

Simplify Polygon Tool Command Line

Version 1.0



User Manual

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1. Overview

Simplify Polygon Tool – Command Line simplifies the mesh in the given .obj file. This tool is easy to use and categorized into two Command Line products. The only parameter needed is either the target number of remaining triangles or percentage to retain. The user does not need to set any trade-off between texture and geometry fidelity. The simplified model is guaranteed to be seamless free automatically.

Unlike GUI version, command line version can be used to perform batch processing. User can either choose to give reduction method parameters per folder or per file.

Note: In batch processing, the reduction method parameter per file will work only on type (2) Command Line – Input tool.

2. Steps

Simplify Polygon Tool Command Line is categorized into two different products as below.

1. Command Line – Invoke

Invoke the “CruncherCMD” command from the command line by traversing to “CruncherCMD.exe” file location and pass in the necessary parameters as defined in the below usages.

2. Command Line – Input

This command line tool is easier to use. User need to launch the “CruncherCMDInput.exe” file and just follow the process as defined in the below usages.

3. Usage

1. Command Line – Invoke

This tool can be invoked from Command Line as a command and pass in the following parameters to perform either file processing or batch processing.

CruncherCMD	/i	[input_file_name.obj input_folder]
	/o	[output_file_name.obj output_folder]

[/f /p]	[number_of_faces percentage]
[/h /help]	help_options

where,

/i	Input OBJ file name with extension or input folder (without extension) & (with double quotes)
/o	Output OBJ file name with extension or output folder (without extension) & (with double quotes)
/f	Number of faces to retain
/p	Percentage to retain
[/h /help]	Usage or help options

Example (Percentage):

```
CruncherCMD /i "C:\temp\input.obj" /o "C:\temp\output.obj" /p 50.25
```

Example (Number of faces):

```
CruncherCMD /i "C:\temp\input.obj" /o "C:\temp\output.obj" /f 1000
```

Example (Batch processing):

```
CruncherCMD /i "C:\temp\inputFolder" /o "C:\temp\outputFolder" /p 75
```

Invalid Example (Batch processing):

```
CruncherCMD /i "C:\temp\inputFolder\" /o "C:\temp\outputFolder\" /p 0.1
```

Note: For Batch processing - Folders name should not end with “\”

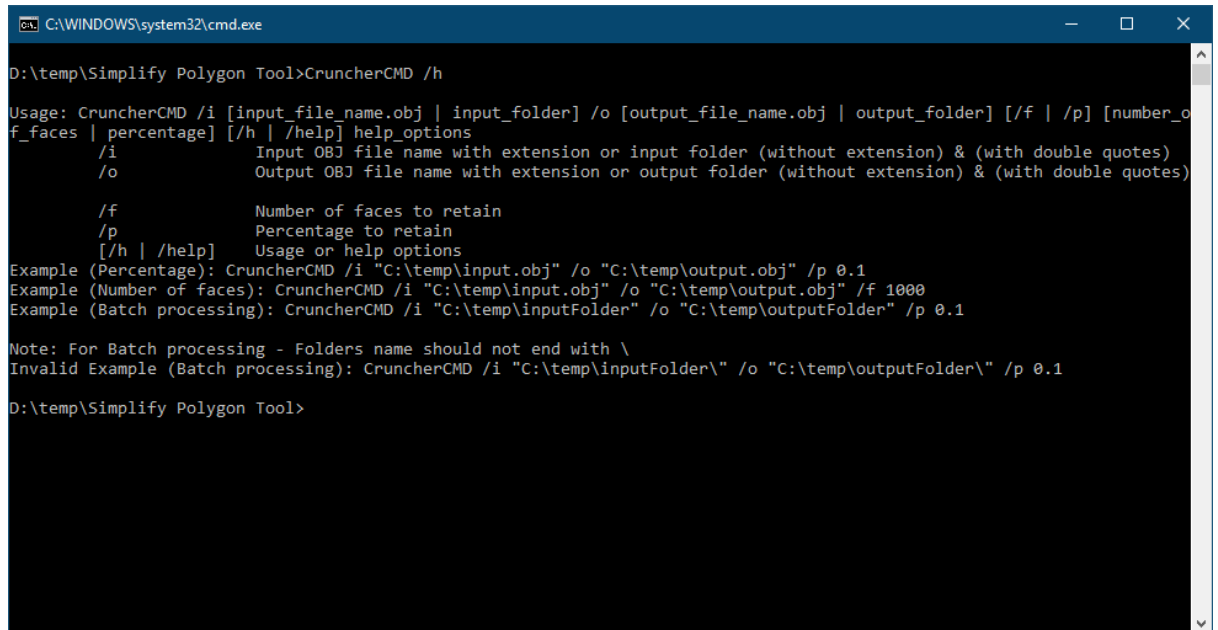
2. Command Line – Input

This tool is easier to launch and use. User need to launch the “CruncherCMDInput.exe” file and just follow the process. Please refer screenshots for more information.

