USABILITY

RESULTS OBTAINED FROM 20 PARTICIPANTS

USABILITY RESULTS

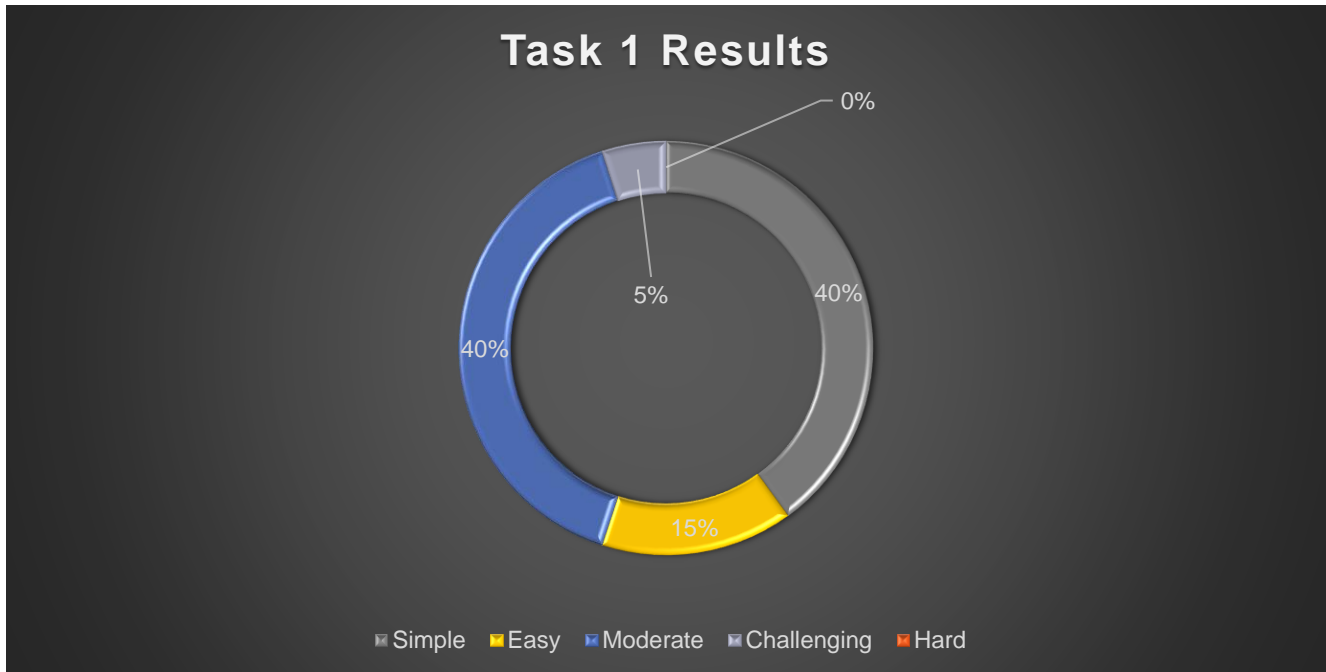## RESULTS OBTAINED FROM 20 PARTICIPANTS

CONTENTS

TASK ONE (UPLOAD NEW .OBJ FILE INTO WEB INTERFACE):

Users found the uploading of .obj files relatively simple, only one user found the task challenging.

TASK TWO(CHANGE TEXTURE OF LEAVES TO LEAVES2.PNG):
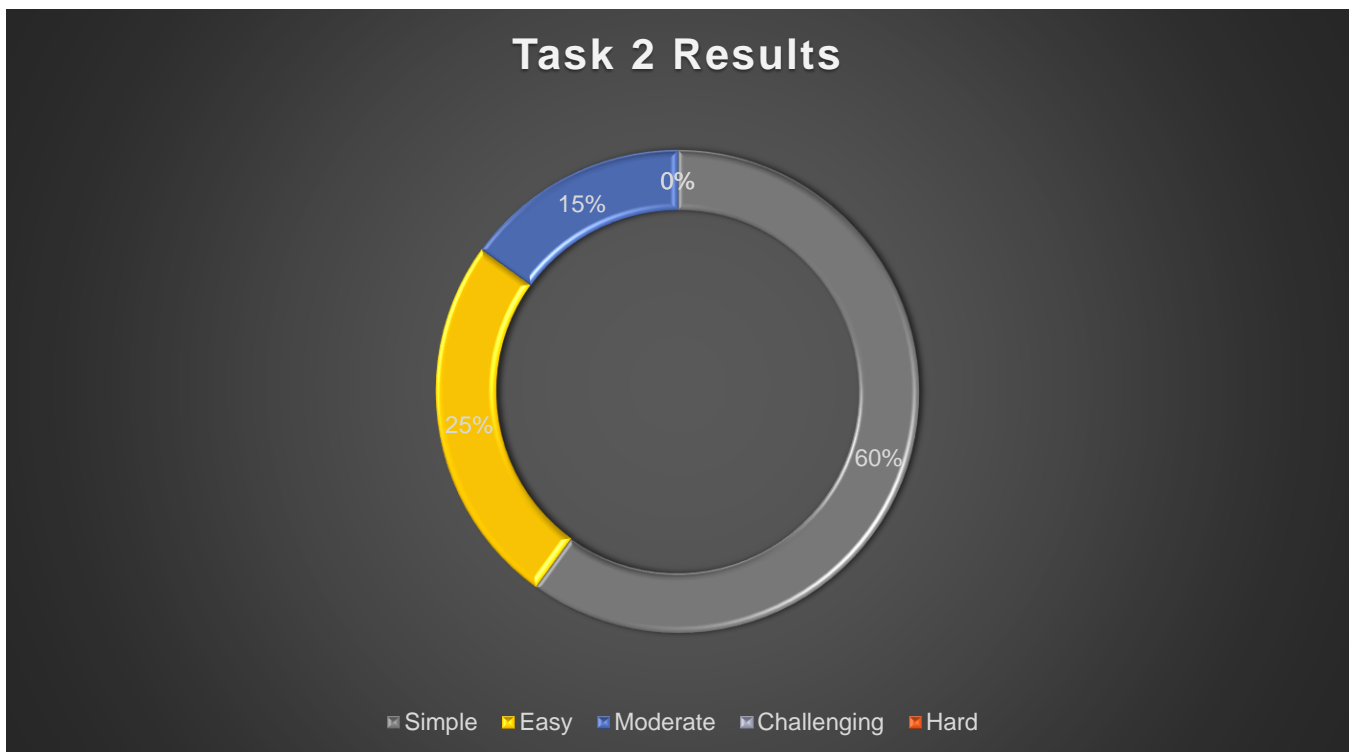
TASK THREE(CHANGE THE LEAVES TO SPHERES SHAPED):

