Software Detailed Design

for

No Kill Louisville Android App

Prepared by Nick Curry,

Sokheang Leang,

Christianne Maene,

Kei R

Indiana University Southeast

Individual Contributions

Nick Curry: team leader, developer, tester

Sokheang Leang: developer, tester

Christianne Maene: developer, tester

Kei R: developer, tester

Personal Information

Nick Curry: nscurry@iu.edu

Sokheang Leang: sleang@iu.edu

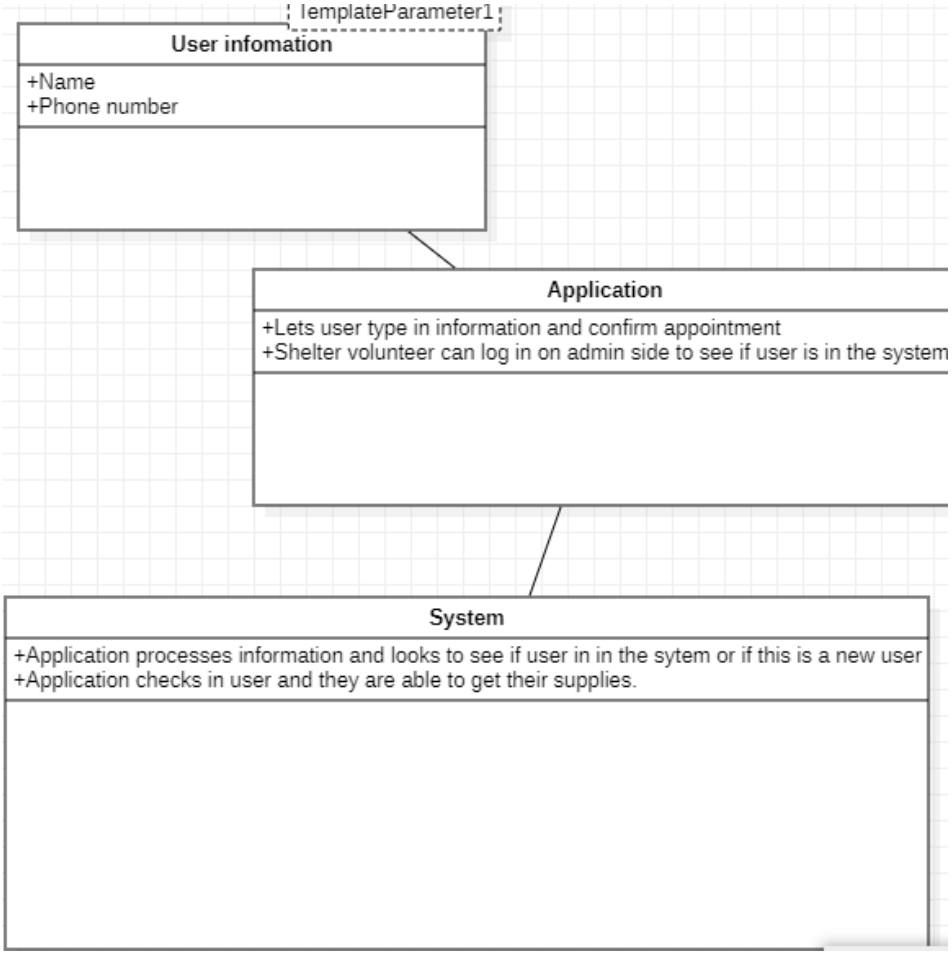
Christianne Maene: imaene03@gmail.com

Kei R: irouf@iu.edu

Data Design

The data for the check-in portion of the application currently uses MongoDB as the database. The database is accessed via a web server using Express and REST API. The web server allows the person picking up pet food to add their check-in time. The volunteer is able to get a list of the check-in information and confirm check-ins. The current attribute of the web server is the name, date of check-in, time of check-in, and a confirmation on check-in.