4. Screenshots

1. Command Line – Invoke

1. Usages / Help



```
C:\WINDOWS\system32\cmd.exe

D:\temp\Simplify Polygon Tool>CruncherCMD /h

Usage: CruncherCMD /i [input_file_name.obj | input_folder] /o [output_file_name.obj | output_folder] [/f | /p] [number_of_faces | percentage] [/h | /help] help_options
      /i          Input OBJ file name with extension or input folder (without extension) & (with double quotes)
      /o          Output OBJ file name with extension or output folder (without extension) & (with double quotes)

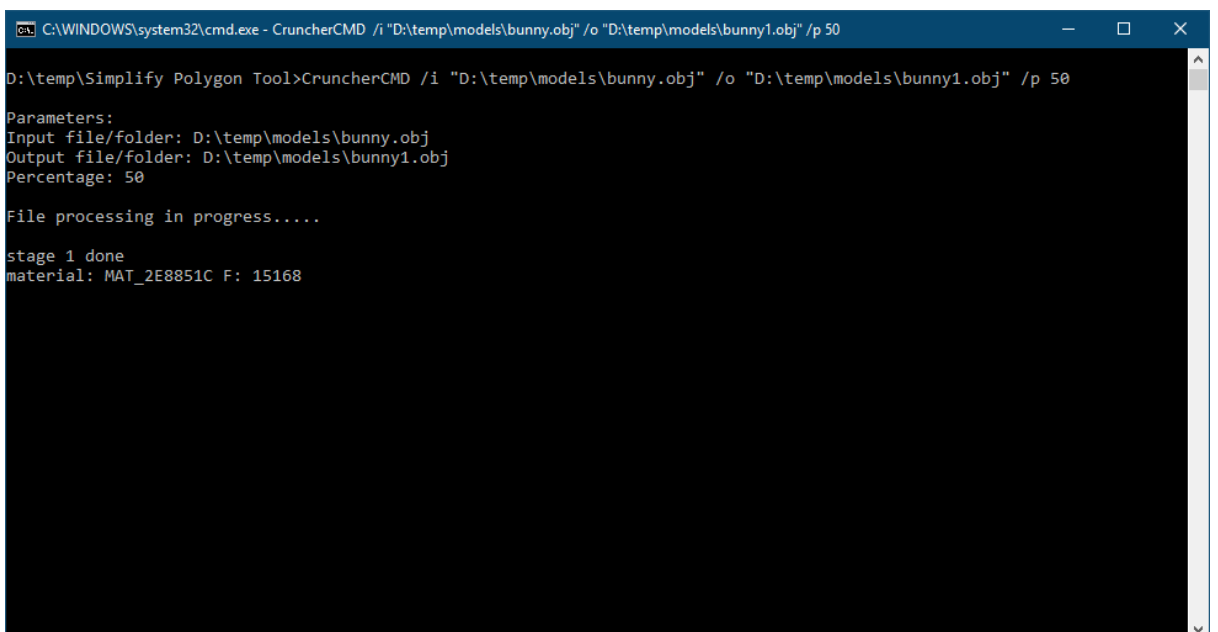
      /f          Number of faces to retain
      /p          Percentage to retain
      [/h | /help] Usage or help options

Example (Percentage): CruncherCMD /i "C:\temp\input.obj" /o "C:\temp\output.obj" /p 0.1
Example (Number of faces): CruncherCMD /i "C:\temp\input.obj" /o "C:\temp\output.obj" /f 1000
Example (Batch processing): CruncherCMD /i "C:\temp\inputFolder" /o "C:\temp\outputFolder" /p 0.1

Note: For Batch processing - Folders name should not end with \
Invalid Example (Batch processing): CruncherCMD /i "C:\temp\inputFolder\" /o "C:\temp\outputFolder\" /p 0.1

D:\temp\Simplify Polygon Tool>
```

