|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| List of Services | Pet backer | Rover | Trusted house sitters | Go puppy | Egy puppy | Pet yard (Us) |
| Boarding | match pet owners with suitable boarding service providers based on criteria such as location, pet type, availability, and user reviews.  For all types of pets. | Functions similar to Pet Backer where users filter based on criteria and choose the carer suitable for them.  For all types of pets. | **X** | **X** | **X** |  |
| Grooming | Offers a grooming service for cats and dogs by making an appointment with pet groomers through the website. | **X** | **X** | Provides cat and dog care service by making an appointment with the pet groomer through the social networking site or phone number | Offers a grooming service for cats and dogs by making an appointment with pet groomers through the website. |  |
| Sitting | Similar to grooming you can select the pet carer that suits you and they come to your house for a certain period of time to take care of your pet. Pets can be cats or dogs or others. | Similar to grooming you can select the pet carer that suits you and they come to your house for a certain period of time to take care of your pet. Pets can be cats or dogs or others. | TrustedHousesitters primarily focuses on connecting homeowners who need pet sitters with individuals willing to care for pets in exchange for accommodation | **X** | **X** |  |
| Walking | Select from a variety of pet walkers and set an agreed time for the walk, the pet walker takes your pet and walks it for the agreed time.  Pets allowed are dogs and cats only. | Select from a variety of pet walkers and set an agreed time for the walk, the pet walker takes your pet and walks it for the agreed time.  Pets allowed are dogs and cats only. | **X** | **X** | **X** |  |
| Daycare | Choose an appropriate carer to drop off your pet at their house and they’ll take care of it for the day. Animals allowed depend on the carers. | Choose an appropriate carer to drop off your pet at their house and they’ll take care of it for the day. Animals allowed depend on the carers. | **X** | **X** | **X** |  |
| Pet Taxi | Book a carer to take your precious pet from your house to your destination when you can’t drive him yourself.  Dogs and cats are allowed. | **X** | **X** | **X** | **X** |  |
| Pet Training | Choose from a list of trained carers that will train your pet to follow your commands.  Only dogs and cats are allowed. | Virtual dog training through a video call on their website.  Only dogs are trained. | **X** | **X** | **X** |  |
| Drop in visits | **X** | Connecting pet owners with sitters to visit their pets the pet owner can choose the date and the duration of the visit and send the location to the sitter | **X** | **X** | **X** |  |
| Health care | **X** | **X** | **X** | provides more health care they communicate with you and come to you and do full health care from the first physical hygiene to vaccinations. | Offers a health care service for cats and dogs by making an appointment with veterinarian to check the pets or give them vaccination |  |
| Online store | **X** | **X** | **X** | **X** | Offers a platform to sell pet necessities , like an e commerce website but only for pets |  |

Given the nature of our project, a microservices architecture could be more suitable.

Microservices Approach:

1. \*Divide Functionalities:\*

- Identify distinct functionalities within out app, such as user authentication, pet services, chatbot integration, and more. Assign each functionality to a separate microservice.

2. \*Technology Stack:\*

- Leverage the diversity of technology stacks that microservices allow. For example, use Node.js for backend services, integrate Flutter for the app's frontend, and implement the chatbot feature as a separate service.

3. \*Independence and Scaling:\*

- Design each microservice to operate independently, allowing for easier development, testing, and deployment. This independence also facilitates scaling of specific functionalities as needed.

4. \*Data Management:\*

- Consider having dedicated databases for each microservice, ensuring that data related to pet services, user profiles, and chatbot interactions are stored independently. This aligns well with microservices' autonomy principle.

5. \*Communication:\*

- Implement lightweight communication protocols like HTTP/REST or message queues between microservices. This facilitates seamless communication while keeping each service decoupled.

6. \*Team Collaboration:\*

- Assign specific functionalities to each team member or sub-team, allowing for parallel development. This aligns with the microservices philosophy of small, cross-functional teams.

7. \*Scalability:\*

- Take advantage of fine-grained scalability. For instance, if the chatbot feature experiences high demand, you can scale that particular microservice independently without affecting other parts of the application.

8. \*Continuous Integration/Continuous Deployment (CI/CD):\*

- Set up a CI/CD pipeline to automate testing and deployment processes for each microservice, ensuring a streamlined development lifecycle.

9. \*Documentation:\*

- Provide clear documentation for each microservice, including API documentation, code documentation, and guidelines for team members. This facilitates collaboration and maintenance.