

Contents

1. Introduction.....	1
1.1 General overview.....	1
1.2 Organizational overview.....	1
1.3 Literature survey	
1.3.1 What is information system?	2
1.3.2 How GIS is integrated as a part of information system?.....	2
1.3.3 Open source software	
1.3.3.1 What is open source software?	3
1.3.3.2 Why open source software?	4
1.3.4 What is GIS?	5
1.3.5 Fundamental ways of representing GIS data	
1.3.5.1 Raster Data.....	7
1.3.5.2 Vector data	7
1.3.6 Open Geospatial Consortium.....	7
1.3.7 Web map server.....	7
1.3.8 GIS web server.....	8
1.3.9 GIS map server.....	8
1.3.9.1 Get capabilities.....	9
1.3.9.2 Get map.....	9
1.3.9.3 Get feature info.....	9
1.3.10 Web feature service.....	9
1.3.10.1 Get capabilities.....	10
1.3.10.2 Describe feature info.....	10
1.3.10.3 Get feature.....	10
1.3.11 Layer.....	10
1.3.11.1 Base layer.....	10
1.3.11.2 Over lay layer.....	10
2. Project outline	
2.1 Title of the project.....	11
2.2 Objective of the project.....	11
2.2.1 Existing system.....	11
2.2.2 Proposed system.....	11
2.3 Methodology use to design the proposed system	
2.3.1 Forecasting of JE outbreaks.....	11
3. Feasibility study	
3.1 Introduction	16
3.2 Feasibility of the proposed system.....	16
3.2.1 Economic feasibility.....	16
3.2.2 Schedule feasibility.....	17

3.2.3	Behavioural feasibility.....	17
3.2.4	Technical feasibility.....	17
3.2.5	Management feasibility.....	17
3.2.6	Time feasibility.....	18
3.3	Conclusion.....	18
4.	System analysis	
4.1	Introduction.....	19
4.2	Project specification.....	19
4.3	Three tire architecture.....	19
4.4	Development steps.....	21
4.5	Context diagram.....	22
5.	Software requirement specification	
5.1	Introduction.....	23
5.2	Product prospective.....	23
5.3	Product function.....	23
5.4	Assumption and dependencies.....	23
5.5	User interface.....	23
5.6	Hardware.....	24
5.7	Software.....	24
6.	System design	
6.1	Introduction.....	28
6.2	Logical design.....	28
6.3	Physical design.....	28
6.4	Module design	
6.4.1	Data Flow Diagram.....	29
6.4.2	Functional Requirement.....	32
6.5	Input design.....	33
6.6	Output design.....	33
7.	Implementation details	
7.1	Conversion of shape file into SQL file.....	34
7.2	Creation of database.....	35
7.3	Loading JE data to Geoserver.....	36
8.	System testing	
8.1	Introduction.....	40
8.2	Testing	
8.2.1	Module testing.....	40
8.2.2	System testing	
8.2.2.1	Program testing.....	40
8.2.2.2	String testing.....	41
8.2.2.3	System testing.....	41

8.2.2.4	User acceptance testing.....	41
8.2.3	Functional testing.....	41
8.2.4	Structural testing.....	41
8.2.5	Combine structural and functional testing.....	41
8.3	Dubbing.....	42
9.	Result and discussion	
9.1	Forecast of JE onset.....	43
9.2	Forecast of JE intensity.....	44
9.3	JE prone villages.....	46
10.	Conclusion	
10.1	Summary of achievement.....	48
10.2	Difficulties encounter.....	48
10.3	Limitation of the project.....	48
10.4	Future scope.....	48