2. File Processing (Percentage)



```
C:\WINDOWS\system32\cmd.exe - CruncherCMD /i "D:\temp\models\bunny.obj" /o "D:\temp\models\bunny1.obj" /p 50

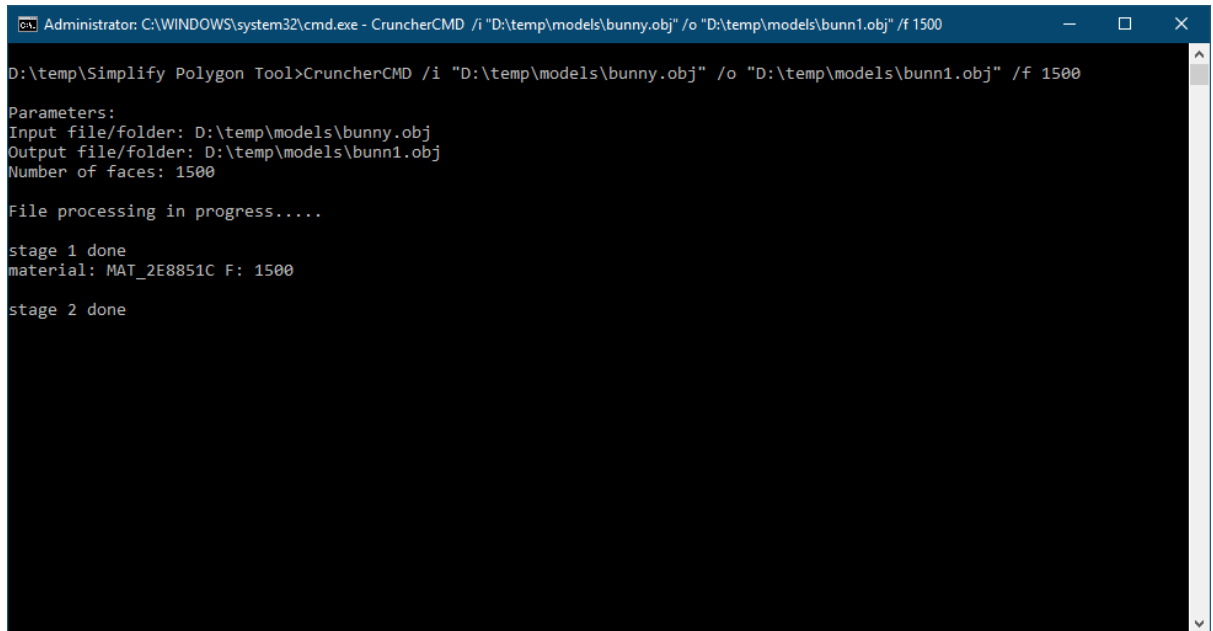
D:\temp\Simplify Polygon Tool>CruncherCMD /i "D:\temp\models\bunny.obj" /o "D:\temp\models\bunny1.obj" /p 50

Parameters:
Input file/folder: D:\temp\models\bunny.obj
Output file/folder: D:\temp\models\bunny1.obj
Percentage: 50

File processing in progress.....

stage 1 done
material: MAT_2E8851C F: 15168
```

3. File Processing (Number of Faces)



```
Administrator: C:\WINDOWS\system32\cmd.exe - CruncherCMD /i "D:\temp\models\bunny.obj" /o "D:\temp\models\bunn1.obj" /f 1500

D:\temp\Simplify Polygon Tool>CruncherCMD /i "D:\temp\models\bunny.obj" /o "D:\temp\models\bunn1.obj" /f 1500

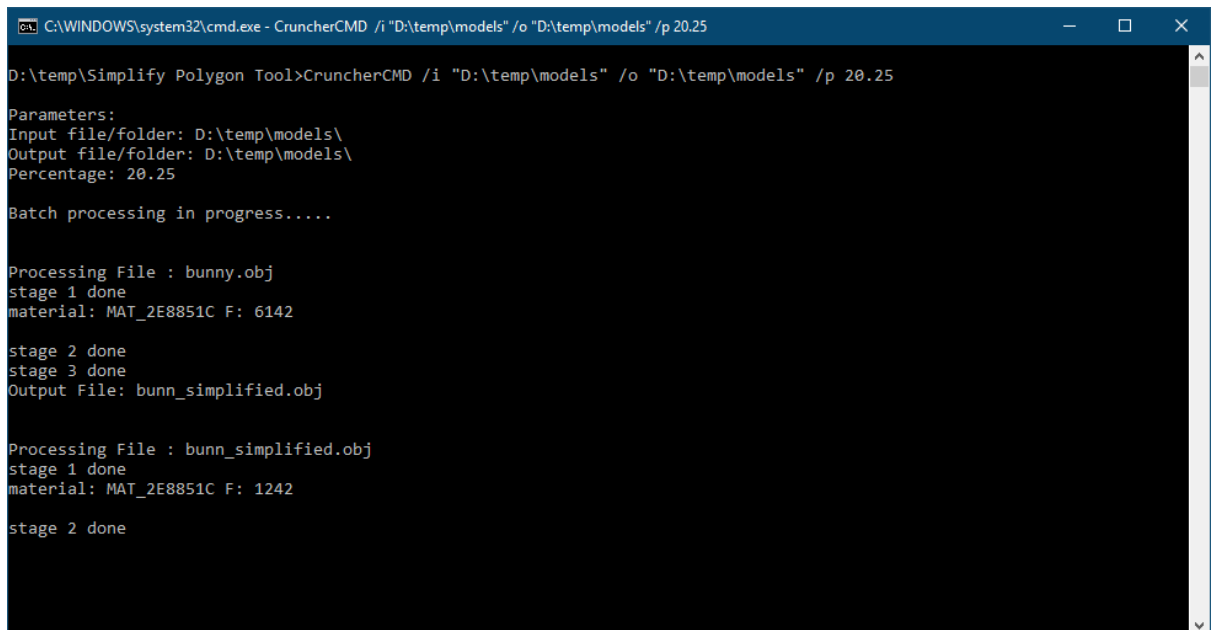
Parameters:
Input file/folder: D:\temp\models\bunny.obj
Output file/folder: D:\temp\models\bunn1.obj
Number of faces: 1500

File processing in progress.....

stage 1 done
material: MAT_2E8851C F: 1500

stage 2 done
```

