Massachusetts Institute of Technology

Architecture of Complex Systems

TA Project Evaluation: 1-Bit Adder

WEEK 1: SYSTEMS THINKING

Step 1: Select Your System

Evaluating 1-bit adder sample project submission.

Step 2: Identifying System Form and Function

Did you indicate form and function of the system you chose as well as provide an explanation of why the elements represent form and function as per the example project?

Points: 2

While the primary form and function are named in the description, there is no detail explanation as to why such elements are the primary elements. Also, "other components" is not a good term to be used to describe additional forms in this system.

Step 3: Identify System Entities

Did you highlight both entities in your system? Did you indicate the form and function of the entities as per the example project?

Points: 2

Both entities are clearly identified and their form and function are included in the description. However, contrary to the instructions, nothing on the diagram is highlighted.

Step 4: Identify System Relationships

Did you identify six entities in your system? Did you also identify the relationships between your entities as per the example project?

Points: 3

All six entities are identified. The relationship among them are also clearly delineated with connectors.

Step 5: Predict System Emergence

Did you predict two types of emergence in your system with a brief description of each in addition to functional interactions as per the project template?

Points: 3
Both types of emergence are included, along with description of functional interactions.

Step 6: Develop System Decomposition
Did you develop a decompositional view of your system including level zero and level one as per the project template?

Points: 2
The decomposition is shown through a list instead a decomposition diagram.