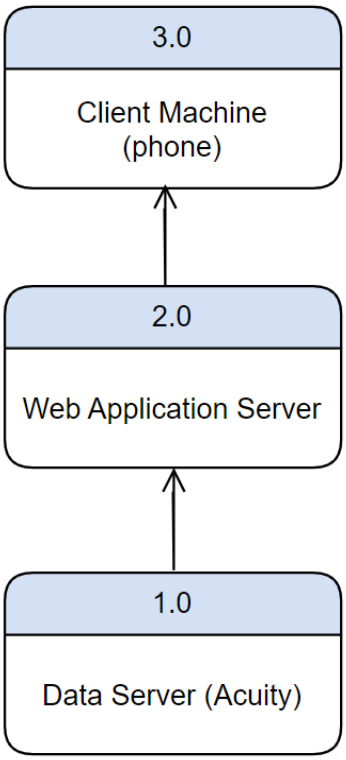
Architecture Design



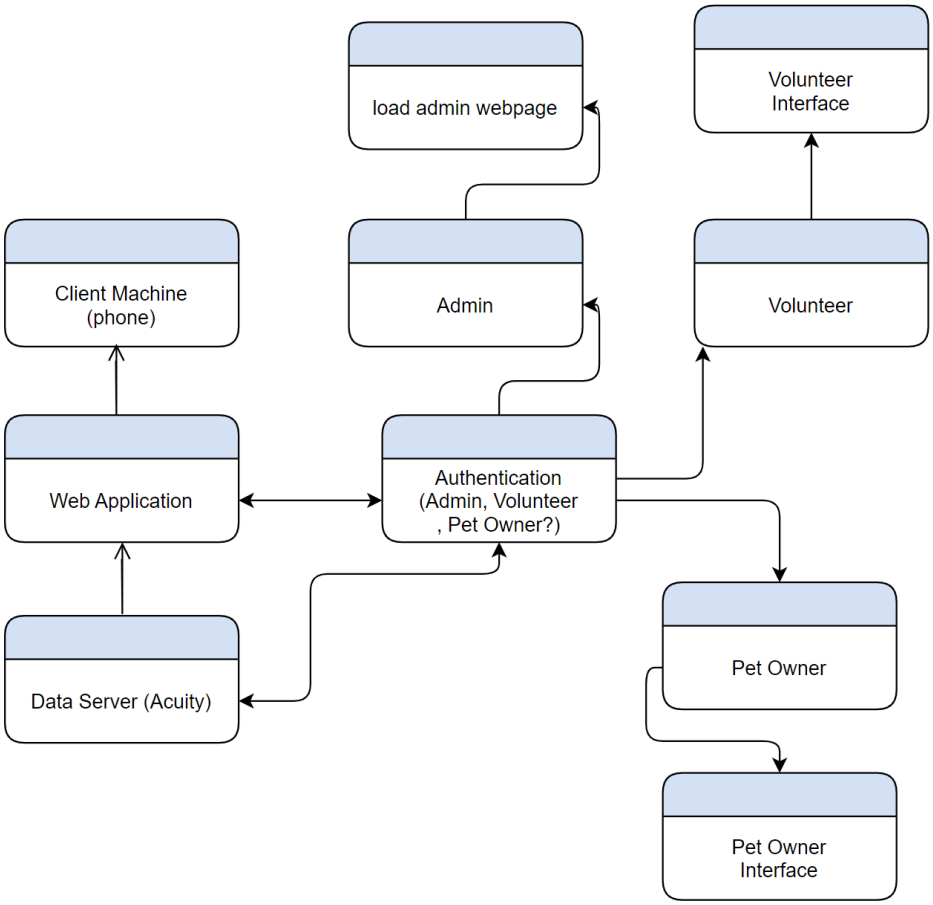
Interface Design

The interface is quite simple and that is according to the request given by No Kill Louisville. The app has a button for scheduling an appointment. This will redirect the pet owner to the web link for scheduling an appointment. The second button is related to confirming an appointment. This button is where the verification goes for if someone did have an appointment. The third button is for volunteers who can confirm an appointment, determine if extra paperwork is needed or if the pet owner is a troublesome person who never brings paperwork.

Hardware & Software mapping



Global Software Control



Procedural Design

As pet owner	
Needs/components:	How:
Schedule an appointment	Web link to already implemented Acuity Scheduling application
Confirm arrival time	Input: Enter name and phone number in prompt Output: Send back a ‘confirmed’ or ‘rejected’ based on volunteer feedback
Confirm parking spot number	Input: Once arrival time has been confirmed, confirm parking spot number by entering a digit specifying what parking slot they are in. Output: Send back a confirmed slot number or slot number already in use rejection message

As a volunteer	
Needs/components:	How:
Confirm that appointment is valid	Upload all confirmed appointments before distribution day Input: Touch the confirm button when recipient has arrived Output: appointment confirmed message
Confirm that necessary paperwork is needed	Upload all needed paperwork before distribution day per recipient Check off to green all completed paperwork when turned in
Get notified as of what parking slot number pet owner has parked in	See what parking slot pet food recipient said they were in so food can be brought out.

The needs for this app are pretty simple and this is as per request from NKL. The purpose of the app is to facilitate distribution day and reduce the bureaucracy work that goes into the day every

time. With few volunteers on hand this is necessary. We still have not been able to achieve access to the code of the database or the database so we can load the information directly. This will be more work for NKL since they are not willing to share this information with us. They will be obliged to fill information in two different databases. Unfortunately, our team has tried to explain this to NKL and work with NKL but we have had no favorable response as yet. We have decided to move ahead and make our own database (backend) and format something that they might be willing to use. Perhaps the app will be more useful than the website application.