4. Batch Processing (Percentage)



```
C:\WINDOWS\system32\cmd.exe - CruncherCMD /i "D:\temp\models\" /o "D:\temp\models\" /p 20.25

D:\temp\Simplify Polygon Tool>CruncherCMD /i "D:\temp\models\" /o "D:\temp\models\" /p 20.25

Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\
Percentage: 20.25

Batch processing in progress.....

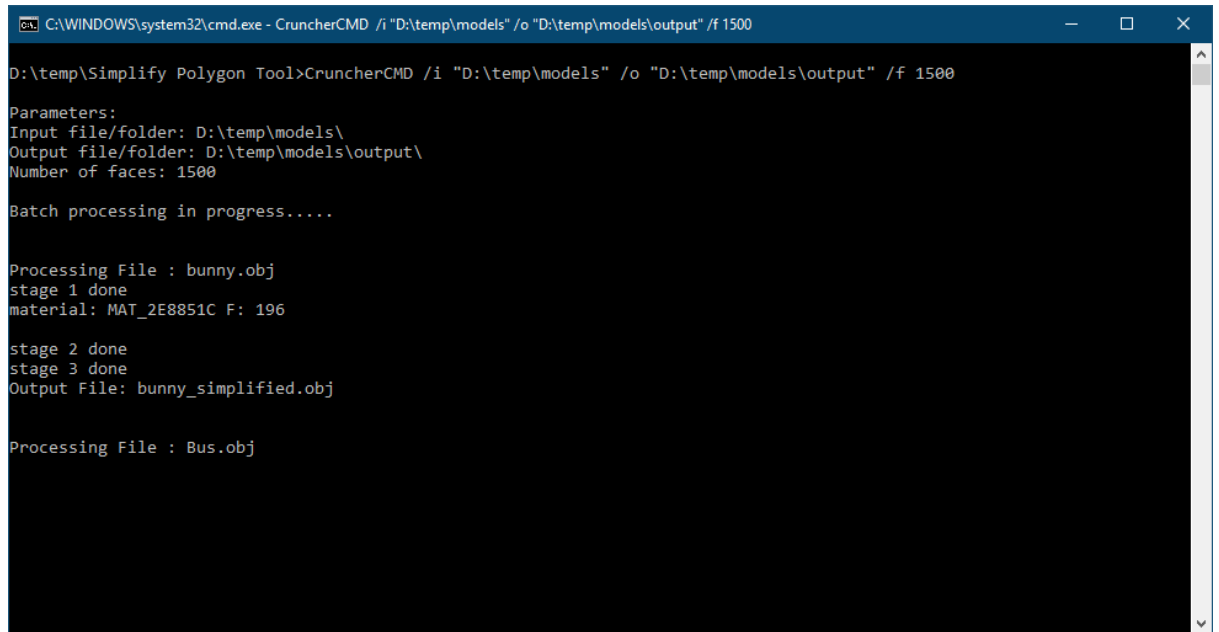
Processing File : bunny.obj
stage 1 done
material: MAT_2E8851C F: 6142

stage 2 done
stage 3 done
Output File: bunn_simplified.obj

Processing File : bunn_simplified.obj
stage 1 done
material: MAT_2E8851C F: 1242

stage 2 done
```

