

StopAndShop

CALIFORNIA STATE UNIVERSITY, LONG BEACH

CECS575 – OBJECT ORIENTED ANALAYIS & DESIGN

ASSIGNMENT 2

GROUP 5

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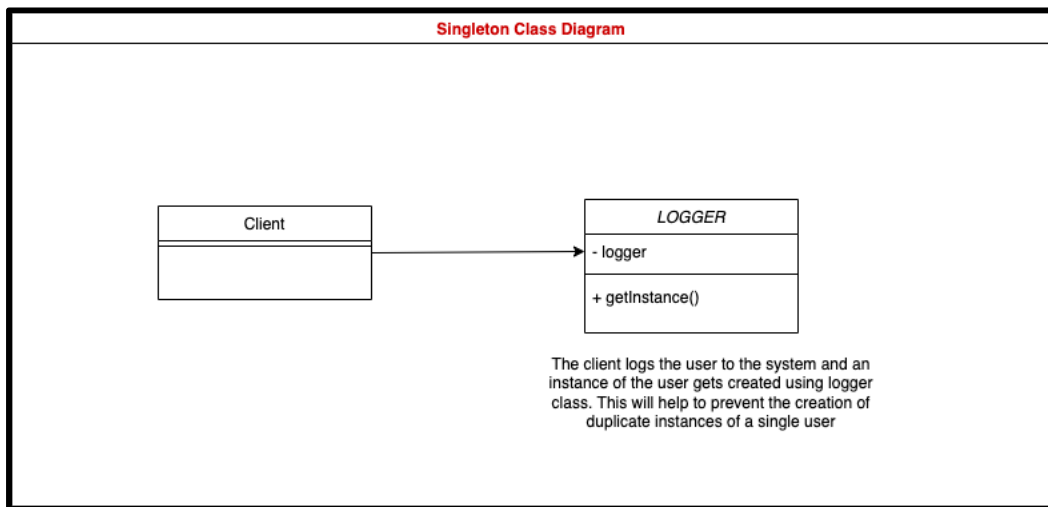
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Table of Contents

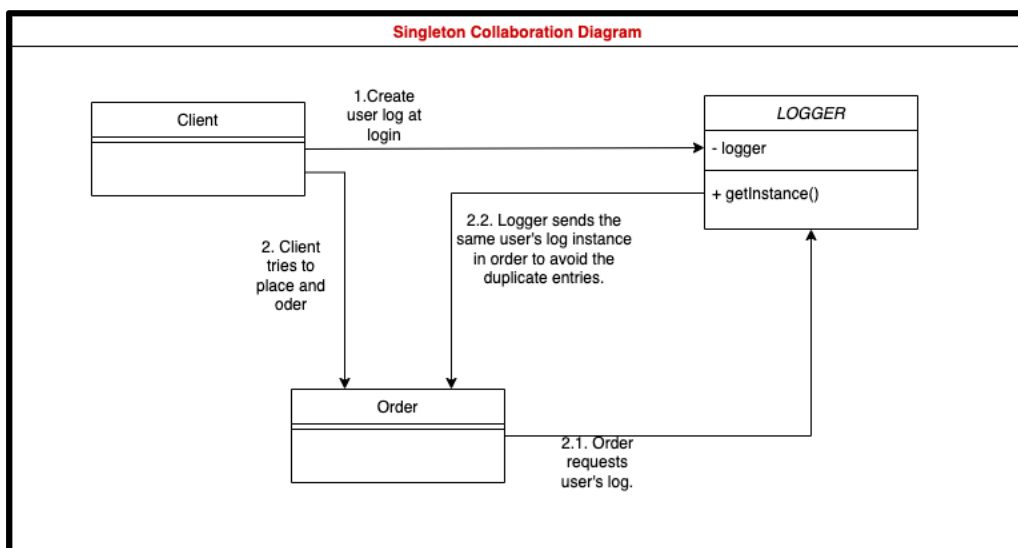
APPLICATION OF A SINGLETON DESIGN PATTERN	2
APPLICATION OF A BUILDER DESIGN PATTERN	3
APPLICATION OF A PROTOTYPE DESIGN PATTERN	5

