**Mohamed Eldakroury**

**ME557**

**Homework 2**

1. **Triangle Strip Model (41 Vertices) :**

**Strip 1**

|  |  |  |  |
| --- | --- | --- | --- |
| C:\Users\mdakrory\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Strip 1.jpg | | | |
| **Point** | **X** | **Y** | **Z** |
| 1 | 1 | 0 | 2 |
| 2 | 1 | 1 | 2 |
| 3 | 1 | 0 | 0 |
| 4 | 1 | 1 | 0 |
| 5 | 0 | 0 | 0 |
| 6 | 0 | 1 | 0 |
| 7 | 0 | 0 | 2 |
| 8 | 0 | 1 | 2 |
| 9 | 1 | 0 | 2 |

**Strip 2**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip2.JPG | | | |
| Point | X | Y | Z |
| 1 | 1 | 1 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 1 | 1 | 2 |
| 4 | 0 | 1 | 2 |

**Strip 3**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip3.JPG | | | |
| Point | X | Y | Z |
| 1 | 1 | 0 | 0 |
| 2 | 0 | 0 | 0 |
| 3 | 1 | 0 | 2 |
| 4 | 0 | 0 | 2 |

**Strip 4**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip4.JPG | | | |
| Point | X | Y | Z |
| 1 | 3 | 0 | 2 |
| 2 | 3 | 1 | 2 |
| 3 | 1 | 0 | 2 |
| 4 | 1 | 2 | 2 |
| 5 | 0 | 1 | 2 |
| 6 | 0 | 2 | 2 |

**Strip 5**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip5.JPG | | | |
| Point | X | Y | Z |
| 1 | 3 | 0 | 2 |
| 2 | 3 | 1 | 3 |
| 3 | 3 | 0 | 3 |
| 4 | 3 | 1 | 3 |
| 5 | 1 | 2 | 2 |
| 6 | 1 | 2 | 3 |
| 7 | 0 | 2 | 2 |
| 8 | 0 | 2 | 3 |

**Strip 6**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip6.JPG | | | |
| Point | X | Y | Z |
| 1 | 3 | 0 | 2 |
| 2 | 3 | 0 | 3 |
| 3 | 0 | 0 | 2 |
| 4 | 0 | 0 | 3 |

**Strip 7**

|  |  |  |  |
| --- | --- | --- | --- |
| \\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\Strip7.JPG | | | |
| Point | X | Y | Z |
| 1 | 3 | 0 | 3 |
| 2 | 3 | 1 | 3 |
| 3 | 1 | 0 | 3 |
| 4 | 1 | 2 | 3 |
| 5 | 0 | 0 | 3 |
| 6 | 0 | 2 | 3 |

1. **Polygon Model (50 Vertices)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 1** | | | | **Polygon 2** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon1.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon2.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 1 | 0 | 2 | **1** | 1 | 0 | 0 |
| **2** | 1 | 0 | 0 | **2** | 0 | 0 | 0 |
| **3** | 1 | 1 | 0 | **3** | 0 | 1 | 0 |
| **4** | 1 | 1 | 2 | **4** | 1 | 1 | 0 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 3** | | | | **Polygon 4** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon3.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon4.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 0 | 0 | 0 | **1** | 1 | 1 | 0 |
| **2** | 0 | 1 | 0 | **2** | 0 | 1 | 0 |
| **3** | 0 | 1 | 2 | **3** | 0 | 1 | 2 |
| **4** | 0 | 0 | 2 | **4** | 1 | 1 | 2 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 5** | | | | **Polygon 6** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon5.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon6.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 1 | 0 | 0 | **1** | 3 | 0 | 2 |
| **2** | 0 | 0 | 0 | **2** | 0 | 0 | 2 |
| **3** | 0 | 0 | 2 | **3** | 0 | 2 | 2 |
| **4** | 1 | 0 | 2 | **4** | 1 | 2 | 2 |
|  |  |  |  | **5** | 3 | 1 | 2 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 7** | | | | **Polygon 8** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon7.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon8.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 3 | 0 | 3 | **1** | 3 | 0 | 3 |
| **2** | 0 | 0 | 3 | **2** | 0 | 0 | 3 |
| **3** | 0 | 2 | 3 | **3** | 0 | 0 | 2 |
| **4** | 1 | 2 | 3 | **4** | 3 | 0 | 2 |
| **5** | 3 | 1 | 3 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 9** | | | | **Polygon 10** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon9.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon10.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 0 | 0 | 2 | **1** | 3 | 0 | 3 |
| **2** | 0 | 0 | 3 | **2** | 3 | 0 | 2 |
| **3** | 0 | 2 | 2 | **3** | 3 | 1 | 2 |
| **4** | 0 | 2 | 3 | **4** | 3 | 1 | 3 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Polygon 11** | | | | **Polygon 12** | | | |
| **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon11.JPG** | | | | **\\my.files.iastate.edu\Users\mdakrory\Documents\Fall2016\ME557\JHomeworks\HW1\polygon12.JPG** | | | |
| **Point** | **X** | **Y** | **Z** | **Point** | **X** | **Y** | **Z** |
| **1** | 3 | 1 | 3 | **1** | 1 | 2 | 3 |
| **2** | 3 | 1 | 2 | **2** | 1 | 2 | 2 |
| **3** | 1 | 2 | 2 | **3** | 0 | 2 | 2 |
| **4** | 1 | 2 | 3 | **4** | 0 | 2 | 3 |

|  |  |
| --- | --- |
| **Strip Model** | **Polygon Model** |
| **C:\Users\alaae\Documents\Fall2016\ME557\Homework1\Trianglestrip.jpg** | **C:\Users\alaae\Documents\Fall2016\ME557\Homework1\PolygonModel.jpg** |
| Almost fine | Totally distorted, I think the problem maybe of how I used Gl\_Polygon |