5. Batch Processing (Number of Faces)



```
C:\WINDOWS\system32\cmd.exe - CruncherCMD /i "D:\temp\models" /o "D:\temp\models\output" /f 1500

D:\temp\Simplify Polygon Tool>CruncherCMD /i "D:\temp\models" /o "D:\temp\models\output" /f 1500

Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\output\
Number of faces: 1500

Batch processing in progress....

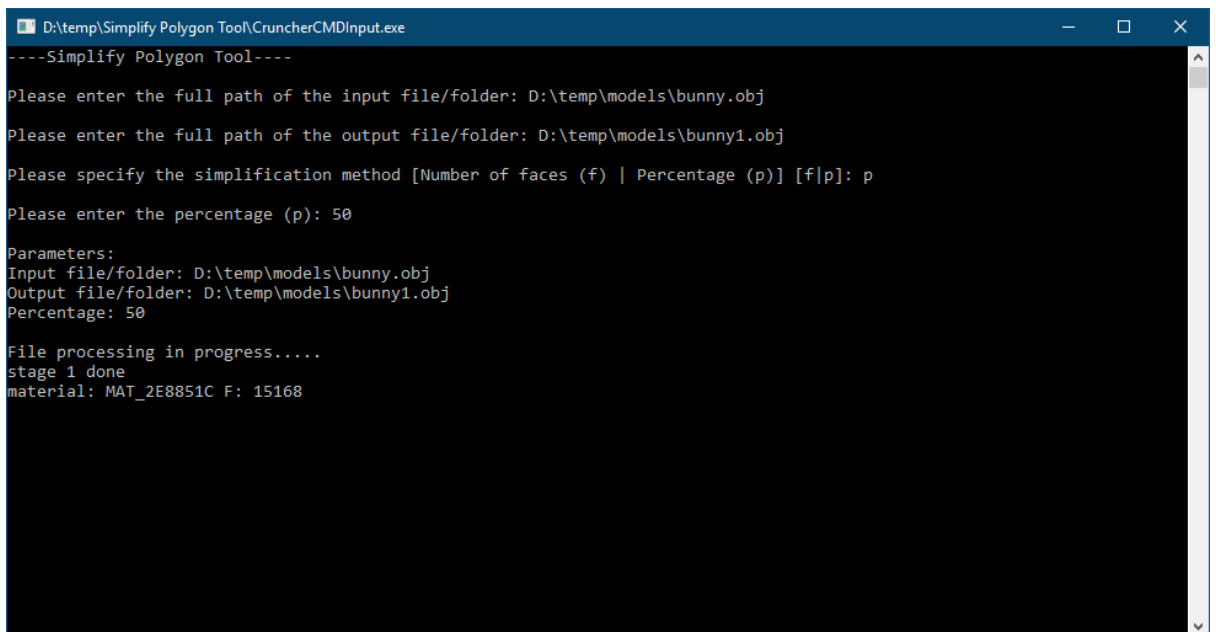
Processing File : bunny.obj
stage 1 done
material: MAT_2E8851C F: 196

stage 2 done
stage 3 done
Output File: bunny_simplified.obj

Processing File : Bus.obj
```