Task 3 Results

0%

5%

15%

5%

75%

◨Simple ◨Easy ◨Moderate ◨Hard ◨Challenging
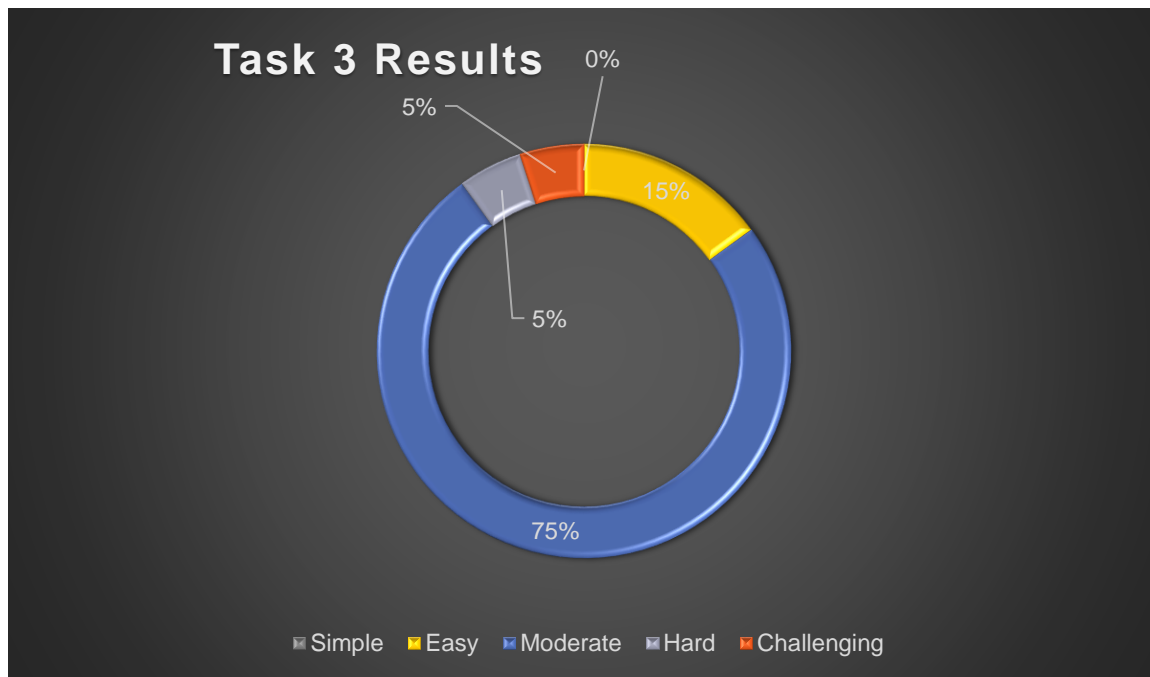
The changing of shapes was found to be a simple task by most, although not many immediately knew how to do so.

TASK FOUR(UPLOAD NEW RULES FILE INTO WEB INTERFACE):

Task 4 Results

0%
10%
90%

�«Simple ◾Easy ◾Moderate ◾Hard ◾Challenging
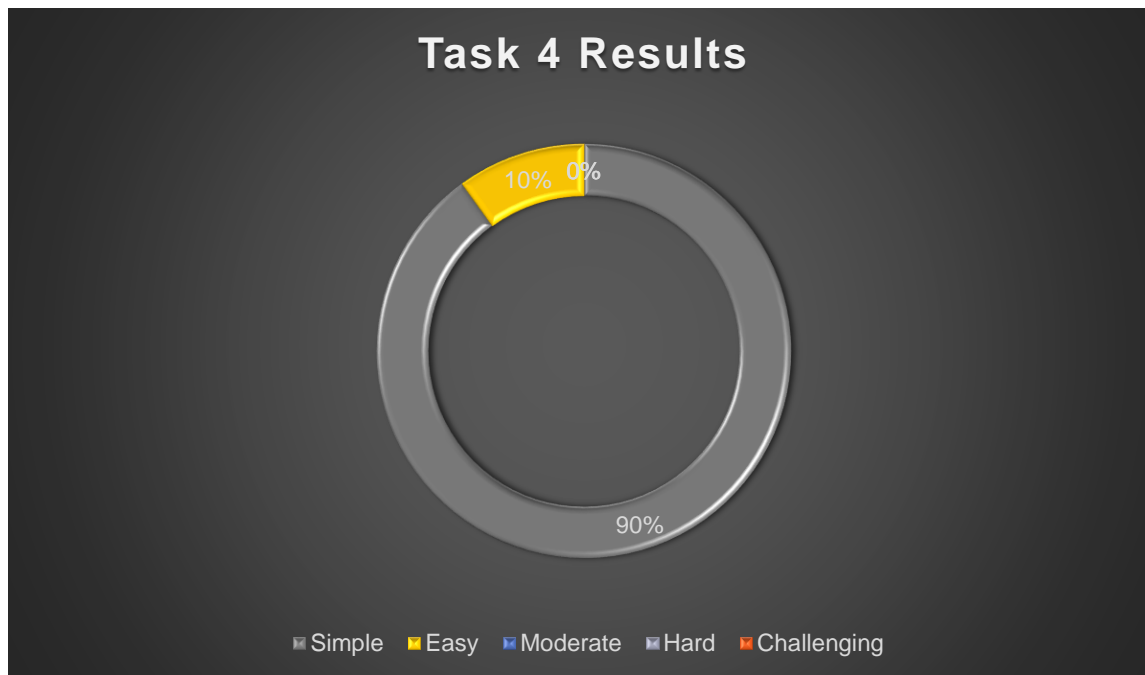
TASK FIVE(UPLOAD NEW TEXTURES INTO INTERFACE):

