MOBILE & WEB APPLICATIONS FOR RESCUE ANIMAL ADOPTION | Team N1N9

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abstract

Animal shelters need a technological upgrade to better connect people with animals who need homes. This project will require exploring the field, designing and implementing a mobile and web application to house a database of homeless animals in the Seattle area (and beyond) and better feature every animal by designing a detailed profiling system.

problem

Animal adoption centers, such as shelters or humane societies, struggle to find homes for animals in need. These places have a maximum capacity, and sadly many of these animals must be euthanized if a home cannot be found. There are many animal shelter and adoptable pet sites on the web, but many simply offer a description of the animal with a photo and a phone number. For example, many animal profiles on Petfinder.com list useful information like breed, color, age, coat type, vaccinations and location along with a photo but it is difficult to learn about a dog's temperament and endearing habits from this information. To combat this, Petango.com utilizes a "Pawsonality test", a personality test that matches owners to pets based on living situation and habits, but we believe this only slows down the adoption process.

Many shelters, such as the Spokane Humane Society, have used social media sites like Facebook to promote adoption and advertise the animals that need a home. This is not an effective method to represent the animals in the shelter either, as only a select few animals can share the limelight and be seen by the general populace. So, how can animal adoption centers best feature the animals in shelters and what can be done to expedite the adoption process?

Currently, there are few mobile apps for adopting pets. All of them only cater to specific regions. We believe there exists a need for animal shelters to get more exposure and perhaps make society more aware there are other options besides purchasing animals from breeders.

objectives

This project aims to solve these problems by providing an intermediate way of learning about the animal remotely, creating more in-depth profiles for animals, a better browsing experience, and providing more ways to share information via social media to lower the barrier in the pet adoption process.

comprehensive profiles
One of our major points of focus is to allow the animal profiles to be extensively detailed. We will create a platform that will allow animal shelters to create in depth profiles easily. There are many factors that are taken into consideration by pet-seekers (e.g. temperament, personality, training, medical history, etc.) that most current online resources do not have immediately available. By providing comprehensive pet profiles, users will be more successful in finding an animal they would want to adopt. We will work with local animal shelters that are willing to share the data about their animals and provide feedback on what they have found is important to advertise about the animals. If we can't find a shelter that can help us we will make assumptions based on our competitor analysis from sites such as Petango.com and Petfinder.com for what is needed in the applications as well as fill the applications. We will also fill the applications with dummy data if the shelters are unable to provide any.

In addition to pet profiles, user profiles will also be implemented into the system. These profiles will include information detailing what kind of animal they are seeking for. This information will be compared to the pet database and pinpoint the best matches. We also aim to have these profiles include some information about the user. This is intended to allow the shelters to have an idea of who is adopting these pets in an attempt to prevent animal cruelty and other forms of neglect.

SEO
A new discovery process will be established to better connect potential owners to compatible pets. We aim to develop a system that will allow users to easily search for the right pet, save unique search queries and be notified of animals added to the database that match their specifications.

social media
Providing more ways for people to share the information they find about shelter animals will help increase the number of adoptions. If a user comes across an animal that they think is better suited for their friend or a family member, sharing the animal's profile quickly using social media, such as Facebook and Twitter, will be an efficient way to share information as well as raise awareness of homeless pets.

milestones

- each team member owns 10 milestones -

milestone	due date	owner
Project Proposal	01/18/2013	All team
Write Up: Competitor content analysis	01/22/2013	Cam
Write Up: Technical scope (feasibility analysis)	01/24/2013	Kyle
Deliverable: Draft feature list	01/25/2013	Angela
Complete meetings with two shelters (deliverable: notes)	02/01/2013	Cam
Deliverable: Finalized feature list	02/04/2013	Jordyn
Deliverable: Wireframes	02/11/2013	Angela
Deliverable: Prototype	02/13/2013	Jordyn
User Testing (deliverable: notes)	02/18/2013	Kyle
Deliverable: Draft design specifications (for team and TA review)	02/22/2013	Angela
Deliverable: Draft database design (for team and TA review)	02/22/2013	Cam
Deliverable: Draft technical specifications (for team and TA review)	02/22/2013	Jordyn
Deliverable: Database design finalized (deliverable: schema)	02/26/2013	Kyle
Setup GitHub git repository and train team (deliverable: GitHub usernames and protocol write up)	02/26/2013	Jordyn
Deliverable: Design specifications for web app	02/26/2013	Angela
Deliverable: Technical specifications	02/26/2013	Jordyn
Sync team to prepare specifications for implementation (deliverable: meeting notes)	02/27/2013	Jordyn

