HEALTHCARE COALITION

Abigail Rehmet, Melody Hsu, Sam Horrigan, Caroline Hoerrner, Elijah Eaton ABOUT THE PROJECT

Near Southwest Preparedness Alliance (NSPA)

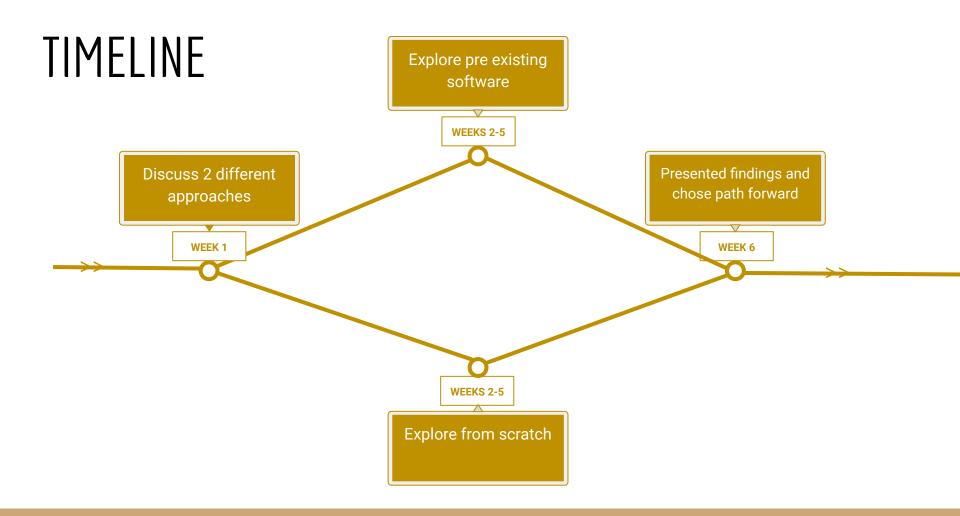
- Virginia based healthcare coalition
- Serves ~1 million people
 - Hospitals
 - Long-term care facilities
 - Public health
 - Emergency management
- Coordinates partner response activities during disasters
 - COVID-19 pandemic
- Four staff members
- Executive Director: Robert Hawkins
- http://nspa1.org/

GOAL

- Project proposed by Chelsea Treboniak
- Create a web-based online tracking system for the NSPA
- Work with Chelsea to gather client and staff requirements for online ticketing system
- Minimum Viable Product in 7-8 weeks

Date Submit: PPE Request Form - CUUD19 PPE and 202000		383 350									
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9. The resource CANNOT be fulfilled locally 10. The resource CANNOT be fulfilled regionally									15. Have you cancelled elective surger	ries and/or non-urgent outpatient appointments (if applicable)?	
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	9. 🗌 The r	esource CAN	NOT be fulfille				DT be fulfilled regionally				

OUR APPROACH



WEEK 1: SPLIT INTO GROUPS

osTicket

- Abby
- Melody

from scratch

- Caroline
- Elijah
- Sam

Redistribute?	Software	Language(s)	Link	Note
			https://github.com/uvdesk/com	
doesn't say no	UVdesk	PHP, mySQL	munity-skeleton	I like this one
Yes	osTicket	PHP, mySQL	https://osticket.com/	
	Zammad Help Desk	Ruby	https://zammad.com/en	don't know if opensource
NO	eTicket	PHP	https://eticketsupport.com/	illegal???
			https://bestpractical.com/downlo	
doesn't say no	Request Tracker	Perl, SQL	ad-page	
			https://glpi-project.org/download	
Maybe	GLPI	PHP	<u>s/</u>	

WEEK 2: GATHERED REQUIREMENTS

TICKET REQUESTER FUNCTIONALITY

- Open a ticket & submit
- Check ticket status
- Request ticket updates
- Avoid login feature