Task 5 Results

0%
100%

◾Simple ◾Easy ◾Moderate ◾Hard ◾Challenging
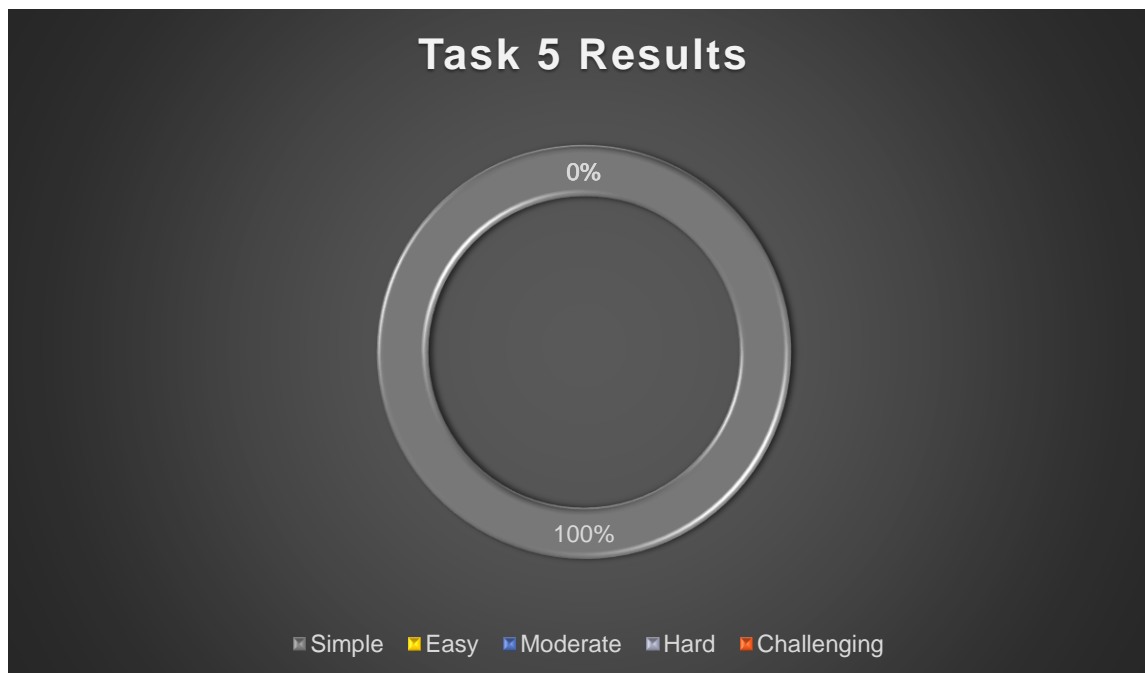
The uploading of various files was found incredibly easy by all users. They quickly made use of the upload buttons.

TASK SIX(TRANSFORM A SECTION OF THE OBJECT TO DISPLAY IN A DODECAHEDRON SHAPE):
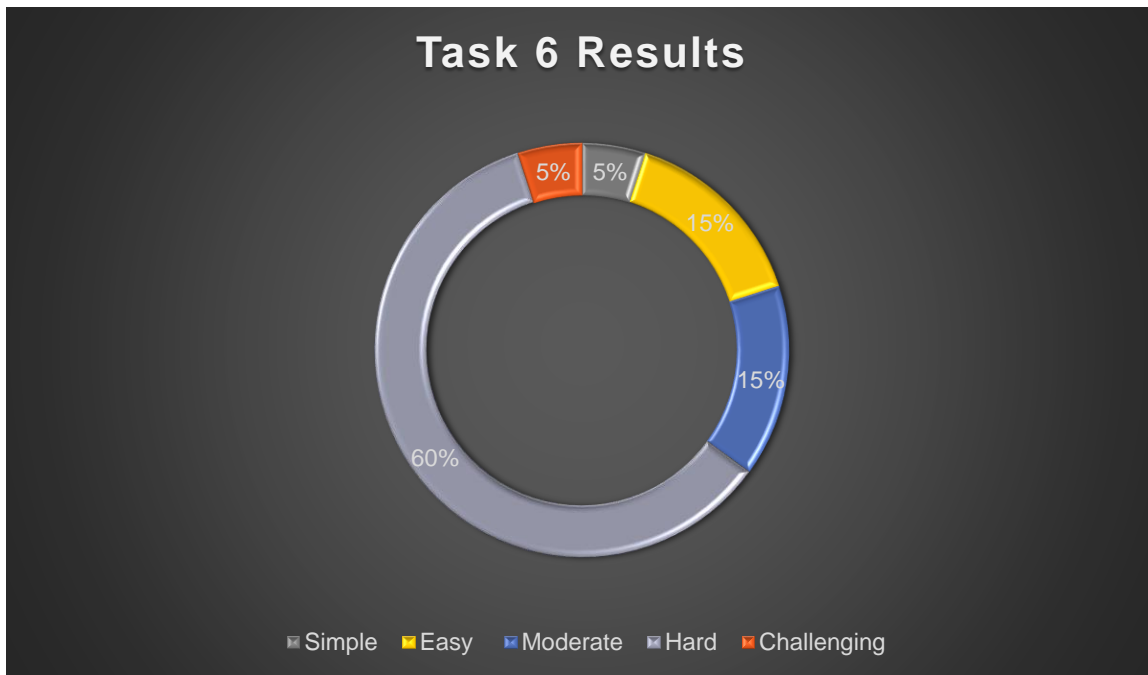
The users struggled to find the right way to change a shape on average although once found it was found easy

