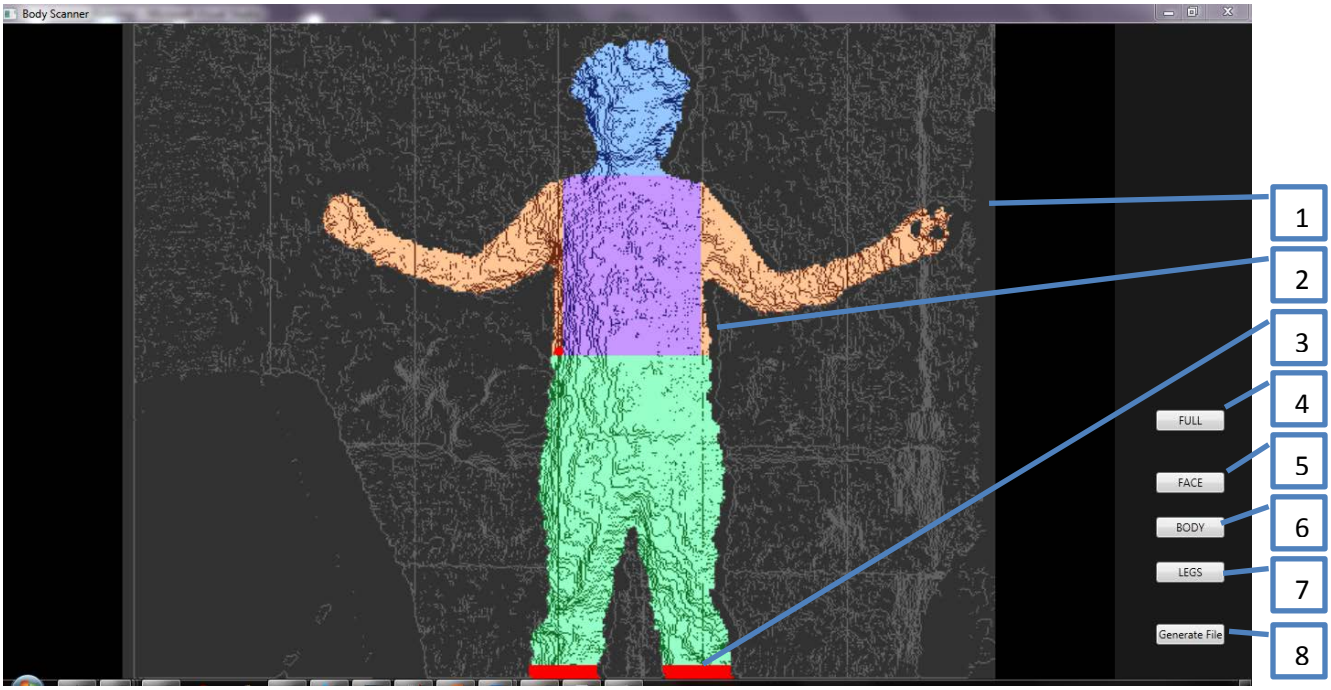
Body Scanner – User Manual

Requirements

- Computer with Kinect for Windows SDK version 1.5 or higher.
- Kinect Camera with cable USB for computer.

Screen



1. The background, all what is gray will not became part of the model.
2. The body detected for scanning.
    - Blue: Head
    - Purple: Torso
    - Orange: Arms
    - Green: legs
3. Red: Body section near borders
4. Button to scan the whole body at once.
5. Button to scan head section.
6. Button to scan torso section (include arms).
7. Button to scan legs section.
8. Button to generate the 3D model.

Instructions

- One person is going to be scanned while other one is going to help pressing the scan buttons.
- (The order of the scanning process doesn't affect the result)
- The first action should be to scan a specific part of the body pressing in the corresponding button, or pressing 'FULL' to scan all what is visible from the body.
- While scanning a specific part of the body in general the more the cover from the screen the more detail it will contain.
- Try to have the Kinect at the middle of the scanned section.
- If a button is pressed to scan a section already scanned, it will overwrite the information with the new data from the scanning.
- The button 'Generate File' will create a 3D file using all the date from the last scan in each section. If a section was never scanned it will appear empty in the model.

Files

BodyScanner.exe
Main program to run the application.

PCL_EXE.exe
This is used inside the program to connect the points from the Point Cloud.

PCD_VIEW
This tool can be called from the command prompt followed by a PCD file to open the Point Cloud.

Default.dae
This is the template from the 3D file, used to create Collada files with the data created from *PCL_EXE*.

Manual to generate ColladaFile.txt
Instructions saying what to change in the Collada template to create a 3D file.

Coordenadas.txt
It the position of all the points from the body scanned by the Kinect, plus the number of points in the file.

Scanned_body.pcd
Point Cloud file with the data created by the Kinect

Data_body.txt
File with all the Vertexes, Normals, Indices and Triangles Index, data that will be used to create the Collada file.

Test_body1.pcd
Point Cloud file similar to *scanned_body* but with the Normals included.

Model_body.dae
Final Collada file, here is created the mesh ready to be opened in most of the 3D modeling software.