Massachusetts Institute of Technology

Architecture of Complex Systems

Project Scoring Rubric

WEEK 4: MODELING WITH DSMs AND MODULARIZATION

Assessment Feedback

Prompt	**Peer Assessment Feedback.** Please provide feedback (300 characters or less) for this project.
Points	**Criteria**
1	**Project submitted:** A file has been submitted for this assignment. Feedback is mandatory for this step.

Step 1: Decompose the System

Prompt	**Step 1: Decompose the System.** Does the submission develop a system decomposition of form shown as a tree structure or indented list as per the example project? Is the decomposition a valid two level down decomposition with a relevant number of 7 +/- 2 elements?
Points	**Criteria**
3	**Complete:** The submission includes a decomposition of form with three levels of hierarchy, including level zero. Each level, excluding the level zero, has 7+/-2 elements of form. The decomposition is in the form of a tree structure or an indented list with hierarchy

	visible.
2	**Partially Complete:** The submission includes a decomposition of form with three levels of hierarchy, including level zero. Each level, excluding the level zero, has 5+/-2 elements of form. The decomposition is in the form of a tree structure or an indented list with hierarchy visible.
1	**Incomplete:** The submission includes a decomposition of form at least two levels of hierarchy. Each level, excluding level zero, has less than 3 elements of form. The decomposition is in the form of a tree structure or an indented list.
0	**Not attempted:** The project template is without work, in its original state. Project is copied from sample.

Step 2A: System DSM

Prompt	**Step 2A: System DSM.** Does the submission develop an NxN design structure matrix clearly labeled and arranged in order of decomposition as per the example project?
Points	**Criteria**
3	**Complete:** An NxN DSM is submitted. The components are grouped according to their initial decomposition view in both rows and columns of the DSM. All the associations/interactions (such as spatial, topological, mass flow, energy flow, etc.) among the elements/components are marked in the DSM.

2	**Partially Complete:** An NxN DSM is submitted. The components are grouped according to their initial decomposition view in both rows and columns of the DSM. Some components (less than 5) as identified in step one are missing in the DSM. Most but not all of the associations/interactions among the elements/components are marked in the DSM.
1	**Incomplete:** An NxN DSM is submitted. The rows and columns of the DSM are in the same order. The components are not grouped according to the decompositional view in step one. Many components, more than 5, as identified in step one are missing in the DSM. Most of the associations/interactions among the elements/components are not marked in the DSM.
0	**Not attempted:** The project template is without work, in its original state. Project is copied from sample.

Step 2B: System DSM

Prompt	**Step 2B: System DSM.** Does the submission cluster elements in the DSM based on their associations? Does the submission include insights based on the clustering? Does the submission include a fresh level 1 decomposition based on the insights?
Points	**Criteria**
3	**Complete:** Submission includes clustering on the DSM and groupings based on the clusters. Most of the associations between components lying inside the group are specified with minimal interactions

	outside. A level one system decomposition emerges from the grouping. Explanation about the advantages and disadvantages of the new level one decomposition is provided in the write-up.
2	**Partially Complete:** Submission includes some clustering on the DSM and groupings based on the clusters. Many associations between components lay inside the group with less interactions outside. A level one system decomposition emerges from the grouping. Some explanation is provided about the advantages and disadvantages of the new level one decomposition.
1	**Incomplete:** Some clustering is performed on the DSM. Groupings are created based on the clusters. Many associations between components lay inside the group with less interactions outside. A level one system decomposition emerges from the grouping. No explanation is provided.
0	**Not attempted:** The project template is without work, in its original state. Project is copied from sample.

Step 3: Change Propagation

Prompt	**Step 3: Change Propagation.** Does the submission identify a list of highly connected components and chain of propagation among the components as per the project template?
Points	**Criteria**
3	**Complete:** Submission identifies all of the five highly connected components. A chain of propagation among the components is also identified.
2	**Partially Complete:** Submission identifies three to five highly connected components. A chain of propagation for at least two components is identified.
1	**Incomplete:** Submission identifies one or two highly connected components. A chain of propagation may or may not be identified for the component(s).
0	**Not attempted:** The project template is without work, in its original state. Project is copied from sample.