TASK SEVEN(ROTATE AROUND THE DISPLAYED OBJECT):
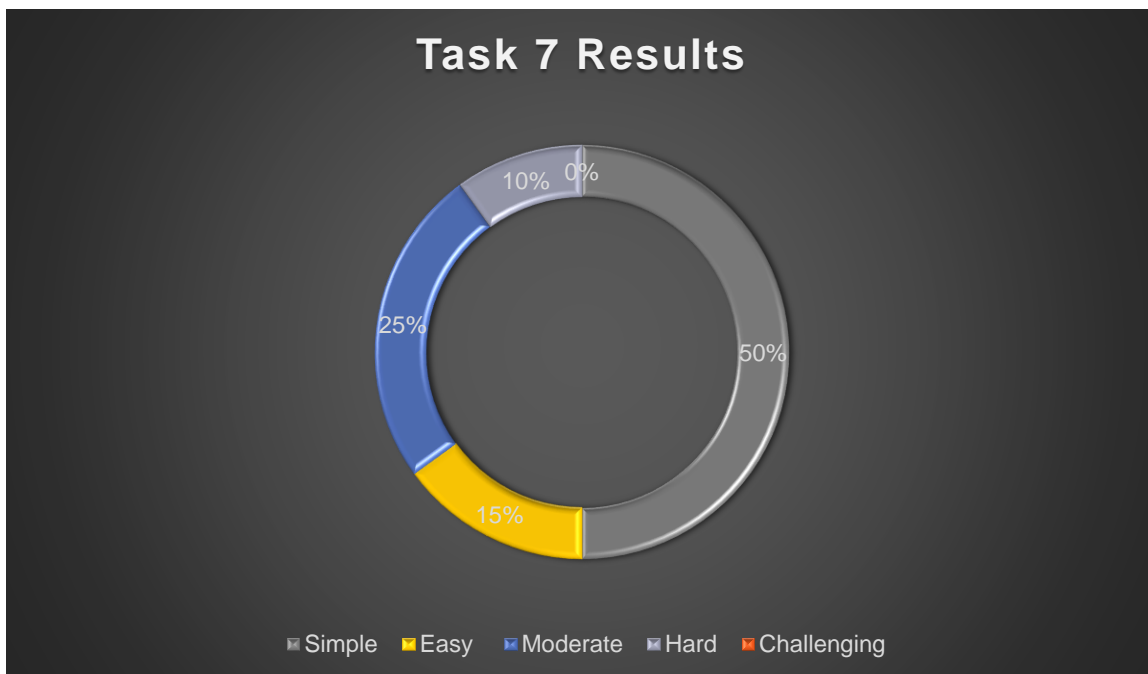
TASK EIGHT(ZOOM INTO THE DISPLAYED OBJECT):

Task 8 Results

0%

100%

◨ Simple ◨ Easy ◨ Moderate ◨ Hard ◨ Challenging
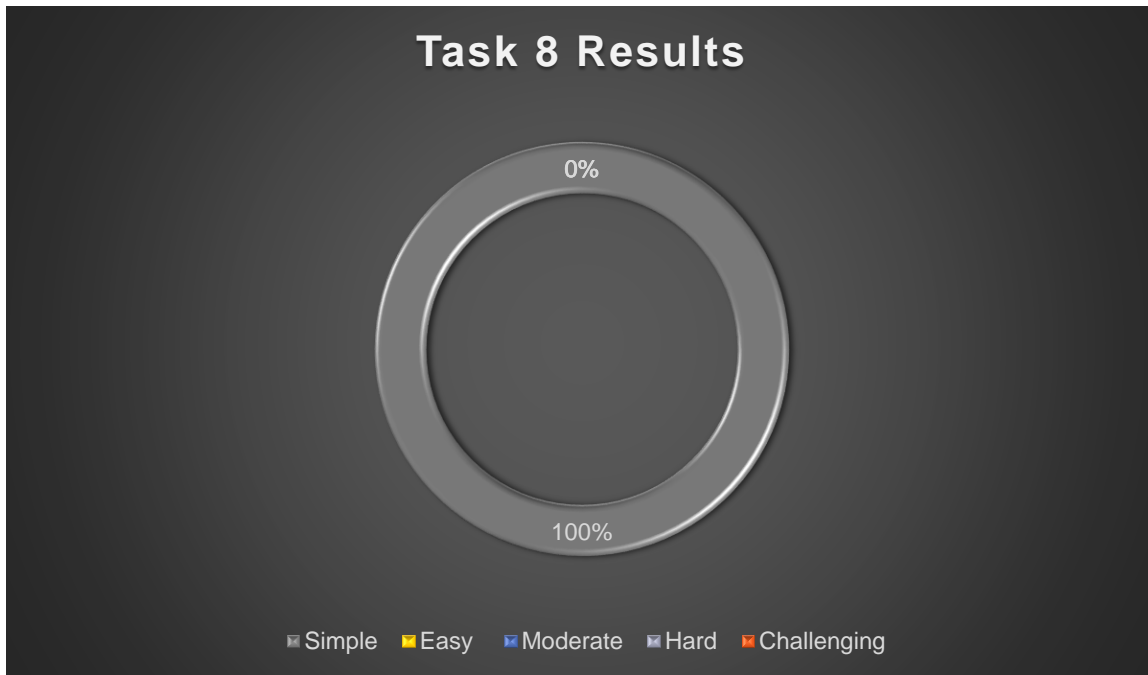
Rotation and zooming of the object was met with ease by all users.