Application of a Singleton Design Pattern

PART -1



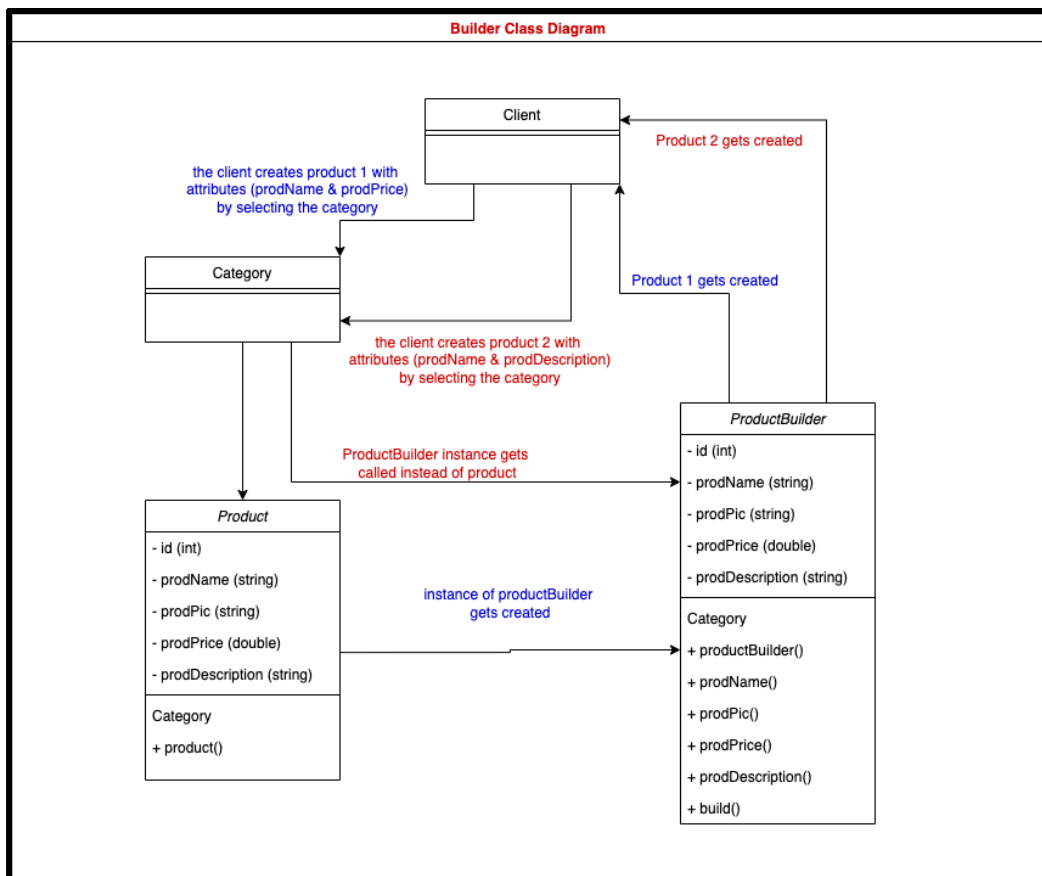
PART -2



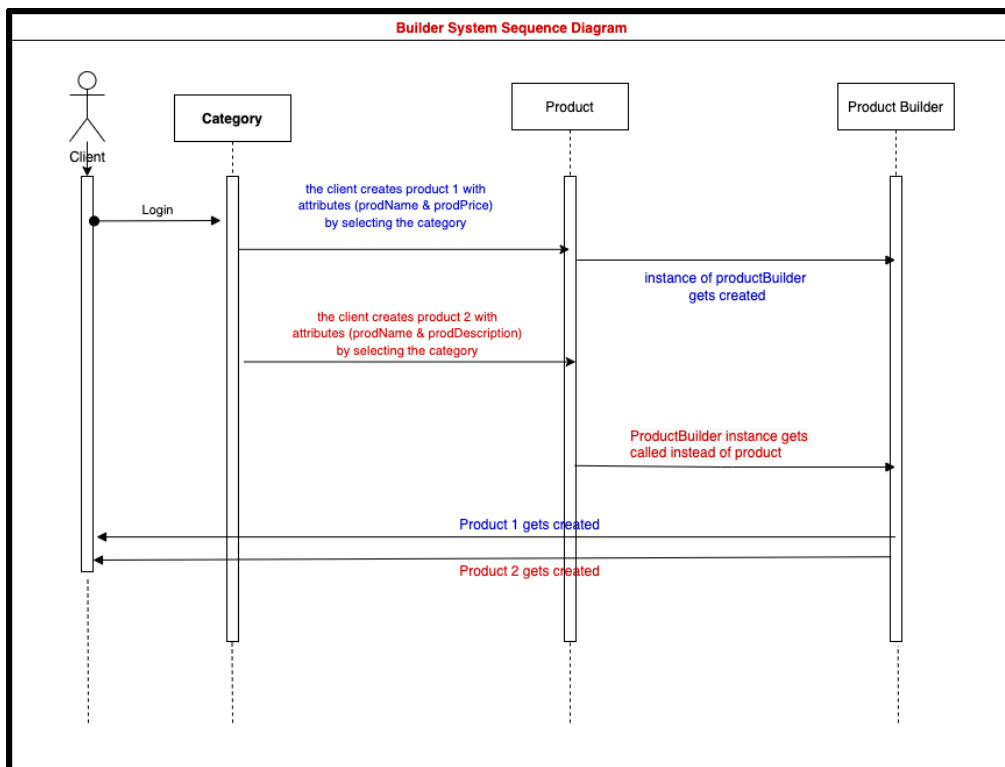
Question	Explain in a text document why singleton should be applied in the scenario and how it improves your design?
Answer	<p>Singleton should be applied in this scenario as once a user logs in, the whole session until the user uses the website should have one logger instance. No matter what activity the user performs, like order or payment, it should have a single logger instance. Singleton helps us achieve that scenario by not letting new instances get created for the same user.</p> <p>It improves the design by taking care of the logger instance. If it was not implemented, we might have faced issues during payment and order because different users could log in into the same logger instance, which might have created confusion.</p>

