

# CONTENTS

<b>1. INTRODUCTION</b>	<b>1-4</b>
1.1 What is OpenGL?	1
1.2 What is GLUT?	1
1.3 How does OpenGL work?	1
1.4 How can we use GLUT?	2
1.5 OpenGL rendering pipelining	3
<b>2. HARDWARE AND SOFTWARE REQUIREMENTS</b>	<b>5</b>
2.1 Hardware Requirements	5
2.2 Software Requirements	5
<b>3. PROJECT DESIGN</b>	<b>7</b>
<b>4. PROJECT IMPLEMENTATION</b>	<b>7-12</b>
4.1 Header Files	7
4.2 Functions Used	8
4.3 APIs Used	9
4.3.1 glut APIs	9
4.3.2 gl APIs	11
<b>5. SAMPLE CODE</b>	<b>13-41</b>
<b>6. OUTPUT</b>	<b>42-44</b>
<b>7. COST ESTIMATION</b>	<b>45-46</b>
<b>8. CONCLUSION</b>	<b>47</b>
<b>9. REFERENCES</b>	<b>48</b>

## LIST OF FIGURES

Sl. No. Figure Name	Pg No.
<b>1.Figure 1.1:</b> Order of operations	4
<b>2.Figure 6.1:</b> Front page	32
<b>3.Figure 6.2:</b> padlock in locked state	32
<b>4.Figure 6.3:</b> Padlock in unlocked state	33
<b>5.Figure 6.4:</b> Pattern lock in locked state	33
<b>6.Figure 6.5:</b> Pattern lock in unlocked state	34