TASK NINE(RETURN OBJECT TO A DEFAULT LAYOUT):

Task 9 Results

5%   5%

0%

15%

75%

◨ Simple ◨ Easy ◨ Moderate ◨ Hard ◨ Challenging
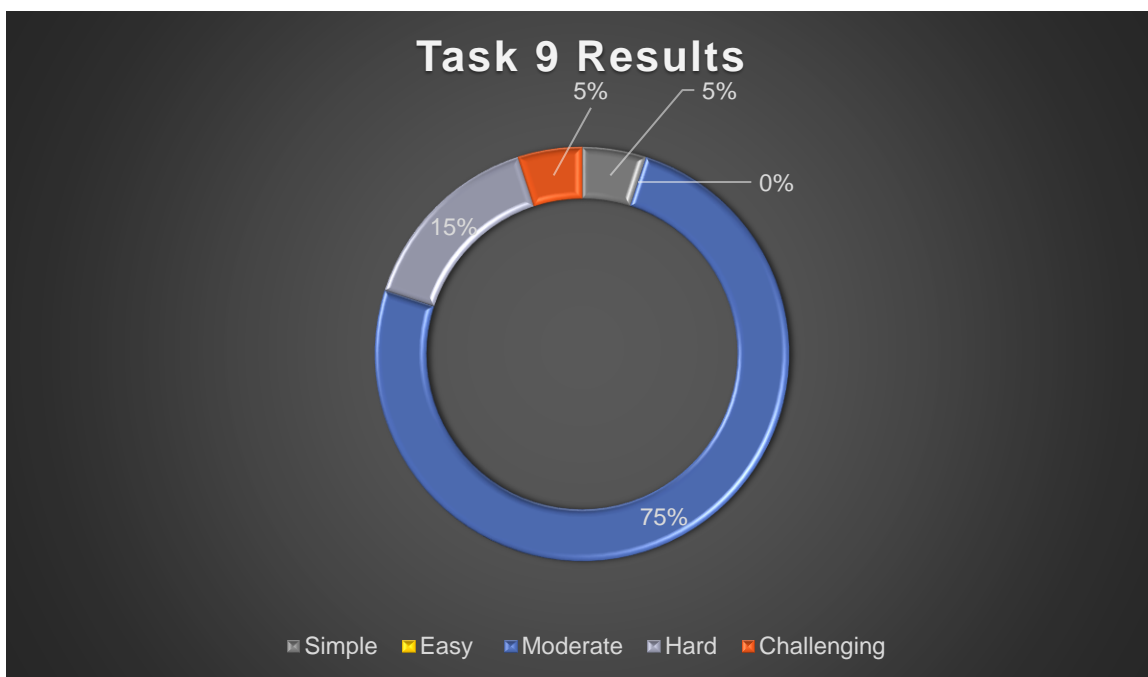
TASK TEN(OPEN THE USER MANUAL):

Task 10 Results

0%

100%

▣ Simple ▣ Easy ▣ Moderate ▣ Hard ▣ Challenging
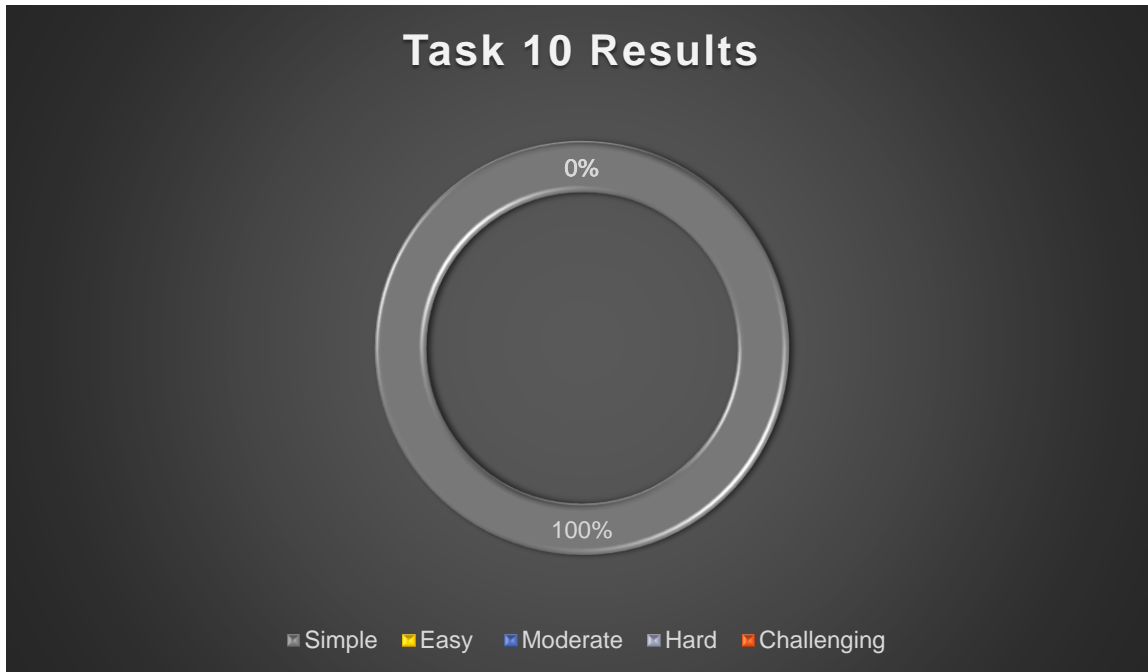
TASK ELEVEN(APPLY BUMP MAPPING TO THE OBJECT):