Database implementation (deliverable: screenshots)	03/04/2013	Kyle
Produce website content (outside of database) (deliverable: write up)	03/08/2013	Cam
Website asset creation (deliverable: screenshots)	03/08/2013	Angela
Website Back-end implementation (deliverable: code)	03/15/2013	Jordyn
Website Front-end implementation (deliverable: screenshots)	03/15/2013	Kyle
Content acquisition: APIs (deliverable: write up)	03/15/2013	Cam
Website testing (deliverable: notes and results)	03/18/2013	Angela
Content acquisition: shelters (deliverable: write up)	03/18/2013	Cam
Content review (make sure content input/delivery is correct from back end to front end; deliverable: notes)	03/21/2013	Kyle
Website published (deliverable: website URL)	03/22/2013	Cam
Deliverable: Design specifications for iOS app	April Week 2	Angela
Mobile API implementation	April Week 2	Kyle
Draft common mobile GUI	April Week 2	Jordyn
Content conversion (web to mobile)	April Week 4	Cam
Mobile asset creation	May Week 2	Angela
iOS app backend implementation	May Week 2	Kyle
iOS app frontend implementation	May Week 2	Jordyn
Sync mobile apps (check for consistency and content)	May Week 2	Kyle
iOS app testing	May Week 3	Jordyn
iOS app release	May Week 3	Angela
Capstone presentation	May Week 4	Cam

resources

To complete this project, we will need the following resources:

- **A vehicle to visit surrounding animal shelters.**
  Both Kyle and Jordyn have cars that can be used to visit the shelters (if animal shelters cannot be visited or contacted, then we will not need a vehicle to visit shelters but instead will try to get in contact via email or do in depth research on existing sites).

- **Phones to test the mobile application.**
  We will borrow/rent additional devices as needed. We currently have 3 iOS devices.

- **Web server to host web site and database.**
  We will use the available resources at the UW to host the site and database.

- **Apple computers for iOS development.**
  Cameron and Kyle will use the computers in the labs as well as rent them from UW as needed.

- **Apple developer account so we can test the application on iOS devices.**
  We will use Jordyn's account.

- **GitHub accounts for everyone that will be used for version control**.
  Jordyn will use his account to host the Git repository and everyone will contribute to it.

expertise

Cameron
Technical writing extraordinaire and friend to small animals, Cameron will oversee the content management of the project. Having work and education backgrounds in both user experience design and database management, Cameron has proven capable of creating and maintaining information systems that focus on usability, integrity, and performance. Cameron also has experience in front and back end web development using various languages including HTML, CSS, JavaScript, and PHP. Additionally, Cameron is experienced in graphic design, being proficient Adobe Photoshop and Illustrator. Cameron defines himself as a dog person, but notes that he also has an appreciation for their feline counterparts.

Jordyn
Jordyn will take on the roles of project manager and developer. His background as a secure software developer has allowed him to become familiar with a multitude of programming languages as well as best practices when doing secure development. Through his freelance, educational and professional career, Jordyn has helped develop projects from concept to release. He also has direct experience developing applications for both the iOS platform and web. Jordyn has managed many projects utilizing agile software development practices to ensure milestones are met within the allotted timeframe. He also has experience mitigating issues, as they occur to keep the project on track or moving resources around to prevent delays.

Kyle
Kyle has several years of experience with back-end development. Having worked on various programming projects in a wide variety of programming languages (whether in an academic or professional setting), he makes sure to get the job done thoroughly and meet all requirements. Kyle will focus primarily on back-end development for this project, and will also build and maintain the database used to drive and store data. Consider him the go-to guy for all back-end issues. He also loves animals, and would not be surprised if his own family gained a couple paws by the end of this project.

Angela
As the team designer, Angela will own the user experience and interaction design of the mobile and web applications. She will give identity to the project and develop brand strategy as well as manage team documentation. Over the course of internships, projects and freelance work, she has worked with many developers to meet user needs, meet business requirements and create useful designs and satisfying products. Angela also has some experience with front-end development and will help implement the design specifications. She loves animals, especially dogs, and plans to use this app to rescue a dog in the future.