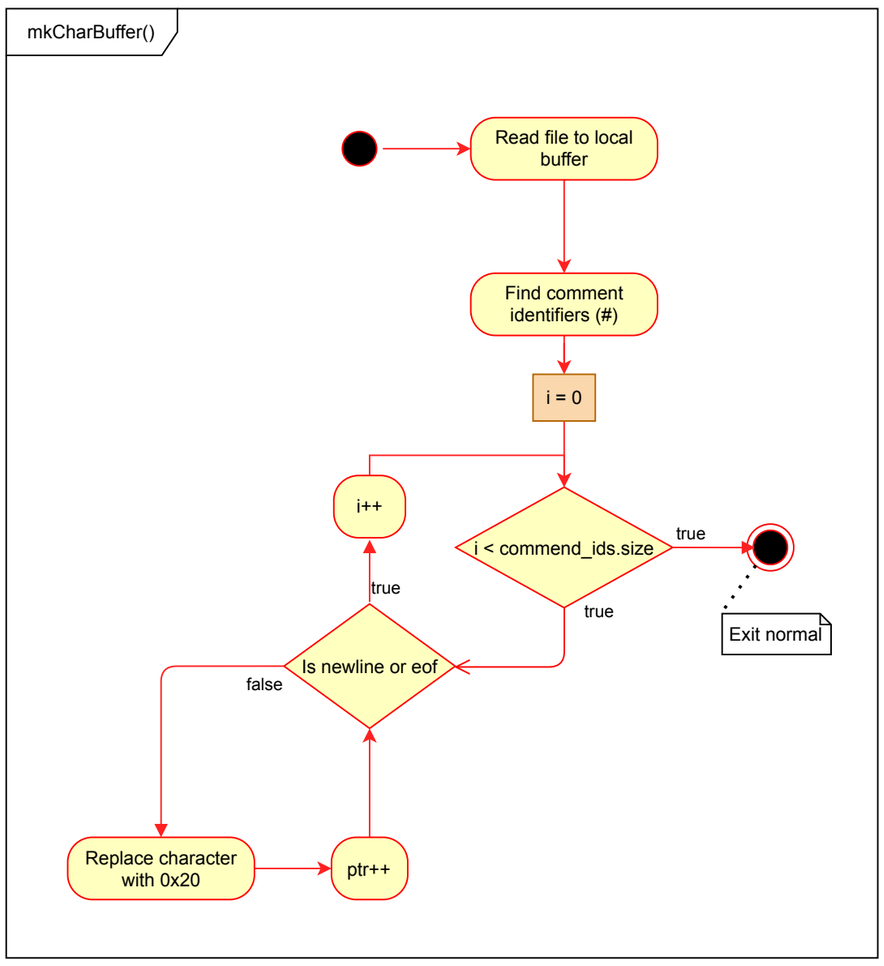
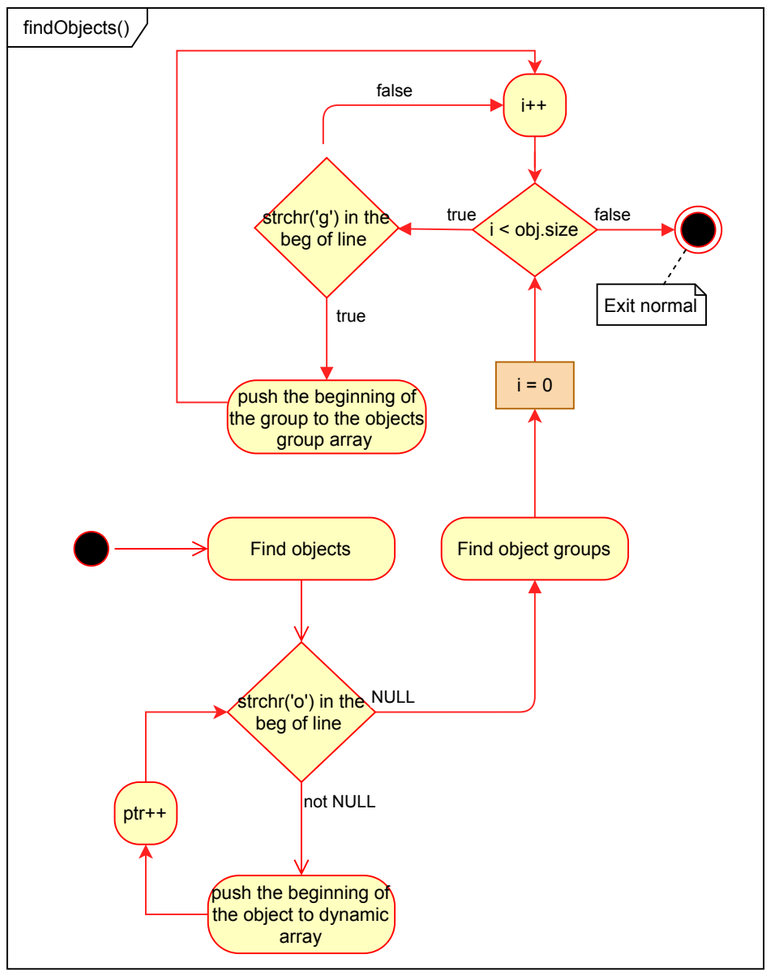
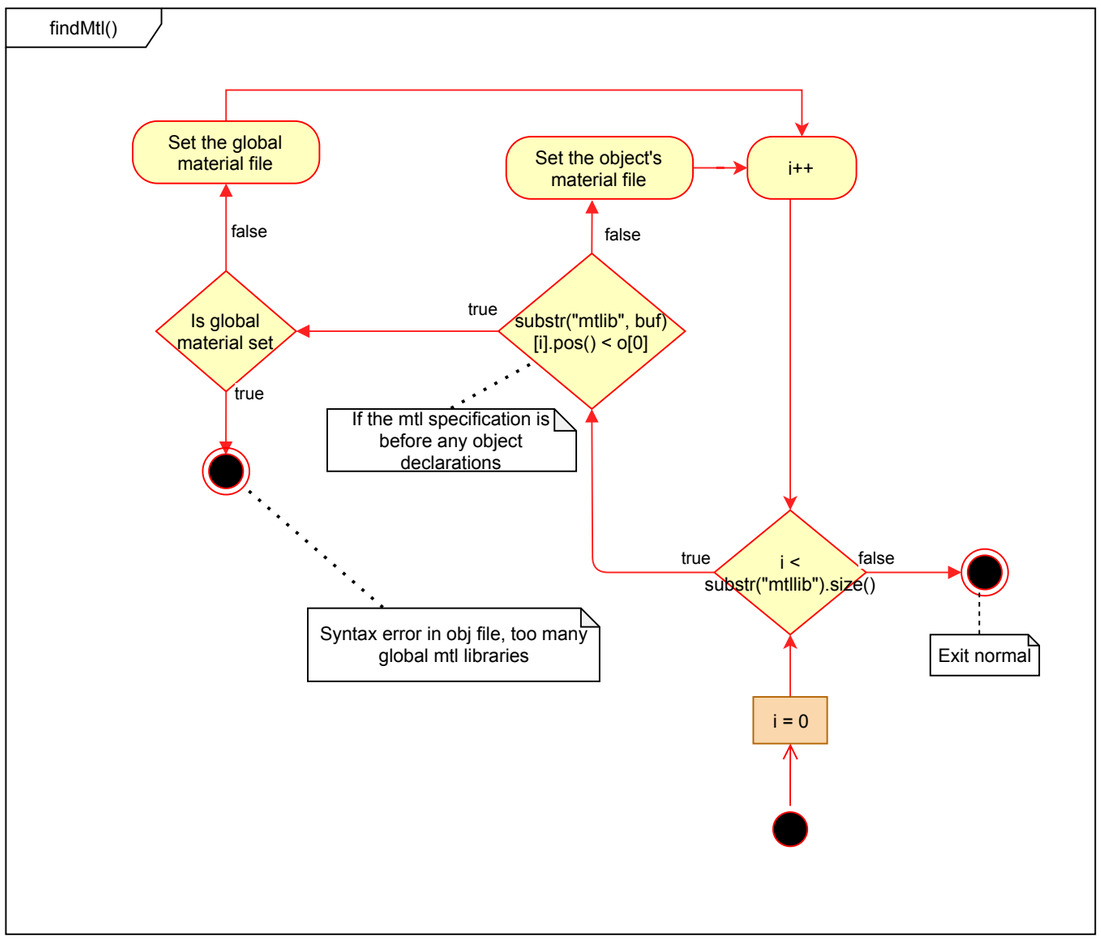
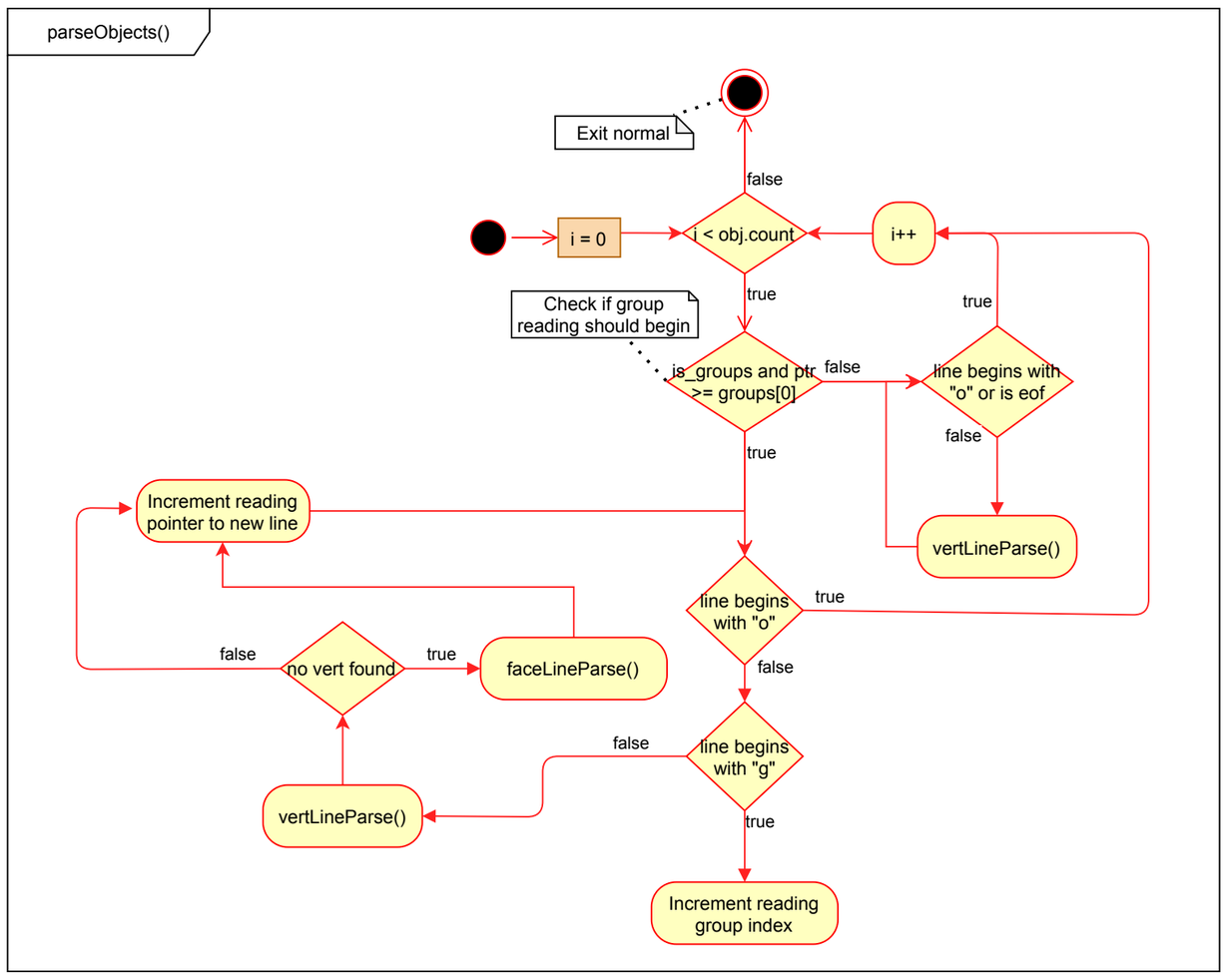
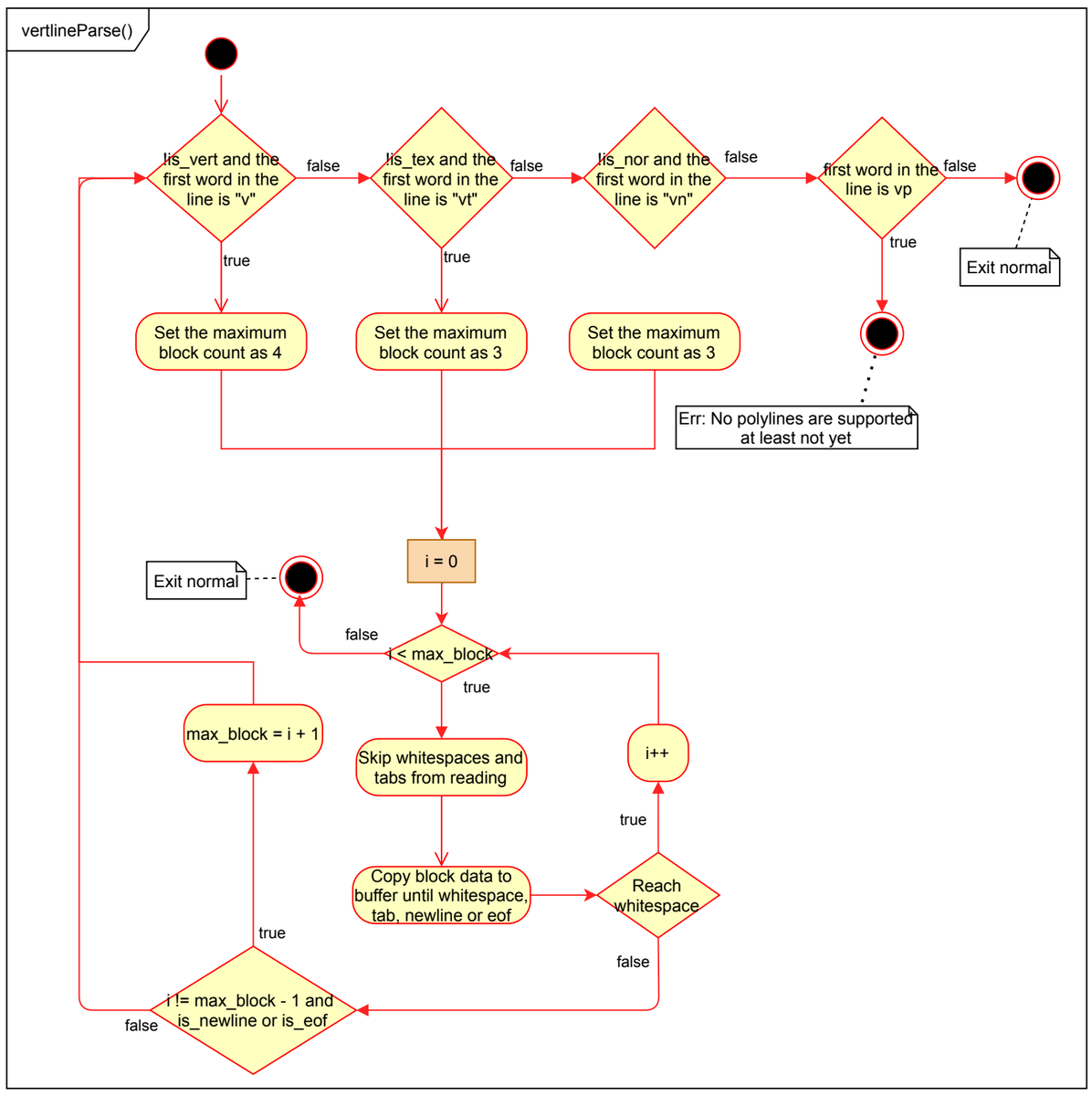

Entry point
mkCharBuffer()
findObjects()
findMtl()
parseObjects()
Exit normal

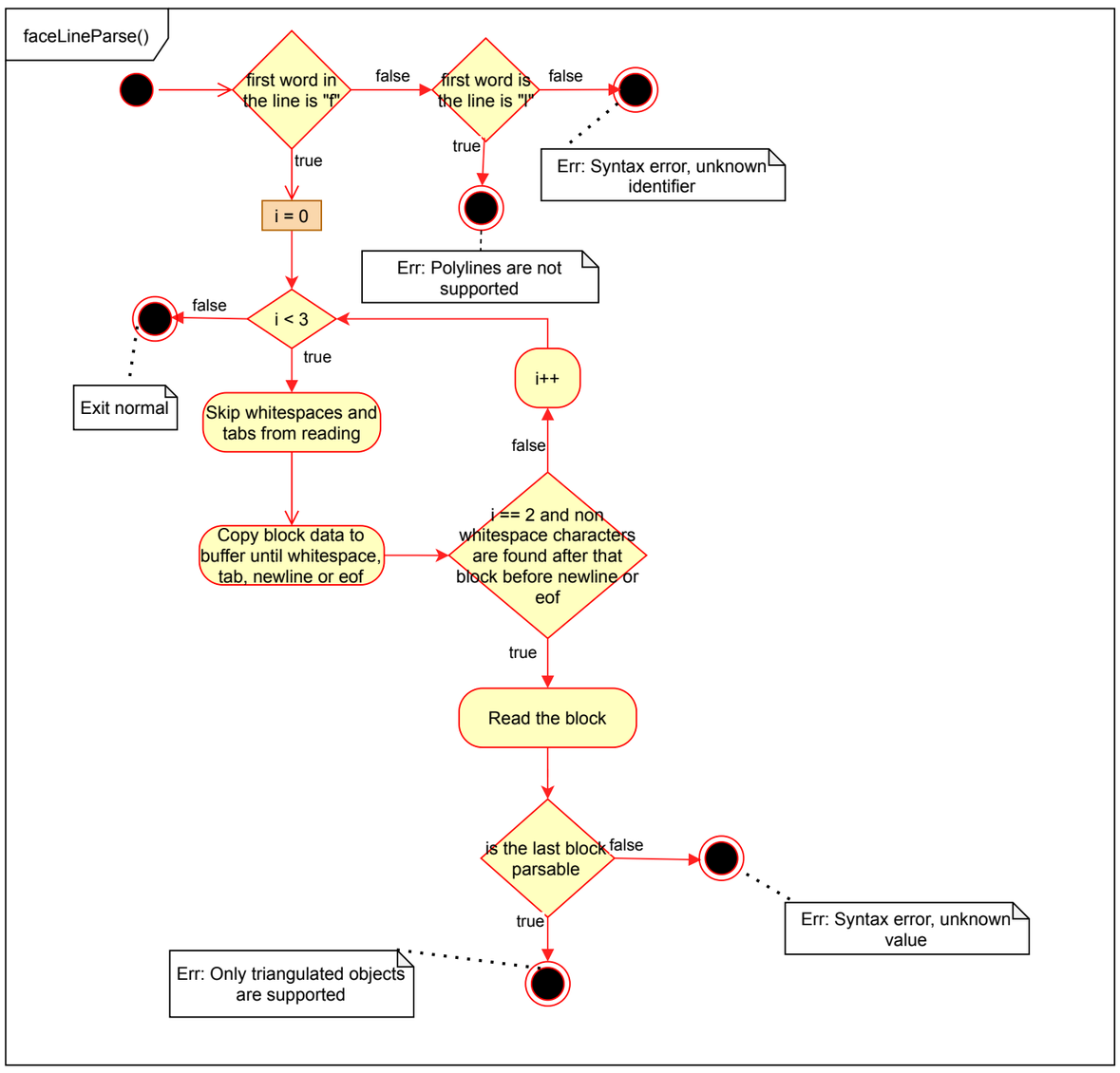

mkCharBuffer()
Read file to local buffer
Find comment identifiers (#)
i = 0
i++
i < commend_ids.size
true
Exit normal
Is newline or eof
false
Replace character with 0x20