Task 11 Results

▣ 1st Qtr ▣ 2nd Qtr ▣ 3rd Qtr ▣ 4th Qtr ▣
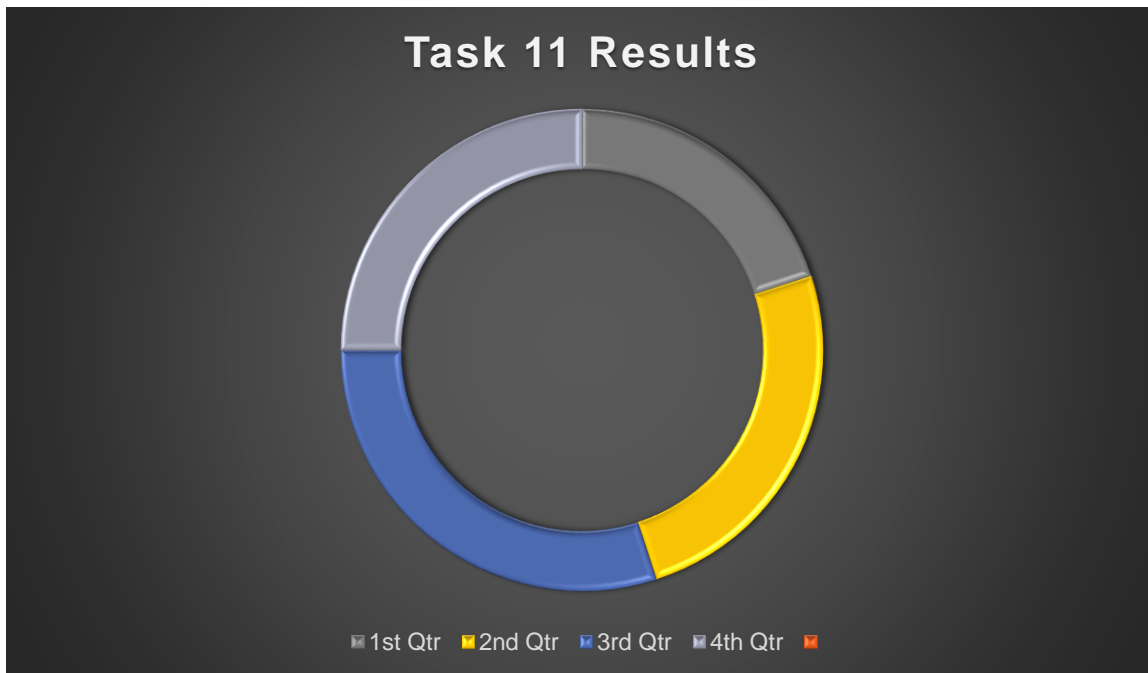
Users commented that after changing a shape in rules file they found dealing with the rules file simpler.

TASK TWELVE(OPEN A LIST OF DIFFERENT TEXTURES):

Task 12 Results

◼ Simple ◼ Easy ◼ Moderate ◼ Hard ◼ Challenging

TASK THIRTEEN(OPEN A LIST OF TEXTURES):

Task 13 Results

◼ Simple ◼ Easy ◼ Moderate ◼ Hard ◼ Challenging
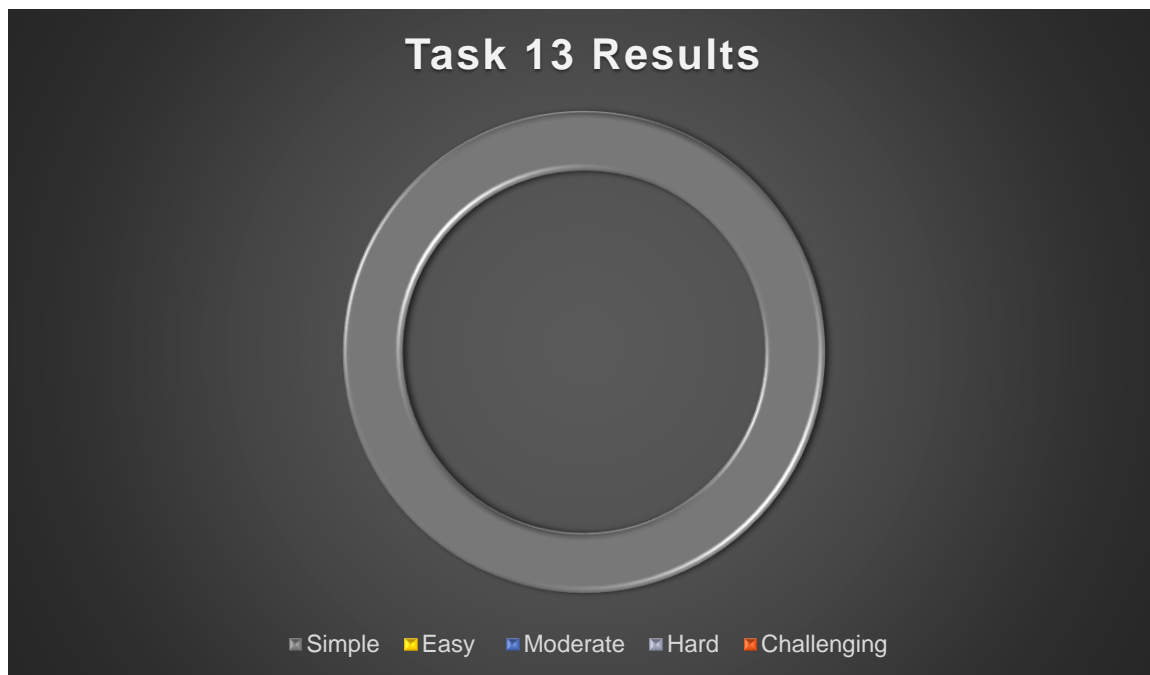
Users found open lists and documents easy with the use of the available buttons.

