Scenario 1 Design a property

1. System asks user about the information of a property
2. User creates a property
   1. User sets a scope
   2. User sets a pattern
3. System checks if property exists
4. System saves property to the database (alt 1)
5. System creates a log and comments for the property
6. System alerts the user the specified property has been saved to the database

Alt 1

3.1 System alerts the user the specified property already exists

3.2 System logs the user as viewing the property

3.3 System displays property, property log, and property comments

3.4 Continue execution at step 1

Scenario 2 Describe a file format

1. System asks user to enter information about a file format
2. User enters information about how a sensor data file will be coming into the system
3. System saves the file format to the database (alt 1)
4. System displays alert that the specified file format has been saved to the database

Alt 1

2.1 System alerts the user the specified file format already exists

2.2 Continue execution at step 1

Scenario 3 Verify datasets

1. User specifies which dataset they wish to verify
2. System checks if the dataset is in the database (alt 1)
3. System will ask the user which property they wish to apply
4. User specifies which property to apply
5. System applies specified property to the data
6. System will present user with points of concern or anomalies
7. Alert system will notify other users related to that study list of the anomalies via cellular text message
8. User can analyze anomaly list and determine which one is an anomaly or not

Alt 1

2.1 System informs user that dataset has not been modified for analysis

2.2 User specifies which raw data file needs to be analyzed

2.3 System recognizes file format from the format list saved in the database (alt 2)

2.4 System modifies data file to be used by the system

2.5 Continue execution at step 3

Alt 2

2.3.1 System displays file format error to the user and asks the user if they wish to specify the file format

2.3.2 Begin execution of scenario 2 step 1

2.3.3 Continue execution at step 2.4

Scenario 4 Display datasets

1. User specifies dataset they wish to view
2. System presents user numerical dataset (alt 1)
3. System provides user choice to view dataset in a graphical form (alt 2)
4. System provides user choice to print graphical representation of dataset (alt 3)
5. System provides user choice to view location where dataset was collected on a map (alt 4)
6. System provides user choice save numerical dataset to the computer (alt 5)
7. System provides user choice to print the numerical dataset (alt 6)
8. System provides user choice to display another dataset (alt 7)

Alt 1

2.1 System displays an error to the user explaining the particular dataset cannot be found.

2.2 Continue execution at step 1

Alt 2

3.1 User choses to view dataset in a graphical representation

3.2 System asks user what type of graph they wish to view the dataset in

3.3 User choses graph type

3.4 System presents user the specified graphical representation of the dataset

3.5 Continue execution at step 2

Alt 3

4.1 User choses to print graphical representation of dataset

4.2 System asks the user how many copies to print, which printer to print from, and so on

4.3 System sends print task to the specified printer

4.4 Continue execution at step 2

Alt 4

5.1 User choses to view the location of where the dataset was collected on a map

5.2 System using gps data in the dataset will plot on a graph where the senor or generally where the data was collected

5.3 Continue execution at step 2

Alt 5

6.1 User choses to save dataset to a computer

6.2 System asks user where to save dataset on the computer

6.3 User specifies where dataset should be saved

6.4 System saves dataset to specified location on the computer

6.5 Continue execution at step 2

Alt 6

7.1 User choses to print graphical representation of dataset

7.2 System asks the user how many copies to print, which printer to print from, and so on

7.3 System sends print task to the specified printer

7.4 Continue execution at step 2

Alt 7

* 1. User choses to display another dataset
  2. Continue execution at step 1