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| **Use Case Name:** | Read offline weather station | |
| **Use Case Number:** | UC01 | |
| **Scenario:** | Read list of offline weather station | |
| **Triggering Event:** | Status check | |
| **Brief Description:** | When the technician is required to see if any of the weather stations is offline, he must do a status check of the weather stations to acquire a list of offline weather stations. | |
| **Actors:** | Data Quality Team | |
| **Related Use Cases:** | Alert and presentation error of weather machine | |
| **Stakeholders:** | Data Quality team: to check the upload and download of the data of the weather stations  Operations and Maintenance department: to apply maintenance for the weather stations to be operational again | |
| **Preconditions:** | Weather station must exist  Alert System must be functional | |
| **Post Conditions:** | Alert System warns technician of down or non-functional weather stations | |
| **Flow of Activities:** | Actor | System |
| 1. The technician goes to the application and enters his login information 2. He navigates to the weather stations status page 3. The Technician analyzes the statuses 4. The Technician lists down the weather station statuses | * 1. System asks for authentication   2.1 Displays the status information |
| **Alternate Flow:** | If user has no account, redirect to sign up page | |

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| **Use Case Name:** | Service Report Handling | |
| **Use Case Number:** | UC02 | |
| **Scenario:** | Technician want to use the operation on the files of service report | |
| **Triggering Event:** | New Report, Update Report, Search Report, Delete Report | |
| **Brief Description:** | The Technician is the one who has access to the service report handling process and it contains the following operations on the files; Create, Read, Update, Delete | |
| **Actors:** | Technician | |
| **Related Use Cases:** | Troubleshoot through phone  Scheduling for site visit | |
| **Stakeholders:** | Operations and maintenance department: to be able to analyze the information of the weather stations for repair or maintenance | |
| **Preconditions:** | Technician must exist.  Database must be up and present.  Weather stations must exist. | |
| **Post Conditions:** | Service report must be created.  Database must receive the service report. | |
| **Flow of Activities:** | Actor | System |
| 1. Technician accesses the service report handling process 2. Picks the following: Create, Read, Update, Delete   For Create:   1. Technician must create a new service report 2. Technician enters the required data for it to be processed. 3. Technician verifies if data is correct. 4. Technician saves the service report file 5. Service report is sent and saved in the database   For Read:   1. Technician enters keywords to search for specific weather station. 2. Technician analyzes the list of the queried service reports. 3. Technician selects the desired service report.   For Update:   1. Technician locates the existing service report to be updated through search 2. Technician changes the information that needs to be updated. 3. Technician saves the report   For Delete:   1. Technician selects the desired service report to be deleted. 2. Technician confirms and validates if the selected service report is to be deleted | 1.1  3.1 Display required fields for service report  4.1 Prompts a message that asks if input data is correct.  6.1 Saves file   * 1. Commits if saved   3.1 Searches the database for the corresponding keywords  5.1 Displays the service report   * 1. Locate the report file   4.1 System displays the service report with fields  5.1 Commits the updated service report.   * 1. Displays service report   4.1 Prompts message asking if he is sure he wants to delete the service report. |
| **Alternate Flow:** |  | |

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| **Use Case Name:** | Alert and presentation error of weather machine | |
| **Use Case Number:** | UC03 | |
| **Scenario:** | Error code is recorded and presented. | |
| **Triggering Event:** | Error occurred from the weather machine; ex. Connection lost or malfunction | |
| **Brief Description:** | Error code is stated and presented for easier reference for the solution | |
| **Actors:** | Weather Station  Technician | |
| **Related Use Cases:** | Troubleshoot through phone  Scheduling for site visit | |
| **Stakeholders:** | Operations and Maintenance Department: to determine what went wrong in the weather machine | |
| **Preconditions:** | Error must occur  Error code is within the ruling of the error codes | |
| **Post Conditions:** | Error code is presented | |
| **Flow of Activities:** | Actor | System |
| 1. Technician checks for any error from weather station 2. Weather station malfunctions | * 1. Alerts technician and error code is presented to the Technician for easier reference |
| **Alternate Flow:** | If error code is not presented, contact site manager for troubleshooting | |

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| **Use Case Name:** | Troubleshoot through phone | |
| **Use Case Number:** | UC04 | |
| **Scenario:** | Weather Station is broken and maintenance through the phone is the first solution to try | |
| **Triggering Event:** | Weather Station is broken or malfunctioning | |
| **Brief Description:** | Technician contacts Site manager so that they can troubleshoot and fix the Weather Station through the phone | |
| **Actors:** | Technician  Weather Machine  Site Manager  Data Quality Team | |
| **Related Use Cases:** | Scheduling for site visit | |
| **Stakeholders:** | Operations and Maintenance Department: to serve as a first solution before a site visit | |
| **Preconditions:** | Technician must have number of the site manager  Information about the weather station must be correct  Site Manager must respond | |
| **Post Conditions:** | A conclusion will be selected, either fix or needs to have a site visit  Call of the site manager and technician must be recorded for history | |
| **Flow of Activities:** | Actor | System |
| 1. Weather Machine is broken 2. Technician calls the Site Manager for maintenance 3. Site Manager answers the call 4. Technician gives the procedures to fix the broken Weather Machine 5. Site Manager applies the maintenance 6. Confirmation from Site manager is given to the technician   If fixed:   1. Data Quality is called to double check if the weather machine is operational   If not fixed:   1. Site Visit is scheduled | 1.1 Alert System is triggered   * 1. Error Code is presented to the technician   3.1 Call is being recorded from the start of the phone being picked up by the Site Manager  4.1 Displays the steps to fix the error through reference of the error code  6.1 Confirmation is recorded  7.1 Scheduling process takes over |
| **Alternate Flow:** |  | |

