Prairie Build Class Library Project 3

Project 3 will incorporate portions from Project 1 User Interface design along with Project 2 ERD concepts to classify objects, organize information, identify behaviors, increase the clarity and precision of the model through inheritance and association relationships using class diagram structures.

Class time will was spent to identify minimum number of behaviors for 4 classes, students required to create behaviors for 2 classes (student may add additional behaviors if desired). **This is *not* a group project, students are required to complete Project 3 individually.**

DUE DATE: Week 14, April 28, 2015 (before the start of class)

POINT VALUE: 25 points

INSTRUCTIONS: Use Visio 2010 to complete project; include last name in file name; *bring hardcopy to hand-in to instructor at the start of class and submit to BB.*

What can I use to help complete Project 3?

1. Class Diagrams & Visio handout
2. Lab 10.1 and 11.1 Class diagrams (questions you may have about class diagram syntax)
3. Lecture Notes from Week 10 - 12
4. Student's finalized Project 2 ERD (you may also request to use instructor Project 2 Prairie results)
5. Attributes and Multiplicity from Project 2
6. Syntax for Class diagrams refer to Lab 10.1 and 11.1

Relationship between Classes

Minimally, Project 3 will use the following relationships between classes

1. Association with multiplicity and narrative
2. Generalized/Specialized which does not include multiplicity and narrative
3. Whole/Part aggregation and composition (optional)

Create class diagrams and their relationships for the following:

	Class	Behavior
1	Client	+payMoney, +requestRepair, +acceptRepair
2	Equipment	+gatherData, +breakdown, +requireCalibration
3	Station	+getService, +transmitData
4	Prairie Staff	+performRepair, +performCalibration, +getPaid
5	Problems	(students identify these behaviors)
6	In-Field Station Service	(students identify these behaviors)

Project 3 requires students to individually identify behavior for class 5 and class 6.

Project deliverables will include:

1. **Use the above classes and their behaviors to create a class diagram**
2. **Identify and include behaviors for class 5 and 6**
3. **Relationships will include Generalized / Specialized and Association Relationship**
4. **Whole/Part (optional)**
5. **Determine multiplicity and narratives using Project 2 ERD results**
6. **Include any assumptions**
7. **Use Visio 2010 to complete Project 3**
8. **Submit to BB in Week 12 folder**

Note: Classes do not need Get / Set methods; but requires the +Create