

<b>Contents</b>	<b>Page No.</b>
<b>Chapter 1: Introduction</b>	<b>1</b>
1.1. Problem Definition	1
<b>Chapter 2: Background study</b>	<b>2</b>
2.1 Android	2
2.1.1 Android Architecture	3
2.1.2 Android Application Components	4
2.1.3 Application Life-cycles	5
2.1.4 Android Software Development Kit and Environment	8
2.1.5 Android User Interface and Touch Screen	9
2.2 Bluetooth	11
2.3 Java	11
2.4 Eclipse	12
2.4.1 Eclipse Architecture	13
2.5 Android Virtual Device	14
2.6 Project Components	15
2.6.1 Android Project Component	15
2.6.2 Java Project Components	15
<b>Chapter 3: Application prerequisite for development</b>	<b>16</b>
3.1 Client Application Requirements and Descriptions	16
3.1.1 Android Application Background and Specifications	16
<b>Chapter 4: Proposed Framework</b>	<b>17</b>
4.1 Android Bluetooth protocol	17
4.1.1 Bluetooth Architecture	17
4.1.2 Bluetooth Stack	18
4.2 Design of Android Bluetooth Communication	19
4.2.1 Chat room framework design	19
4.2.2 Bluetooth interface	20
4.2.3 Finding Device	20
4.2.4 Establishing Connection	21
4.3 Proposed Framework layout	21
4.3.1 Work Flow Diagram of the Chat Application	22
4.4 Server Side	22
4.5 Client side	23
4.6 Management of Connection	23
<b>Chapter 5: Implementation</b>	<b>24</b>
5.1 Architectural Design	24
5.2 Bluetooth protocol Used	24
5.3 Bluetooth Packet Format	26

5.4 Data Transmission	27
5.5 Implementation of Bluetooth communication in Java	28
5.6 Class/ Methods Information	29
<b>Chapter 6: Testing and verification</b>	<b>31</b>
6.1 Testing and verification	31
6.2 Screenshots	32
<b>Chapter 7: Conclusion and Future Work</b>	<b>42</b>
<b>Chapter 8: References</b>	