Application of a Builder Design Pattern

PART -1



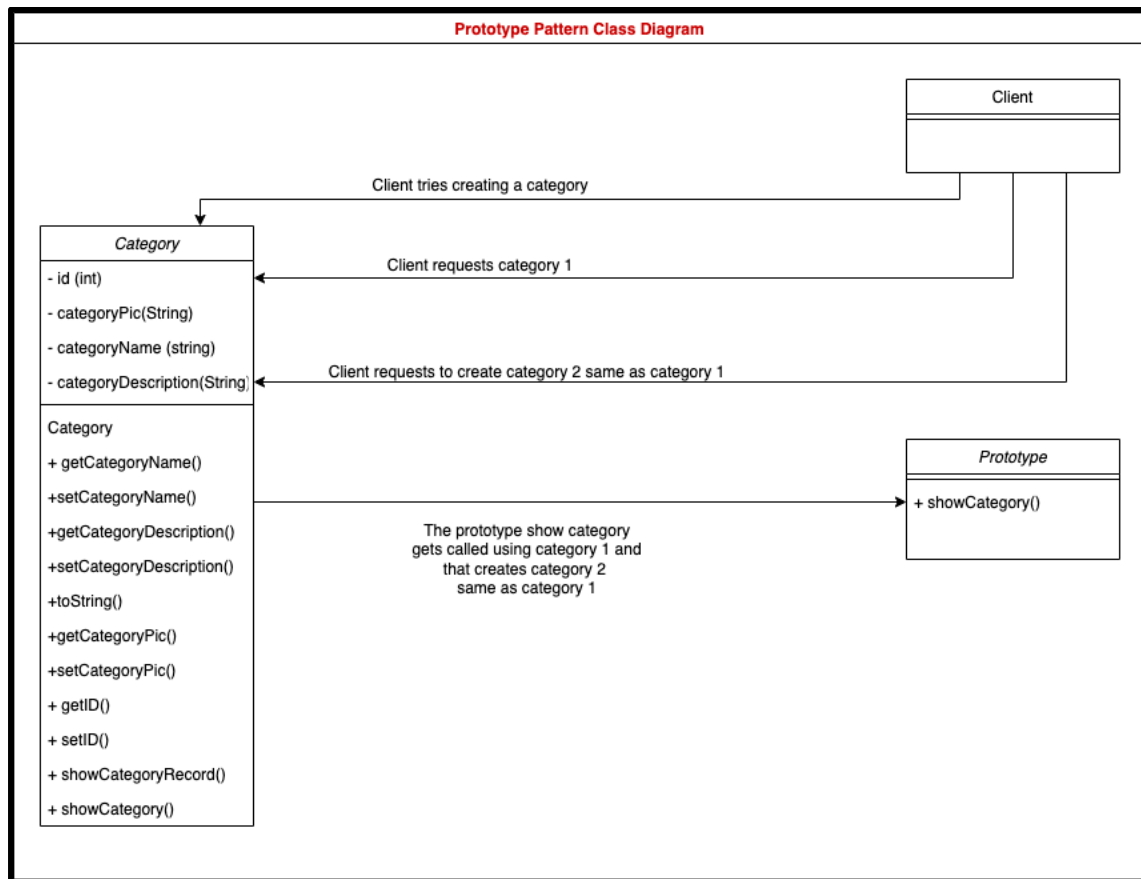
PART -2



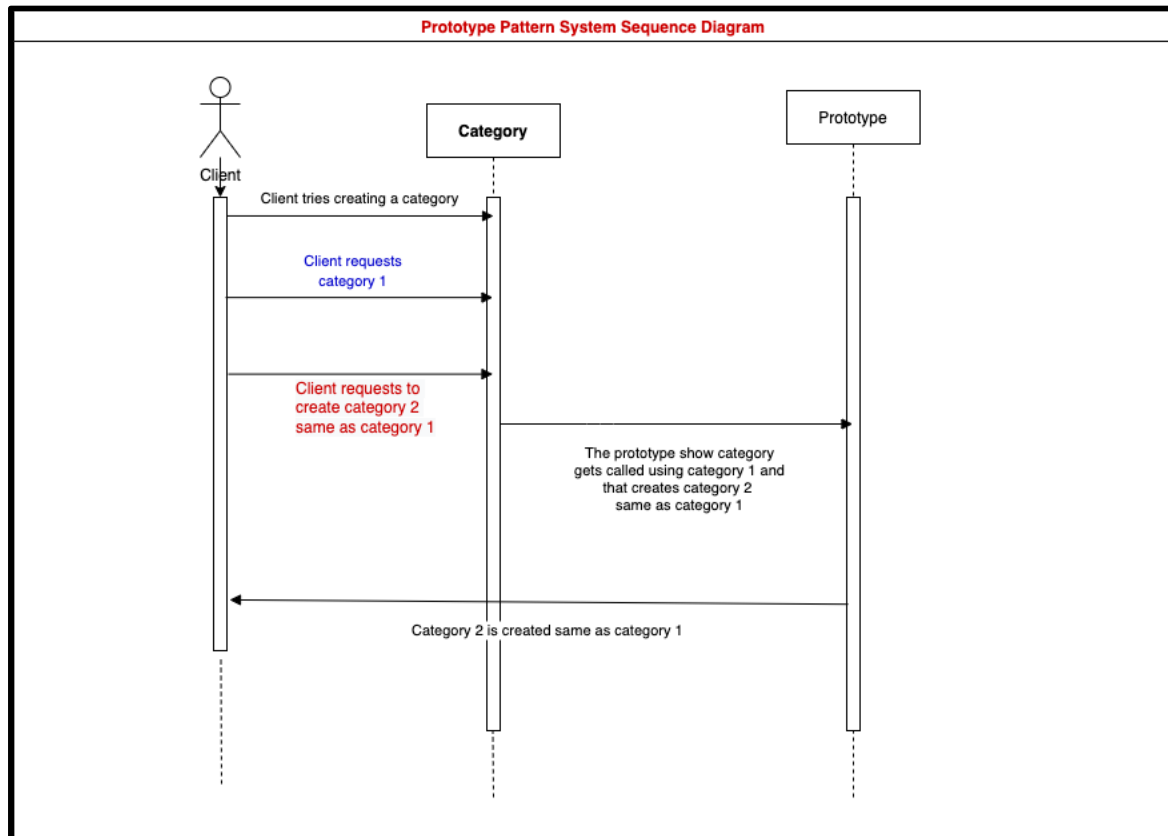
Question	How this pattern improves the design of your system?
Answer	<p>Builder design is helping us improve the design of the system by not having to maintain different methods for similar functionalities (Categories).</p> <p>The builder method smoothly takes care of the above functionality; hence, we do not have to worry about creating different methods with different parameters for similar functionalities.</p> <p>Here, the pattern is helping us in constructing the representation of complex types of Products. This construction in return will help in creating many similar representations of same construction.</p>

Application of a Prototype Design Pattern

PART -1



PART -2



Question	How this pattern improves the design of your system?
Answer	<p>The prototype design is helping us improve the system's design by not having to create the same type of categories every time we need to create a similar one.</p> <p>Whenever we need to create a category that has already been created, we do not have to go through the whole process again; instead, the prototype will take care of it and create a similar category.</p>

Thank You!