**The “Prototyping model” is one of the most popularly used System Development Life Cycle (SDLC) Models, which belongs to predictive life cycle models. Explain the prototyping model?**

The Prototype Model in software development is a **Systems Development Methodology (SDM)** It centers around creating a **paradigm output**, which is basically an early, simplified version of the final system or product .This prototype is then tested, refined based on feedback, and iteratively improved until a satisfactory version is achieved. This final prototype then acts as the foundation for building the complete system.

* **Advantages to using a prototype in the development process:**

1. Early user feedback
2. Reduced risk
3. Improved requirements definition
4. Flexibility:
5. Identification of design flaws

* **Disadvantages to using a prototype in the development process:**

1. Time Consumption
2. Misunderstood Final Product
3. Scope Creep
4. Throwaway Prototypes
5. Poor Documentation
6. Suboptimal Solutions