### **Process Model: Agile Model**

The Agile Model is the best fit for the AirCNC project. Here's why and an overview of the model:

**Agile Model** is an iterative and incremental development process. The work is divided into smaller units ,which are typically 1-4 weeks long. Each unit results in a functional piece of the application that can be reviewed and tested. After each unit, feedback is gathered and improvements are made in the next iteration.

### **1. Why This Model is Suitable for Our Project**

* **Flexibility and Adaptability**: With the AirCNC project, we need to be adaptable. The real estate and rental market can have changing needs, like new regulations or features, and Agile allows quick changes after receiving feedback.
* **Continuous Feedback**: Agile promotes constant communication and feedback with stakeholders (hosts, guests, admins), which is essential in a platform like AirCNC. For example, you might want to adjust the search filters or modify how the review system works based on user feedback.
* **Frequent Releases**: The Agile model allows for frequent, smaller releases of the product. This is great for AirCNC because we can launch an MVP (Minimal Viable Product) first, with essential features, and gradually add more features like advanced booking management or new payment methods.
* **Collaboration**: The model encourages active collaboration between the developers, designers, and project stakeholders which are my teammates in this project. This is important because the requirements for a rental platform like AirCNC can evolve rapidly as new trends or demands emerge.

### **2. Complications with the Agile Model**

* **Scope Creep**: As Agile allows for frequent changes and iterations, there's a risk that the scope of the project might keep expanding based on constant feedback. This could delay the final release of the product and cause additional work for the team.
* **Time Management**: Since units are short, they require efficient planning and accurate estimation of tasks. If something unexpected comes up or a feature takes longer than expected, it could affect the project timeline and require adjustments.
* **Resource Intensive**: Agile requires close communication and regular meetings between team members, product owners, and stakeholders. If any of the team members are unavailable or there are communication issues, it could delay the process or cause misunderstandings about the requirements.
* **Integration Issues**: Since features are developed in smaller increments, there might be issues when integrating new features with the already built portions of the system. For instance, payment processing or calendar booking might conflict with other functionalities that are developed in parallel.
* **Potential for Inconsistent User Experience**: As features are developed and rolled out over multiple units, there might be inconsistencies in how users experience the platform in the early stages, which could affect user satisfaction. For instance, the property management system might not be fully integrated into the payment system until later, leading to a disjointed experience.

### **Conclusion:**

The Agile model is ideal for AirCNC because of its flexibility, ability to adapt to changes, and focus on delivering incremental value. However, the team must be cautious about scope creep, communication, and integration challenges to ensure the project is completed successfully.