6. Command Line – Input

1. File processing (Percentage)



```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe

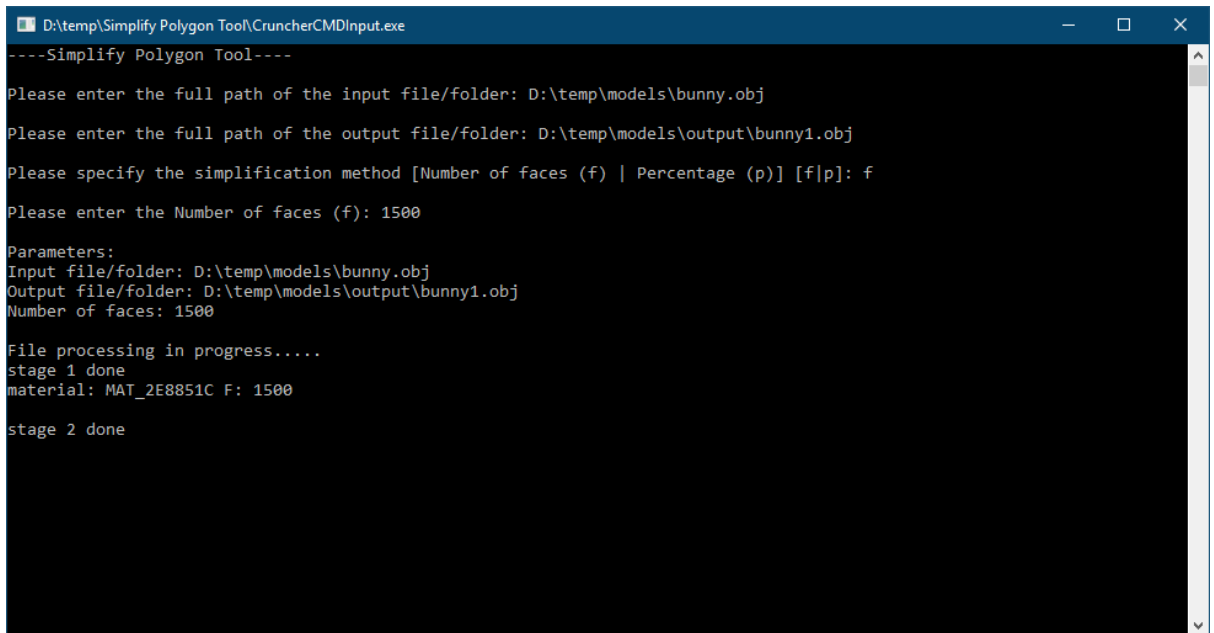
---Simplify Polygon Tool---

Please enter the full path of the input file/folder: D:\temp\models\bunny.obj
Please enter the full path of the output file/folder: D:\temp\models\bunny1.obj
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: p
Please enter the percentage (p): 50

Parameters:
Input file/folder: D:\temp\models\bunny.obj
Output file/folder: D:\temp\models\bunny1.obj
Percentage: 50

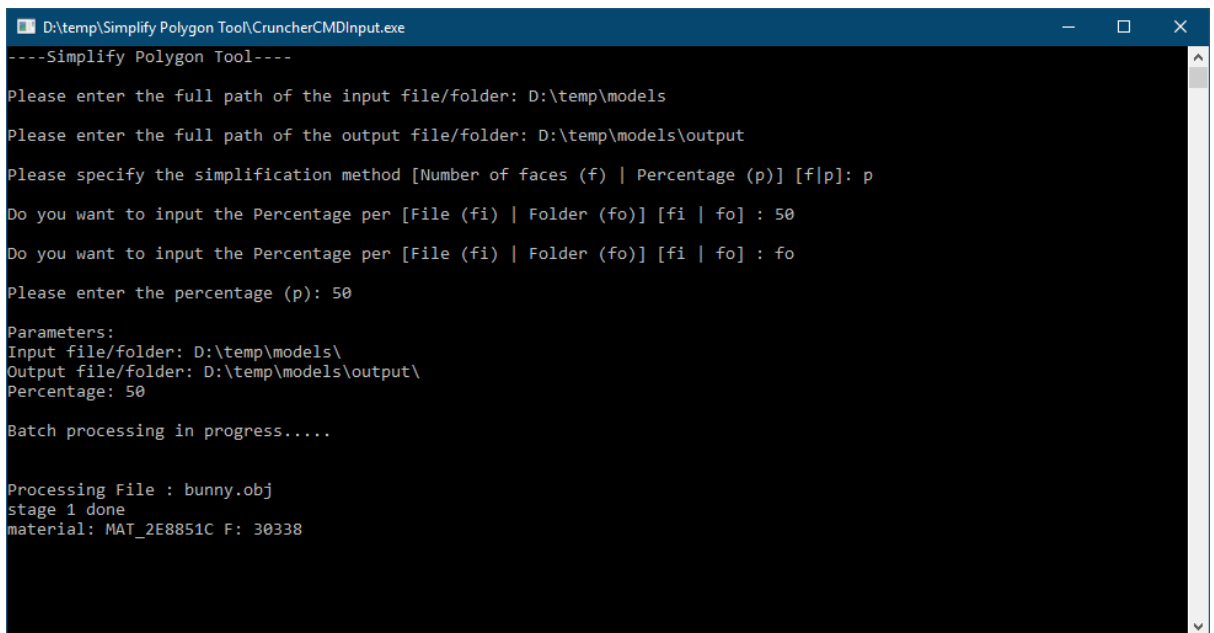
File processing in progress....
stage 1 done
material: MAT_2E8851C F: 15168
```

2. File Processing (Number of Faces)



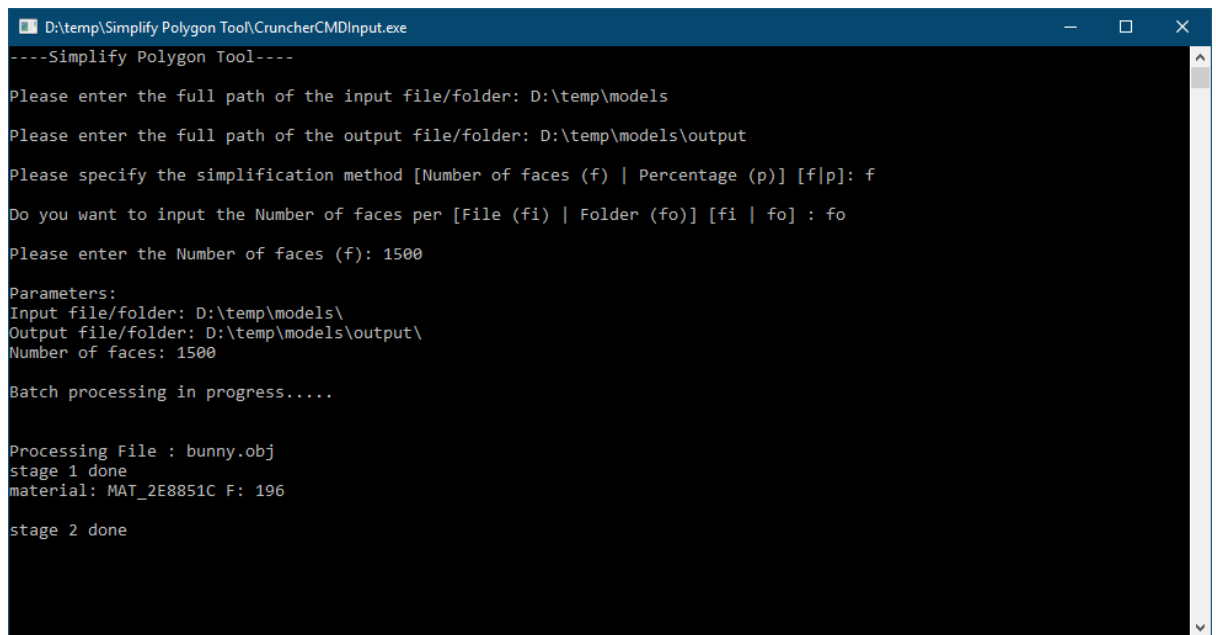
```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe
---Simplify Polygon Tool---
Please enter the full path of the input file/folder: D:\temp\models\bunny.obj
Please enter the full path of the output file/folder: D:\temp\models\output\bunny1.obj
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: f
Please enter the Number of faces (f): 1500
Parameters:
Input file/folder: D:\temp\models\bunny.obj
Output file/folder: D:\temp\models\output\bunny1.obj
Number of faces: 1500
File processing in progress.....
stage 1 done
material: MAT_2E8851C F: 1500
stage 2 done
```

3. Batch Processing (Percentage per Folder)



```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe
---Simplify Polygon Tool---
Please enter the full path of the input file/folder: D:\temp\models
Please enter the full path of the output file/folder: D:\temp\models\output
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: p
Do you want to input the Percentage per [File (fi) | Folder (fo)] [fi | fo] : 50
Do you want to input the Percentage per [File (fi) | Folder (fo)] [fi | fo] : fo
Please enter the percentage (p): 50
Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\output\
Percentage: 50
Batch processing in progress.....
Processing File : bunny.obj
stage 1 done
material: MAT_2E8851C F: 30338
```

