

**CSCI E97**  
**Grade Sheet for Assignment 3**

Student \_\_\_\_\_ Graded by \_\_\_\_\_

Grade \_\_\_\_/40

**Design Document (20 points)**

The design document (in PDF format) has a clear overview of the problem and presents a short description of the document's organization. The requirements section provides a brief and accurate summary of the Smart City Controller requirements. Includes a <b>Use Case Diagram</b> with text describing the actors and use cases.	/4
The <b>class diagram/dictionary</b> provides a clear model of the Controller classes. The diagram should show all dependencies and associations (including composition) as well as inheritance relationships. Define the features of each class (attributes and associations) and methods of each class (except get and set methods). The class dictionary provides details on classes, properties, associations, and methods, including type information and descriptions. It provides sufficient detail about how someone uses the Smart City Controller Service.	/4
The <b>Sequence diagram</b> provides a detailed description of the classes and methods used to support the event and action workflow between the Smart City Model and Smart City Controller components.	/4
The design applies the <b>Command Pattern and Observer Pattern</b> in the interaction between the Controller Service and the Model Services.	/4
The general quality of the document (clarity of design, completeness, readability). The design document makes it clear how the design meets the requirements. Remember to reference requirements from the implementation section. A brief description of the diagram follows each diagram.	/4
<b>Grade</b>	/20

**Implementation (20 points)**

<p>Include a Results document (in pdf format) describing your results:</p> <ul style="list-style-type: none"> <li>• Did the design document make the implementation easier?</li> <li>• How could the design have been better, more straightforward, or made the implementation easier?</li> <li>• Did the design review help improve your design?</li> <li>• How did you find the integration of the components?</li> <li>• Your comments on your peer's designs</li> <li>• Comments from your peer design review partners</li> <li>• Changes to your design based on the peer design review or implementation</li> </ul>	/4
<p>Code compiles with the command</p> <pre>javac cscie97/smartcity/controller/*.java cscie97/smartcity/test/*.java cscie97/smartcity/model/*.java com/cscie97/ledger/*.java</pre>	/4
<p>The program should run with the command</p> <pre>java -cp . cscie97.smartcity.test.TestDriver</pre> <p>The test driver loads in the Smart City Model configuration and sets sensor and device values. The controller responds to sensor events following the rules defined. Controller actions are output to the console. The test driver should also demonstrate account management using the ledger developed in assignment 1.</p>	/4
<p>Additional tests to demonstrate functionality and exception handling. Also description/documentation for these additional tests and their expected output.</p>	/4
<p>The general quality of implementation, including comments and code structure. Does the implementation follow the design document?</p>	/4
<b>Grade</b>	<b>/20</b>