

ANIMAL SHELTER WEBSITE

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Aim: -

To prepare a detailed statement of problem for the selected mini project and to identify a suitable software model for the same.

Problem Title: -

Animal Shelter Website Development .

Problem Statement: -

In recent times, there has been a concerning and gradual increase in the number of missing pets, and unfortunately, the success rates of reuniting them with their distressed owners remain dishearteningly low. The limited range of methods available to locate lost pets, such as traditional approaches like distributing posters or seeking help through social media, has proven insufficient in addressing the issue effectively. These traditional methods often yield limited results due to their restricted reach and lack of organization. Furthermore, even when missing pets are found, the process of reconnecting them with their rightful owners can be hampered by the absence of proper contact information. Moreover, another significant challenge lies in the scarcity of efficient and functional pet search websites. The lack of well-established and accessible platforms for reporting and searching for missing pets hinders the chances of successful reunions. While some owners may resort to posting their search lists on online platforms, the limited availability of dedicated missing pet websites makes it difficult for users to find an extensive network of resources to aid in their search.

Addressing these issues requires a comprehensive approach that encompasses improved public awareness, effective communication channels between pet owners and animal shelters, and the development of user-friendly online platforms dedicated to missing pet cases. By establishing a well-coordinated system that incorporates technology, social media, and community engagement, we can work together to increase the chances of reuniting missing pets with their worried and loving owners. Additionally, keeping accurate records of missing pet cases and gathering relevant statistics will not only provide a clearer picture of the scale of the problem but also help garner public attention and support for this important cause. Only through collective efforts can we hope to mitigate the distress caused by missing pets and promote responsible pet ownership across communities.

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Traditional Software Model: -

Traditional model for the development of a pet finder website to address the issue of missing pets is the "Spiral Model."

Justification:

Risk Management: The Spiral Model is well-known for its strong emphasis on risk management. When dealing with an issue like missing pets, there are various uncertainties and challenges that need to be addressed. The Spiral Model allows for the early identification and mitigation of risks through its iterative approach, where each iteration involves risk analysis and risk reduction. This ensures that potential obstacles and challenges related to missing pets can be proactively addressed during the development process.

Iterative and Incremental: Like the Unified Process, the Spiral Model is also iterative and incremental. It involves repetitive cycles of planning, risk analysis, engineering, and testing. This iterative nature is well-suited for the development of a pet finder website, where continuous improvement and refinement are essential to create a functional and user-friendly platform.

User Involvement: The Spiral Model encourages extensive user involvement throughout the development process. In the case of a pet finder website, involving pet owners, shelters, and the community is crucial to understanding their needs and preferences. This user-centric approach ensures that the website meets the requirements of its target audience effectively.

Flexibility and Adaptability: The Spiral Model allows for flexibility and adaptability to changes in requirements. As the development team gathers feedback from users and stakeholders, they can incorporate changes and improvements into subsequent iterations. This enables the website to evolve and cater to emerging needs in the ongoing search for missing pets.

Prototyping: The Spiral Model incorporates the concept of prototyping, where early versions of the product are developed to validate ideas and gather feedback. For a pet finder website, prototyping can be beneficial in visualizing the user interface, testing navigation flow, and refining the website's features based on user feedback.

Efficient Resource Allocation: The Spiral Model focuses on allocating resources effectively by prioritizing high-risk areas and features in the initial iterations. For a pet finder website, this means that the most critical functionalities can be developed and tested early on, ensuring that the core features for reuniting missing pets and their owners are given priority.

In conclusion, the Spiral Model offers an effective and systematic approach to developing a pet finder website by addressing risk management, promoting user involvement, allowing for flexibility, and enabling iterative improvements. By following the Spiral Model, the development team can build a reliable and efficient platform to assist in reuniting missing pets with their owners and contribute to the well-being of the pet-loving community.

Agile Software Model:-

Scrum is an Agile framework that focuses on delivering value incrementally and iteratively. It is well-suited for complex projects with changing requirements, making it a suitable approach for the development of a pet finder website to address the issue of missing pets.

Short Description:

In the Scrum model, the development process is divided into time-boxed iterations called "sprints." Each sprint typically lasts two to four weeks and involves a cross-functional team working collaboratively to deliver a potentially shippable product increment. The development work is organized and prioritized in a backlog, which is a list of features and tasks ordered by their importance.

During each sprint, the team selects a set of items from the backlog to work on and commits to completing them within the sprint duration. Daily stand-up meetings are held to promote transparency, communication, and quick problem-solving. At the end of each sprint, a review meeting is conducted to demonstrate the completed work to stakeholders, gather feedback, and plan the next sprint.

Scrum also emphasizes continuous improvement through retrospectives, where the team reflects on the past sprint to identify areas for improvement and implement changes in subsequent sprints.

Advantages for the Pet Finder Problem:

Iterative Development: Scrum's iterative approach aligns well with the need for continuous improvement when developing a pet finder website. Each sprint produces a working increment of the website, allowing for regular feedback from users and stakeholders, which helps in refining and improving the platform over time.

Flexibility and Adaptability: As the pet finder problem involves uncertainties and changing requirements, Scrum's flexible nature allows the development team to adapt and adjust their approach based on feedback and emerging needs. This ensures that the website remains relevant and effective in addressing the issue of missing pets.

Regular Communication: Scrum encourages frequent communication among team members and stakeholders through daily stand-ups, sprint reviews, and retrospectives. This fosters collaboration and ensures that everyone involved in the

project is aligned and informed about the progress and challenges.

Transparency and Accountability: Scrum provides transparency into the development process and progress through the use of visual boards, burndown charts, and regular meetings. This helps in keeping stakeholders informed about the status of the project and fosters a sense of accountability within the development team.

Continuous Improvement: The pet finder problem may require continuous refinement and enhancement of features based on user feedback. Scrum's iterative nature and the focus on continuous improvement through retrospectives make it well-suited for addressing evolving needs and ensuring the website remains effective in reuniting missing pets with their owners.

In conclusion, the Scrum model offers a structured yet adaptable approach to the development of an animal shelter website, making it a suitable choice for addressing the issue of missing pets effectively. Its iterative development, flexibility, emphasis on communication, transparency, and continuous improvement align well with the requirements of the animal shelter problem statement.