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| **Use Case Name:** | Double check for working weather machine | |
| **Use Case Number:** | UC05 | |
| **Scenario:** | Maintenance is applied to the weather machine | |
| **Triggering Event:** | Maintenance is done to the weather machine and technician contacts the data quality team | |
| **Brief Description:** | This process is to make sure that the weather station is functioning | |
| **Actors:** | Technician  Data Quality Team | |
| **Related Use Cases:** | Troubleshoot through phone | |
| **Stakeholders:** | Operations and Maintenance Department: to determine if weather station is fixed through maintenance | |
| **Preconditions:** | Maintenance must be done  Weather Station must exist | |
| **Post Conditions:** | Weather Station status is presented | |
| **Flow of Activities:** | Actor | System |
| 1. Technician contacts the data quality team 2. Data quality team answers the phone 3. Data quality team checks the weather machine and gives confirmation whether weather machine is functioning | 1.1 Call is recorded for history and information  3.1 weather machine status is presented  3.2 Confirmation is recorded |
| **Alternate Flow:** |  | |

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| **Use Case Name:** | Scheduling for site visit | |
| **Use Case Number:** | UC06 | |
| **Scenario:** | Maintenance through site visit is needed | |
| **Triggering Event:** | Maintenance through site visit is mandatory since maintenance through the phone didn’t work | |
| **Brief Description:** | This process is for scheduling for the site visit of a weather station for maintenance. Handles the dates and the people needed for the site visit | |
| **Actors:** | Technician | |
| **Related Use Cases:** | Troubleshoot through phone | |
| **Stakeholders:** | Operations and Maintenance Department: to make a scheduling for a site visit more convenience and have a quick process | |
| **Preconditions:** | Troubleshoot through phone method didn’t work  Location is needed | |
| **Post Conditions:** | Schedule is created and a team of technicians is selected | |
| **Flow of Activities:** | Actor | System |
| 1. Technician makes a schedule for site visit 2. Technician wants to select the available people for the site visit 3. Technician selects the dates and the technician for the site visit 4. Technician confirms the schedule | 1.1 Prompts the technician on the date of the site visit  2.1 Presents the technician of the availability of the people in the department  3.1 Confirmation of the schedule is presented |
| **Alternate Flow:** |  | |

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| **Use Case Name:** | Checking of service report | |
| **Use Case Number:** | UC07 | |
| **Scenario:** | Checks the service report submitted | |
| **Triggering Event:** | Service report is finished | |
| **Brief Description:** | When the service report that has been accomplish by the technician is to be checked by the technician head | |
| **Actors:** | Technician  Technician Head | |
| **Related Use Cases:** | Service Report Handling | |
| **Stakeholders:** | Data Quality team: to check the submitted service report if all the forms are correct and filled up. After checking it is uploaded to the database | |
| **Preconditions:** | Technician Head must exist  Form must be filled up | |
| **Post Conditions:** | Service report is reviewed and saved to the database | |
| **Flow of Activities:** | Actor | System |
| 1. Technician finishes the service report 2. Technician forwards the report to the technician head 3. Technician head receives and reviews the service report 4. Technician head saves the files to the database | * 1. System checks if all forms are filled up   2.1 System sends service report  4.1 System saves the service report to the database |
| **Alternate Flow:** |  | |

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| **Use Case Name:** | Request for service and maintenance on broken WS | |
| **Use Case Number:** | UC08 | |
| **Scenario:** | Requesting for maintenance when weather station is broken | |
| **Triggering Event:** | Weather Station needs maintenance | |
| **Brief Description:** | Data Quality Team files a service request to be given to the technicians for the maintenance of the broken Weather Station | |
| **Actors:** | Data Quality Team  Technician | |
| **Related Use Cases:** | Read offline weather station.  Alert and presentation error of weather machine. | |
| **Stakeholders:** | Data Quality team: to file a service request for maintenance. Faster reaction time for the O & M Department for the needed maintenance  Operations and Maintenance department: to determine what weather stations are needed to be fixed | |
| **Preconditions:** | Weather station must exist  Service Request exist | |
| **Post Conditions:** | Service Request is given to the technicians | |
| **Flow of Activities:** | Actor | System |
| 1. Data Quality Team files a service request 2. Fills up all the fields presented 3. Ready to be submitted to the Technicians 4. Data Quality Team submits the service request to the technician 5. Technician receives the service request | 1.1 System presents a form of a service request  3.1 System checks if the fields are correct  4.1 System forwards the service request to the technicians |
| **Alternate Flow:** | If some fields are empty, prompt the user to input the data of the service request | |