

# Contents

	Page No.
Abstract	i
Acknowledgements	ii
Contents	iii
List of figures and tables	vi
1. Introduction .....	01
1.1 General Introduction .....	01
1.2 Statement of the Problem.....	02
1.3 Objectives of the project .....	02
1.4 Current Scope .....	03
1.5 Future Scope.....	03
2. Literature Survey.....	04
2.1 Development Environment.....	04
2.2 Android Architecture.....	05
2.3 Existing Positioning Techniques.....	09
2.4 XAMPP.....	11
2.5 System Architecture And Technology.....	13
2.6 Introduction to Front End Tool.....	14
2.6.1 What is android? .....	14
2.6.2 Tools.....	15
2.6.3 Development Environment.....	18
2.6.4 Summary.....	18
3. System Requirements Specification.....	19
3.1 Purpose.....	19
3.2 Definitions, Acronyms and Abbreviations.....	19
3.3 Specific Requirements.....	19
3.3.1 Functional Requirements.....	19
3.3.2 Software Requirements.....	20
3.3.3 Hardware Requirements.....	20

3.3.4	End User.....	20
4	System Design .....	21
4.1	Introduction .....	21
4.2	System Architecture Design.....	21
4.2.1	Off-line Phase.....	23
4.2.1	Tracking Phase.....	23
4.2.2	Location Determination System Architecture.....	23
4.3	Performance Analysis.....	24
5.	Detailed Design.....	27
5.1	Class Diagram.....	27
5.2	Overall Block Diagram.....	29
5.3	Sequence Diagram.....	30
5.4	Data Collection And Analysis.....	32
5.4.1	Signal Strength Information.....	32
5.4.2	Analysis.....	33
5.5	Algorithm.....	36
6.	Implementation.....	37
7.	Testing.....	42
7.1	Purpose.....	42
7.1.1	Test Objectives.....	42
7.1.2	Test Types.....	42
7.2	Conducting Tests.....	43
7.2.1	Unit Testing.....	43
7.2.2	Integration Testing.....	44
7.2.3	System Testing.....	45
8.	Conclusion and Future Enhancements.....	46

9. Bibliography.....	47
10. Snapshots of the Application.....	48