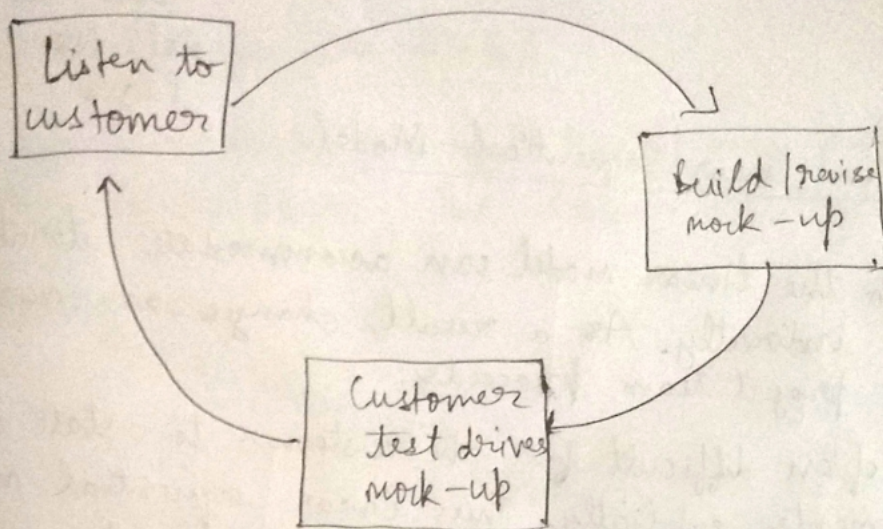


Problems in linear Sequential Model

- i) Although the linear model can accommodate iteration, it does so indirectly. As a result, changes can cause confusion as the project team proceeds.
- (ii) It is often difficult for the customer to state all requirements explicitly. Thus linear sequential model has difficulty accommodating the natural uncertainty that exists at the beginning of many projects.
- (iii) The customer must show patience. Because A working version of the program will not be available until late in the project time-span.

The Prototyping Model

- i) Developer and customer meet and define the overall objectives for the software, identify whatever requirements are known, and outline areas where further definition is mandatory. Then a "quick design" occurs which leads to the construction of a "prototype".
- (ii) The prototype is evaluated by the customer/user and used to refine requirements for the software.
- (iii) The prototype serves as a mechanism for identifying software requirements.



- iv) Iteration occurs as the prototype is tuned to satisfy the needs of the customer and developer better understands what optimally needs to be done.

Problems related to Prototyping Model :

- i) Customer is often unaware that the prototype is held together with "chewing gum and baling wire" and rush to get it working without concerns on quality. Customer over foul and demands that "a few fixes" be applied to make a prototype working product.

- ii) In order to get a prototype working quickly, the developer often makes implementation compromises. Ex: An inappropriate operating system or programming language may be used; an inefficient algorithm may be implemented simply to demonstrate capability. The sub-optimal choices can later become an integral part of the system and ^{compromise} the software quality.

Source - "Software Engineering
A practitioner's approach"