

3.3.2 Sparse Data using QuadTree	8
3.4 Limitations of QuadTree	8
3.5 Types of QuadTree	9
3.6 Working of QuadTree	9
3.7 Algorithm	10
3.8 Insertion in QuadTree	11
3.9 Search in QuadTree	11
3.10 Complexity	11
3.10.1 Time Complexity	11
3.10.2 Space Complexity	12
3.11 Collision in QuadTree	12
3.12 Coefficient of Restitution	12
3.13 Workflow of QuadTree	13
3.14 Model Architecture	13
3.15 Performance Testing Steps	14
Chapter 4 Requirements	16
4.1 Software Requirements	16
4.2 Hardware Requirements	16
4.3 Tools Used	16
4.4 Technologies Used	16
Chapter 5 Design	17
5.1 Experimental Setup	17

