Domain Model Designer Requirements

Project Statement:

Domain Model Designer is a web application aimed to help easily create domain models rapidly through the use of a custom syntax. The main goal is to allow users to create domain models through writing out relationships between domain entities and allowing the program to auto generate the resulting model.

Functional Requirements (MAIN MODEL):

1. Users should be able to create domain model entities. Entities should have the following properties:
    a. A name
    b. A color
    c. A display style (dotted, bold, etc)
    d. Any number of Relations (see req 2)
2. Users should be able to create Relations between Entities. Relations contain the following information:
    a. Some text describing the relation
    b. 2 Entities being related
    c. Up to two multiplicities (number of objects in relation to each other [kinda])
    d. Directionality (Which sides have arrows/types of arrows)
3. Server should be able to generate a model from text. Syntax is as follows:
    a. Each new line should be a new relationship
    b. Parameters should be put on each line as:
       [entity_1][arrow_1][mult_1]-[text]-[mult_2][arrow_2][entity_2]
       For example: `Relation-1-stores-2..>Entity` leads to: