**Difference between Prototype & V Model**

| **Aspect** | **Prototype Model** | **V-Model** |
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| **Development Approach** | Iterative and incremental. | Sequential and phased (Waterfall-based). |
| **Focus** | Primarily on obtaining feedback and refining requirements. | Emphasizes verification and validation through testing. |
| **Requirements Clarity** | Often used when requirements are unclear or evolving. | Assumes well-defined and stable requirements. |
| **Phases and Testing** | Emphasizes the development of a prototype and iterative feedback gathering. | Testing is a significant part of each development phase, culminating in system testing. |
| **Flexibility** | Highly adaptable to changing requirements. | Less flexible; changes are costly once testing phases begin. |
| **Stakeholder Involvement** | Continuous involvement and feedback from stakeholders. | Stakeholder involvement is more concentrated during validation phases. |
| **Risk Management** | Reduces risk by identifying issues early in the development process. | Detects issues through systematic testing phases. |
| **Suitability** | Best suited for projects with evolving or unclear requirements. | Well-suited for projects with stable and well-defined requirements. |
| **Quality Assurance** | Quality assurance is achieved through iterative feedback and improvements. | Quality assurance is achieved through systematic testing. |
| **Project Progress Visibility** | High visibility into project progress through continuous prototyping. | Project progress becomes more visible during testing phases. |
| **Documentation** | Less emphasis on extensive documentation. | Requires detailed documentation at each phase. |
| **Cost Implications** | Typically more cost-effective due to early issue identification. | Costs can increase if issues are discovered later in the process. |
| **Examples** | Mobile app development, user interface design. | Aerospace, healthcare, and safety-critical systems. |