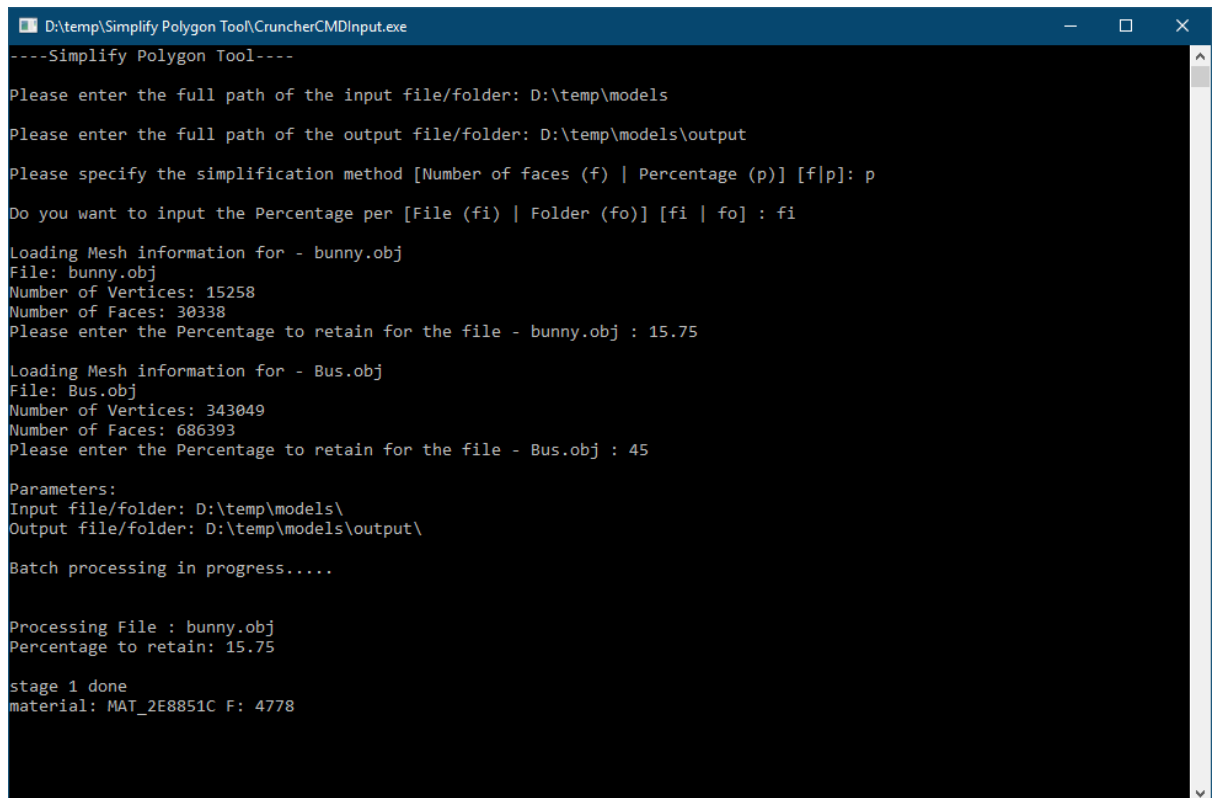

4. Batch Processing (Number of Faces *per Folder*)



```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe
----Simplify Polygon Tool----
Please enter the full path of the input file/folder: D:\temp\models
Please enter the full path of the output file/folder: D:\temp\models\output
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: f
Do you want to input the Number of faces per [File (fi) | Folder (fo)] [fi | fo] : fo
Please enter the Number of faces (f): 1500
Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\output\
Number of faces: 1500
Batch processing in progress....

Processing File : bunny.obj
stage 1 done
material: MAT_2E8851C F: 196
stage 2 done
```

5. Batch Processing (Percentage *per File*)



```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe
----Simplify Polygon Tool----
Please enter the full path of the input file/folder: D:\temp\models
Please enter the full path of the output file/folder: D:\temp\models\output
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: p
Do you want to input the Percentage per [File (fi) | Folder (fo)] [fi | fo] : fi
Loading Mesh information for - bunny.obj
File: bunny.obj
Number of Vertices: 15258
Number of Faces: 30338
Please enter the Percentage to retain for the file - bunny.obj : 15.75
Loading Mesh information for - Bus.obj
File: Bus.obj
Number of Vertices: 343049
Number of Faces: 686393
Please enter the Percentage to retain for the file - Bus.obj : 45
Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\output\
Batch processing in progress....

Processing File : bunny.obj
Percentage to retain: 15.75
stage 1 done
material: MAT_2E8851C F: 4778
```

6. Batch Processing (Number of Faces *per File*)

```
D:\temp\Simplify Polygon Tool\CruncherCMDInput.exe
----Simplify Polygon Tool----
Please enter the full path of the input file/folder: D:\temp\models
Please enter the full path of the output file/folder: D:\temp\models\output
Please specify the simplification method [Number of faces (f) | Percentage (p)] [f|p]: f
Do you want to input the Number of faces per [File (fi) | Folder (fo)] [fi | fo] : fi
Loading Mesh information for - bunny.obj
File: bunny.obj
Number of Vertices: 15258
Number of Faces: 30338
Please enter the Number of Faces to retain for the file - bunny.obj : 1500
Loading Mesh information for - Bus.obj
File: Bus.obj
Number of Vertices: 343049
Number of Faces: 686393
Please enter the Number of Faces to retain for the file - Bus.obj : 8000
Parameters:
Input file/folder: D:\temp\models\
Output file/folder: D:\temp\models\output\
Batch processing in progress....
Processing File : bunny.obj
Percentage to retain: 6.37345e-322
stage 1 done
material: MAT_2E8851C F: 196
stage 2 done
```

5. Support

Website: <https://www.codefarm.sg>

Email: contact@codefarm.sg