Incremental build model

The **incremental build model** is a method of [software development](https://en.wikipedia.org/wiki/Software_development) where the product is [designed](https://en.wikipedia.org/wiki/Software_design), implemented and [tested](https://en.wikipedia.org/wiki/Software_testing) incrementally (a little more is added each time) until the product is finished. It involves both development and maintenance

The incremental model can be used when developing web applications where:

The incremental model is used when the requirements are clearly defined and understood.

A new technology is being used

There are some high risk features and goals.

Evolutionary process models

Prototyping

**Software prototyping** is the activity of creating [prototypes](https://en.wikipedia.org/wiki/Prototype) of software applications, i.e., incomplete versions of the [software program](https://en.wikipedia.org/wiki/Software) being developed

It begins with communication, meet with the stakeholders and define the overall objectives of the software.

A prototyping iteration is planned quickly and modelling occurs

A quick design leads to the construction of the prototype.

The prototype is deployed and evaluated by stakeholders

Prototyping is used where the user is unsure of the efficiency of the algorithm. Or the adaptability of the operating system.

Spiral Model

Couples the iterative nature of prototyping with the controlled and systematic aspects of the waterfall model, it uses prototyping as a risk reduction mechanism.

The spiral model is used in the development of software when:

* When project is large
* When releases are required to be frequent
* When creation of a prototype is applicable
* When risk and costs evaluation is important

Concurrent Models

The concurrent process model defines a series of events that will trigger transitions from state to state for each of the software engineering activities.

The concurrent process model is applicable to all types of software development and provides an accurate picture of the current state of a project.