1. Project vision

1.1. Backgrounds - We will build a weather station station using a Raspberry PI. We will use external sensor input and pull weather data from the internet. The PI station will give accurate weather readings and send alerts based on data from either the sensors or the web to the users.

1.2. Socio-economic Impact, Business Objectives, and Gap Analysis -

1.3. Security and ethical concerns - SkyPI is one letter away from SpyPI

1.4. Glossary of Key Terms -   
2. Project Execution and Planning

2.1. Team Information

2.2. Tools and Technology

2.3. Project Plan

2.4. Best standards and Practices

3. System Requirement Analysis

3.1. Function Requirements

3.2. Non-functional Requirements

3.3. On-Screen Appearance of landing and other pages requirements.

3.4. Wireframe designs

4. Functional Requirements Specification

4.1. Stakeholders

4.2. Actors and Goals

4.3. User stories, scenarios and Use Cases

4.4. System Sequence / Activity Diagrams

5. User Interface Specifications

5.1. Preliminary Design

5.2. User Effort Estimation

6. Static Design

6.1. Class Model

6.2. System Operation Contracts

6.3. Mathematical Model

6.4. Entity Relation

7. Dynamic Design

7.1. Sequence Diagrams.

7.2. Interface Specification

7.3. State Diagrams

8. System Architecture and System Design

8.1. Subsystems / Component / Design Pattern Identification

8.2. Mapping Subsystems to Hardware (Deployment Diagram)

8.3. Persistent Data Storage

8.4. Network Protocol

8.5. Global Control Flow

8.6. Hardware Requirement

9. Algorithms and Data Structures

9.1. Algorithms

9.2. Data Structures

10. User Interface Design and Implementation

10.1. User Interface Design

10.2. User Interface Implementation

11. Testing

11.1. Unit Test Architecture and Strategy/Framework

11.2. Unit test definition, test data selection

11.3. System Test Specification

11.4. Test Reports per Spring

12. Project Management

12.1. Project Plan

12.2. Risk management

13. References