## Domain Modeling

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| **Conceptual Class Category** | **Example from EMPS** |
| **Physical or Tangible Objects** | Environmental Sensors, EMPS UI |
| **Specifications, Designs or Descriptions of Things** | Sensor Readings, Stored Data (from DB), User Account, Success Message, Sensor Data Type, Alert, Predictive Model, Data Query, System |
| **Places** | Region |
| Transactions | Registration |
| Transaction Line Items | Registration Information, Alert Information |
| **Roles of People** | User, User Data Admin, System Manager |
| **Containers of Other Things** | Registration Page, Data Collection Page, Home Page |
| **Things in a Container** | Stored Data |
| **Other Computers/Systems (external)** | Database, Algorithms Server |
| **Abstract Noun Concepts** | Account Creation Error, Data Collection Error, Database Error, Data Fields, Login Error, Insufficient Data Error, Generation Failure Error |
| **Organizations** | Government Agencies, Research Centers |
| **Events** | Data Collection |
| **Processes** | Model Generation |
| **Rules and Policies** | - |
| **Catalogs** | - |
| **Records of Finance, Work, Contracts, Legal Matters, etc.** | - |
| **Financial Instruments and Services** | - |
| **Manuals, Books, Documents, Reference Papers** | - |

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| Good Classes (Retained) | Bad Classes (Pruned) - Reasoning |
| Environmental Sensors | Stored Data - Redundant |
| EMPS UI | User Account - Redundant |
| Sensor Readings | Success Message – Implementation Specific |
| Alert | Sensor Data Type - Attribute |
| Predictive Model | Data Query – Implementation Specific |
| User | System – Vague |
| User Data Admin | Region – Attribute |
| System Manager | Registration - Vague |
| Database | Registration Page – Implementation Specific |
| Algorithms Server | Data Collection Page – Implementation Specific |
| Data Collection | Home Page – Implementation Specific |
|  | Account Creation Error - Irrelevant |
|  | Data Collection Error - Irrelevant |
|  | Database Error - Irrelevant |
|  | Data Fields - Irrelevant |
|  | Login Error - Irrelevant |
|  | Insufficient Data Error - Irrelevant |
|  | Generation Failure Error - Irrelevant |
|  | Model Generation - Attribute |
|  | Registration Information - Attributes |
|  | Alert Information - Attributes |
|  | Government Agencies - Irrelevant |
|  | Research Centers - Irrelevant |

