

Trace Bullet: There is a two way to fire machine gun in the dark. First you find to where is the target then you guess the environmental factors after that you determine the exact properties of the gunpowder and bullets you use. If all calculations and environmental factors are right you shoot the target somewhere near close.

Or you just use trace bullet.

When a tracer bullet is fired, the phosphors in it leaves a trace until the bullet hits the target. Like I mentioned trace bullet used more often than calculations because they give feedback right now and they have same factors with a real bullet they have low outside influence.

Prototypes: Prototypes are a way to test the boundaries of what you can do and can't do. It's basically a dummy application for testing purpose and it's not a solution for the problem. It's just giving the idea of how to solve the problem.

Prototype vs. Trace Bullet:

Prototype is a testing for a possible solution. Trace bullets on the other hand testing how accurate and precise your current solution is to the ideal solution the customer wants

Orthogonality: Orthogonality when something's property changed the other thing's property doesn't change. For example, when you changed your phone case your phone's performance won't change.