TASK FOURTEEN(USE MAGICVOXEL TO CREATE AN OBJECT):

Task 14 Results

Simple Easy Moderate Hard Challenging
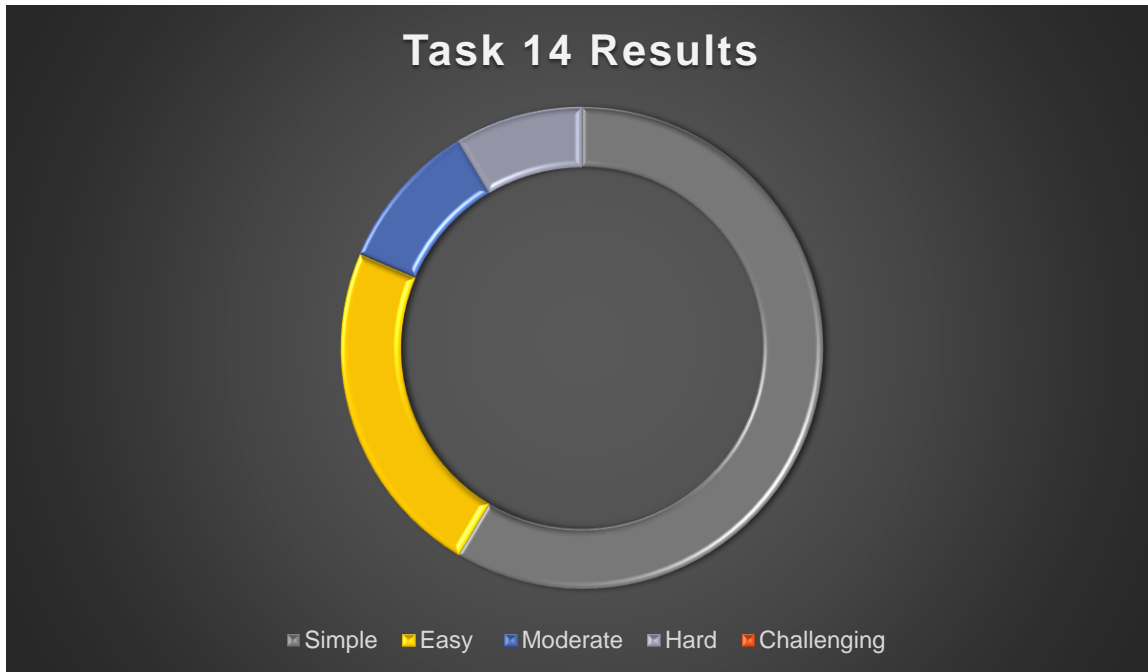
TASK FIFTEEN(UPLOAD NEW OBJECT):

Task 15 Results

Simple Easy Moderate Hard Challenging
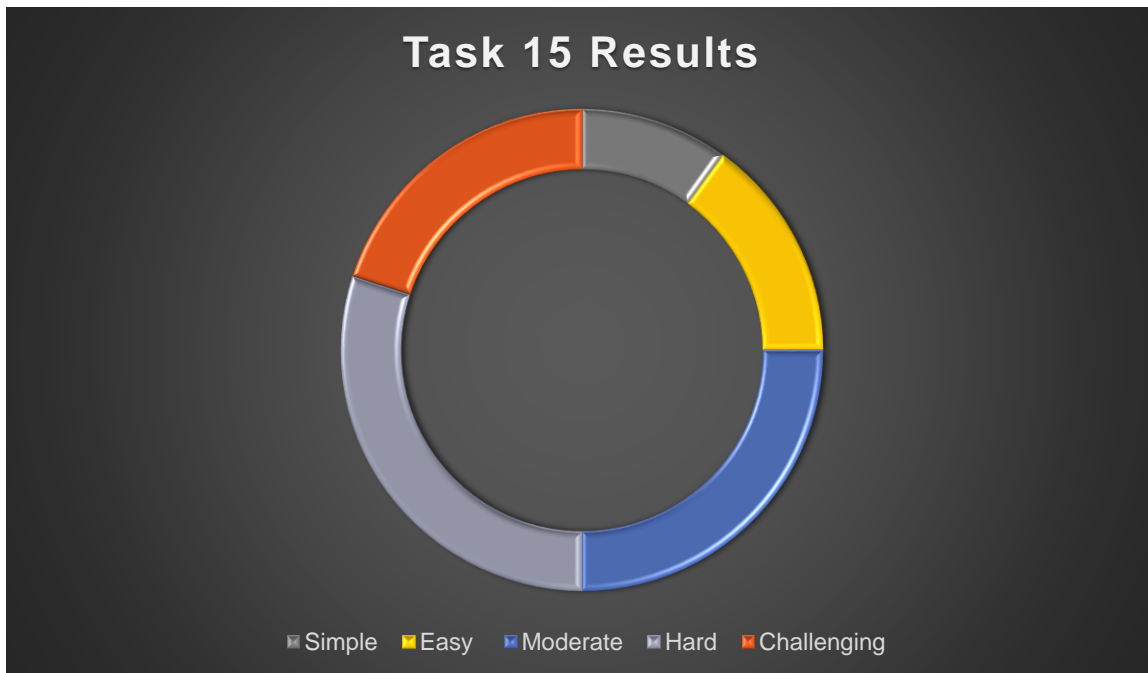
Users found this task to be more enjoyable and only struggled when uploading objs that were large or one where there were blocks diagonal to each other.

