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| **Subsystem Name:** **Graphics Subsystem** |
| **Classes:** Graphic, Graph Graphic, Map Graphic, Graph, Map |
| **Collaboration Graph:** See figure 4.2 |
| **Description:** Responsible for retrieving data, packaging data, and drawing maps and graphs to user interface. |
| **Contracts:**  2. Draw graph  - Server: Graph  3.Retrieve and package graph data  - Server: Graph Graphic  12. Draw map  - Server: Map  13. Retrieve and package map data  - Server: Map Graphic |

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| **Subsystem Name:** **User Interface Subsystem** |
| **Classes:** Interface, Public Interface, FD Interface, Tech Interface, Mobile Interface, User |
| **Collaboration Graph:** See figure 4.2 |
| **Description:** Responsible for validating a user’s credentials and displaying alerts to the facility director user interface. |
| **Contracts:**  1. Validate user credentials  - Server: User  11. Display alerts  - Server: FD Interface |

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| **Subsystem Name:** **Math Subsystem** |
| **Classes:** Building, Consumption, Sensor |
| **Collaboration Graph:** See figure 4.2 |
| **Description:** Responsible for storing readings data, providing readings data, calculating consumption data, and generating graph data. |
| **Contracts:**  4. Generate graph data  - Server: Consumption  5. Calculate consumption  - Server: Building  6. Provide reading data  - Server: Sensor  9. Store reading to sensor object  - Server: Sensor |

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| **Subsystem Name:** **Observation Subsystem** |
| **Classes:** Alert, Task, Malfunction, Reading |
| **Collaboration Graph:** See figure 4.2 |
| **Description:** Responsible for reading data from sensors, generating alerts, listing current malfunctions, providing malfunction status updates, and managing task information. |
| **Contracts:**  7. List current malfunctions based on parameters given  - Server: Malfunction  8. Read data from sensors  - Server: Reading  10. Generate alert  - Server: Alert  14. Manage task data  - Server: Task  15. Provide malfunction status updates  - Server: Malfunction |