ptr++


findObjects()
i++
strchr('g') in the beg of line
i < obj.size
false
true
Exit normal
push the beginning of the group to the objects group array
i = 0
Find objects
Find object groups
strchr('o') in the beg of line
NULL
not NULL
ptr++
push the beginning of the object to dynamic array


findMtl()
Set the global material file
Set the object's material file
i++
false
Is global material set
true
substr("mtlib", buf)[i].pos() < o[0]
If the mtl specification is before any object declarations
i < substr("mtllib").size()
Syntax error in obj file, too many global mtl libraries
Exit normal
i = 0


parseObjects()
Exit normal
i = 0
i < obj.count
i++
Check if group reading should begin
is_groups and ptr >= groups[0]
false
true
line begins with "o" or is eof
vertLineParse()
Increment reading pointer to new line
line begins with "o"
no vert found
faceLineParse()
line begins with "g"
Increment reading group index


vertlineParse()
is_vert and the first word in the line is "v"
is_tex and the first word in the line is "vt"
is_nor and the first word in the line is "vn"
first word in the line is vp
false
true
Exit normal
Set the maximum block count as 4
Set the maximum block count as 3
Set the maximum block count as 3
Err: No polylines are supported at least not yet
i = 0
i < max_block
max_block = i + 1
Skip whitespaces and tabs from reading
i++
Copy block data to buffer until whitespace, tab, newline or eof
Reach whitespace
i != max_block - 1 and is_newline or is_eof


faceLineParse()
first word in the line is "f"
first word is the line is "l"
false
true
Err: Syntax error, unknown identifier
i = 0
Err: Polylines are not supported
i < 3
Exit normal
Skip whitespaces and tabs from reading
i++
Copy block data to buffer until whitespace, tab, newline or eof
i == 2 and non whitespace characters are found after that block before newline or eof
Read the block
is the last block parsable
Err: Syntax error, unknown value
Err: Only triangulated objects are supported