TASK SIXTEEN(DOWNLOAD MINIFIED JAVASCRIPT):

TASK SEVENTEEN(ADD RULE TO RULE FILE):

TASK EIGHTEEN(CHANGE EVERYTHING INTO CUBES):

Graph showing time taken to finish tasks

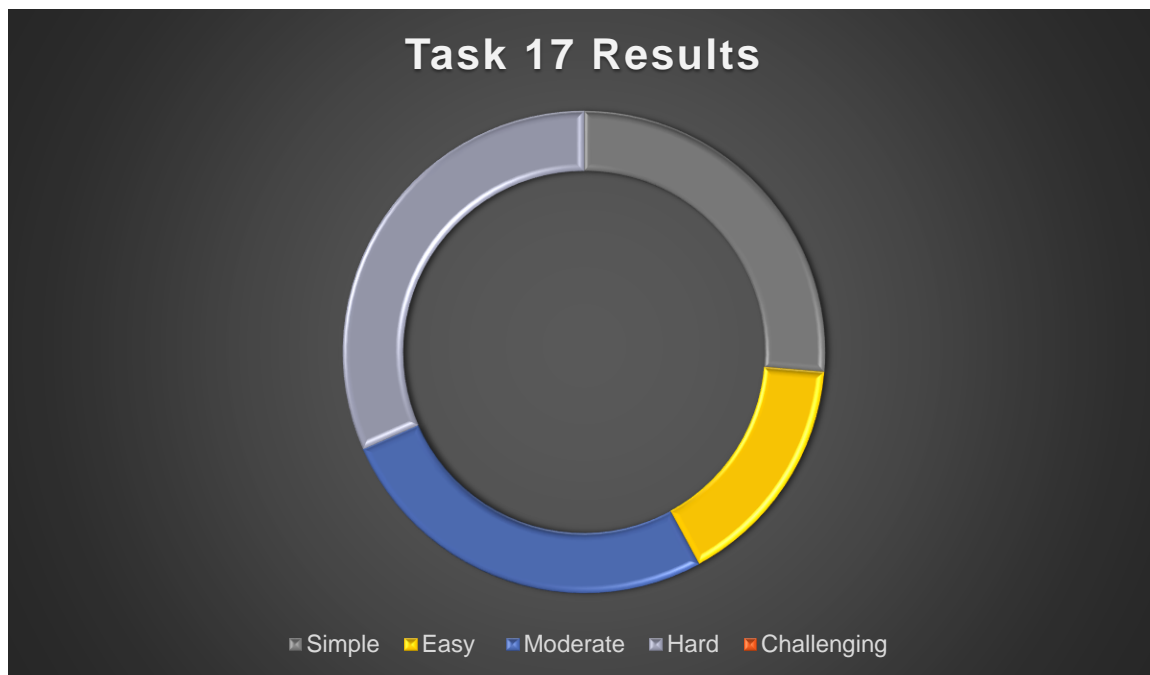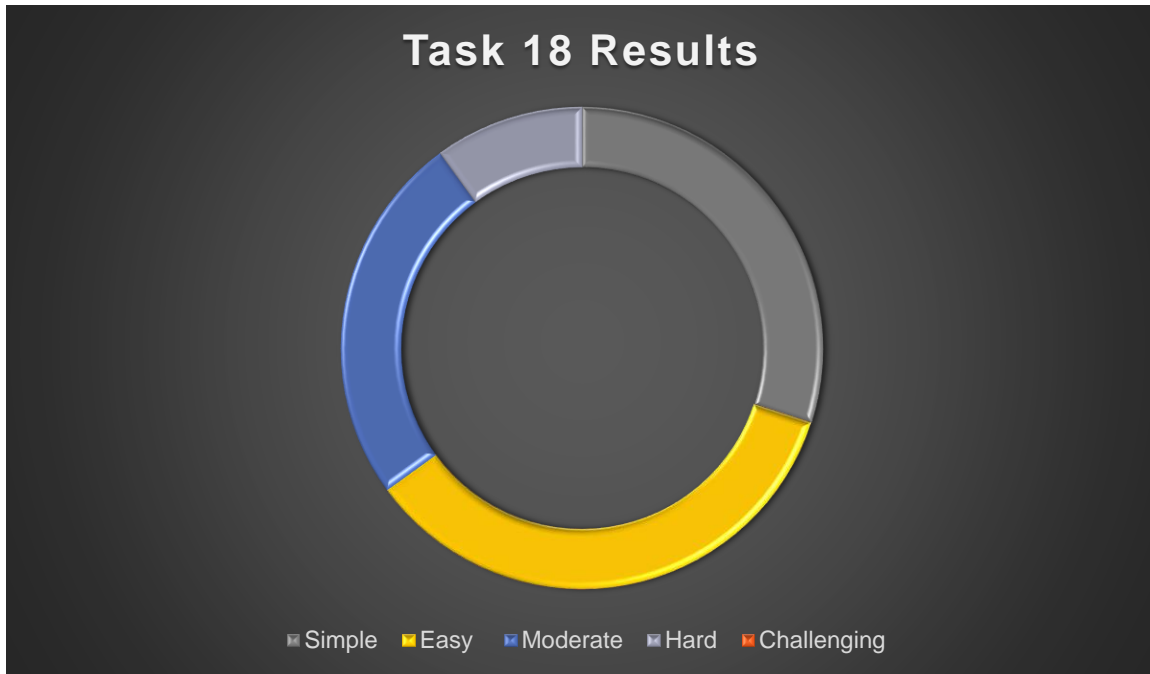|	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
Minimum Time	2.3	2.5	3.5	4.5	3.6	4.2
Average Time	3.2	4.4	1.8	2.8	4.5	8.5
Maximum Time	4.5	7.6	6.5	8	12	13.3

■ Minimum Time   ■ Average Time   ■ Maximum Time

Graph showing time taken to finish tasks

	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
Minimum Time	1.3	1.5	3.9	2.8	6.5	2
Average Time	2.7	2.4	7.4	3.6	9.8	4.2
Maximum Time	4.9	5.6	12.7	5.4	12.7	6.3

■ Minimum Time   ■ Average Time   ■ Maximum Time

Graph showing time taken to finish tasks

	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
Minimum Time	2.2	12.6	3.2	2.4	3.5	5.5
Average Time	3.5	16.8	4.5	3.6	4.6	7.9
Maximum Time	4.6	23	7.2	4.1	5.2	10.3

The time taken to finish the tasks shows us that the uploading is restricted by the speed of the upload but the actual tasks are easily performed. Other manipulation tasks took users longer but after using the rules file once or twice their task speed sped up.