

Architecture of Complex Systems

Project Scoring Rubric

WEEK 1: SYSTEMS THINKING

Step 2: Identify System Form and Function

Prompt	Step 2: Identify 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	Criteria
3	Complete: Primary form and function of the chosen system is mentioned. An explanation detailing why the chosen elements represent the primary form and function is provided.
2	Partially Complete: Primary form and function of the system is provided. Little to no explanation detailing why these are the primary form and function.
1	Incomplete: The primary form or function of the system is not mentioned or one of the two is not present. Explanation is missing.
0	Not attempted: The project template is without work, in its original state. The project is copied from the samples.

Step 3: Identify System Entities

Prompt	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	Criteria
3	Complete: Two entities are identified and highlighted in the diagram. Form and function for each entity is also included.
2	Partially Complete: Two entities are identified and highlighted in the diagram. Form and function is not specified for one or both of the entities.
1	Incomplete: Only one entity is identified with incomplete information of form and function.
0	Not attempted: The project template is without work, in its original state. The project is copied from the samples.

Step 4: Identify System Relationships

Prompt	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	Criteria
3	Complete: All six entities are identified. Relationships between all the entities are defined using the connectors.
2	Partially Complete: Four to five entities are identified. Not all relationships between the entities are defined.
1	Incomplete: Less than four entities are identified. Not all relationships between the entities were defined.
0	Not attempted: The project template is without work, in its original state. The project is copied from the samples.

Step 5: Predict System Emergence

Prompt	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	Criteria
3	Complete: Both types of emergence (intended and unintended) are mentioned. The functional interaction that led these different types of emergence is also provided.
2	Partially Complete: Both types of emergence are mentioned. The functional interaction that led to these emergence is not provided.
1	Incomplete: Only one type of emergence is mentioned and the functional interaction that led to this emergence is missing.
0	Not attempted: The project template is without work, in its original state. The project is copied from the samples.

Step 6: Develop System Decomposition

Prompt	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	Criteria
3	Complete: Decompositional view containing both level zero and level one is included. Five to seven elements exist at level one.
2	Partially Complete: The decompositional view is created with level zero and level one. Level one has three to four elements.
1	Incomplete: An incomplete decompositional view missing key components is provided. Both level zero and level one are present but two or less elements total exist in the decompositional view.
0	Not attempted: The project template is without work, in its original state. The project is copied from the samples.