# SDLC Methodologies: DSDM, Lean, RUP

1. DSDM (Dynamic Systems Development Method): This is an Agile project delivery framework that focuses on delivering high-quality solutions on time and within budget. It emphasizes continuous user involvement, frequent iterations, and collaboration between stakeholders. DSDM encourages flexibility and adaptation to changing requirements throughout the development process.
2. Lean: Lean Software Development is inspired by lean manufacturing principles. It aims to maximise the value delivered to customers while minimizing waste. It focuses on eliminating unnecessary activities, streamlining processes, and creating efficient workflows. Lean advocates for delivering a Minimum Viable Product (MVP) and iteratively improving it based on customer feedback.
3. Rational Unified Process (RUP): RUP is an iterative software development framework that is process-centric and focuses on defining roles, activities and artifacts. It provides guidelines for tailoring the development process into four phases: Inception, Elaboration, Construction, and Transition, and it emphasizes the importance of documentation and continuous evaluation.

**THE THREE LEVELS OF SOFTWARE PROTOTYPE**

LOW FIDELITY PROTOTYPE

Low fidelity is the most basic type of software prototype available. This will only incorporate the key elements of the product, such as very simple visuals such as shapes, and important content like titles. There is no functionality to these prototypes, they are a series of static screens that may be scrolled through to mimic a user’s journey and actions. In fact, a low fidelity prototype might not even involve software. It could be a paper prototype.

## **MID-FIDELITY PROTOTYPE**

A mid-fidelity prototype represents the middle ground between a low and high fidelity prototype. This means that it offers some of the key content and functionality that will be used in the product, but it will not contain all. It might mean photos and graphics are missing, or some of the high-level interactions such as animation are not present. It will most likely be a series of wireframes that are linked together to give some levels of interactivity.

## **HIGH-FIDELITY PROTOTYPE**

A high-fidelity (hi-fi) prototype is created to work as closely to the finished product as possible. It has a high level of detail, including all the visual aspects that will appear on a site, all links, and most content. In many ways, this type of prototype could be mistaken for the final product.