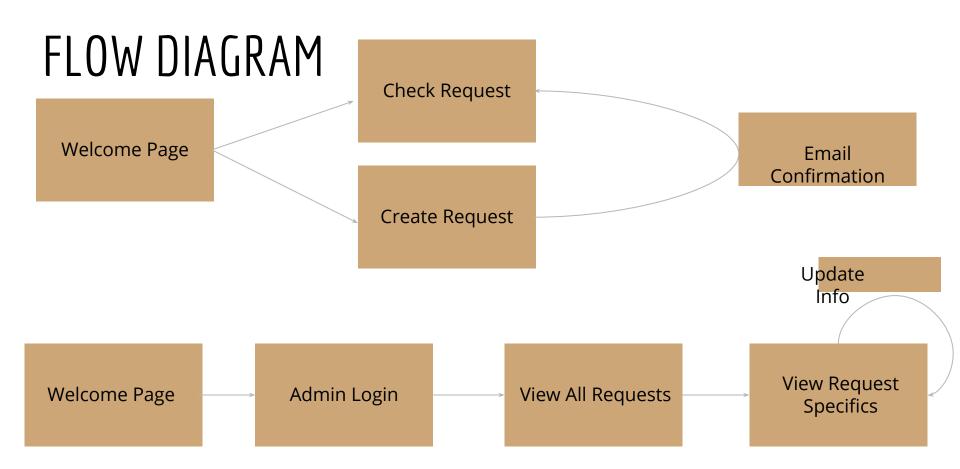
ADMIN (NSPA STAFF) FUNCTIONALITY

All staff:

- Login
- View all tickets
- Assign priority
- Communicate to client
- Delete/close tickets
- Assign tickets to staff

Director capabilities:

• Escalate ticket



WEEK 3: EXPLORED OSTICKET

STAFF FUNCTIONS

- Login
- View opened/closed tickets
- Assign priority
- Communicate to client
- Delete/close tickets
- Assign tickets
- Escalate ticket

CLIENT FUNCTIONS

- Open a ticket & submit
- Check ticket status



Support Center Home

Open a New Ticket

Check Ticket Status

Near Southwest Preparedness Alliance

Dedicated to enhancing regional preparedness and response to disaster.

In order to streamline support requests and better serve you, we utilize a support ticket system. Every support request is assigned a unique ticket number which you can use to track the progress and responses online. For your reference we provide complete archives and history of all your support requests. A valid email address is required to submit a ticket.

Open a New Ticket

Guest User | Sign In

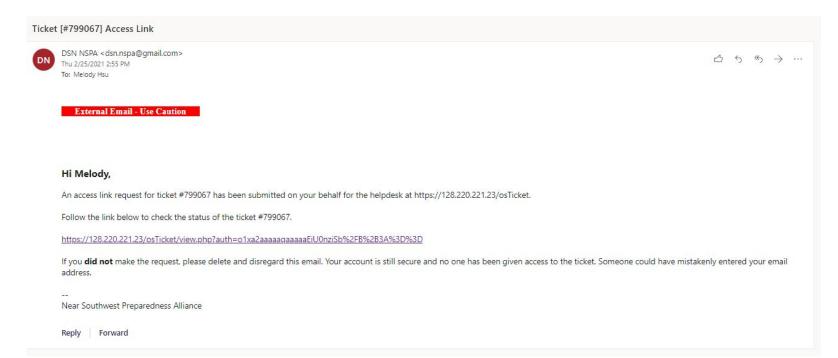
Check Ticket Status

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powered by OSTicket

Guest Us	ser Sign In Kind
⚠ Support Center Home 🛛 🔒 Open a New Ticket 🖉 🔒 Check Ticket Status	Brand
Open a New Ticket	When will you run out of your current supply? (estimated)
Please fill in the form below to open a new ticket.	Detailed item description (vital characteristics, brand, specs, experience, size, etc.))
Requesting agency point of contact Please type all answers	Date needed, pending availability
Requestor's Name *	If resources request has been fulfilled regionally, please explain how
Title *	The resource CANNOT be fulfilled locally
Requestor's Phone Number Ext: Hospital Name- System (if requesting for entire hospital system, which facilities does this include?)	The resource CANNOT be fulfilled regionally
Requestor's Email Address *	As of the request date, what is your current supply of each of the items, in individual units, you requested?
DELIVERY Address (include any special instructions, such as if there is a loading dock, or a 24/7 number needs to be	called,
etc). 24/7 Contact Name and Phone number for delivery issues	For each item you requested, how many do you use each day when caring for emergent and urgent patients?
Help Topic General Inquiry	Are the items requested being used for emergent or urgent care only?
Request specifics	
Please type all answers:	What conservation measures have you put into place?
Order	Have you cancelled elective surgeries and/or non-urgent outpatient appointments (if applicable)?
Kind	nave you cancelled elective surgenes and/or non-orgenic outpatient appointments (it applicable)?
Brand	

