

List of Domain Classes:

- Analogy - The full analogy object that contains all four components: context, target domain, source domain, common structural elements (optional)
- Analogy Context - Scenario where analogy could be used. This will include what programming misconception occurs and what goal is desired.
- Target Domain - The situation the analogy is aiming to solve in the context of the code. This will include the steps explaining the programming concept.
- Source Domain - The analogy of the scenario. This will include the steps explaining the analogy, tying into the programming concept.
- Common Structural Elements (optional) - An abstract view of the analogy. This will explain the usage of the analogy.

Domain Class: Analogy - The full analogy object that contains all four components

- ID - String, ID of the analogy
- Context - String, Analogy Context id
- Target Domain - String, Target Domain id
- Source Domain - String, Source Domain id
- Common Structural Elements (optional) - String, Common Structural Elements id

Constraints:

- ID - unique
- Source Domain - Unique
- Common Structural Elements - Unique, nullable

Domain Class: Analogy Context - Scenario where analogy could be used

- ID - String, ID of Analogy Context
- Misconception - String, the misconception that the analogy aims to help correct
- Desired Knowledge - String, the desired knowledge that the analogy aims to help the student understand

Constraints:

- ID - unique

Domain Class: Target Domain - The situation the analogy is aiming to solve in the context of the code

- ID - String, ID of Target Domain
- Domain (optional) - String, the domain you are in for the situation
- Precondition - String, the precondition you need to have for the analogy to be used

- Required Action - String, the action you should be performing in the context of the situation
- Postcondition - String, the result of you performing the required action
- targetConstraints (Optional) - String, constraints for the scenario

Constraints:

- ID - unique
- targetConstraints - nullable

Domain Class: Source Domain - The analogy of the scenario

- ID - String, ID of Source Domain
- Domain - String, the domain you are in for the situation
- Precondition - String, the precondition you need to have for the analogy to be used
- Required Action - String, the action you should be performing in the context of the situation
- Postcondition - String, the result of you performing the required action
- sourceConstraints (Optional) - String, constraints for the scenario

Constraints:

- ID - unique
- sourceConstraints - nullable

Domain Class: Common Structural Elements (optional) - An abstract view of the analogy

- Precondition - String, the precondition you need to have for the analogy to be used
- Required Action - String, the action you should be performing in the context of the situation
- Postcondition - String, the result of you performing the required action
- commonConstraints (Optional) - String, constraints for the scenario

Constraints:

- ID - unique
- commonConstraints - nullable