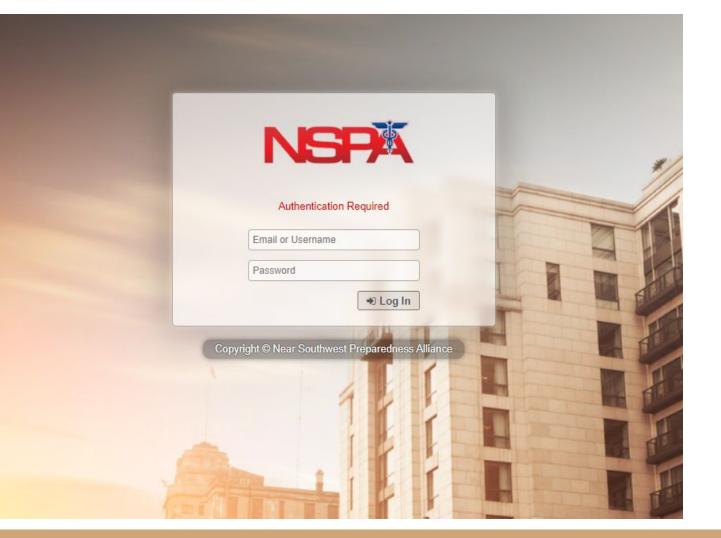
What ticket requester receives:



What ticket requester receives:

What admin receives:

Ticket	[#799067] Access Link	
DN	DSN NSPA <dsn.nspa@gmail.com> Thu 2/25/2021 2:55 PM To: Melody Hsu</dsn.nspa@gmail.com>	New Ticket Alert DN DSN NSPA <dsn.nspa@gmail.com> To Abigail Rehmet Thu 3/4/2021 6:27 PM</dsn.nspa@gmail.com>
	External Email - Use Caution	External Email - Use Caution
	Hi Melody, An access link request for ticket #799067 has been submitted on your behalf for the helpdesk at https://128.2 Follow the link below to check the status of the ticket #799067. https://128.220.221.23/osTicket/view.php?auth=o1xa2aaaaagaaaaaEiU0nziSb%2FB%2B3A%3D%3D If you did not make the request, please delete and disregard this email. Your account is still secure and no on address. Near Southwest Preparedness Alliance Reply Forward	Hi Admin, New ticket #762095 created From: Melody Department: Support sdaerhae To view or respond to the ticket, please login to the support ticket system Your friendly Customer Support System powered by Forsiticket



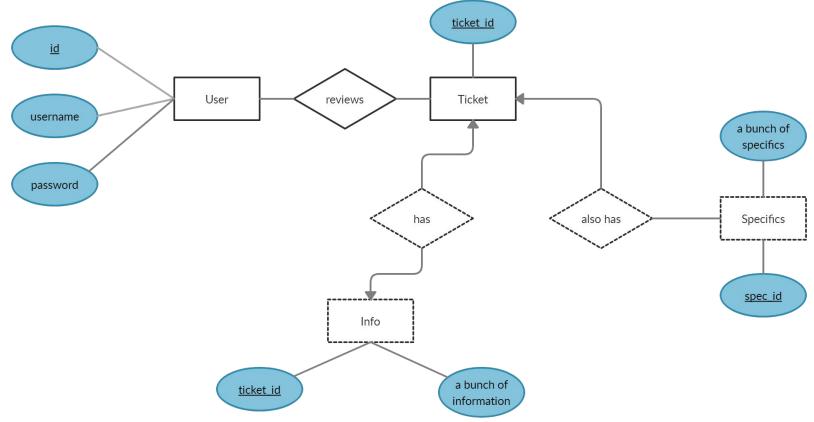
	Dashboard	Users	Tasks Tickets	Knowledgebase		
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(Open 🕈			-	4 - P	<u> </u>
	Ticket \$	Last Updated \$	Subject +	From +	Priority \$	Assigned To
	530977	2/22/21 3:38 PM	🗎 hi 😔 2	test	High	
	762095	3/4/21 6:28 PM	afaasfa 🔍 3	Melody	Normal	NSPA Support
	874136	3/4/21 6:24 PM	af	aafdfawg	Normal	
	799067	2/25/21 5:44 PM	📑 fasgarh 🖓 2	Melody	Normal	NSPA Support
	323638	2/23/21 11:16 AM	📄 asfaf	sdgwe	Normal	
	798824	2/23/21 10:59 AM	🗎 asfa	а	Normal	
כ	408423	2/22/21 4:50 PM	🗎 sd	Melody	Normal	
	632627	2/22/21 4:49 PM	📑 sdlfgjhesgkl 🖓 2	Abby	Normal	NSPA Support
	186367	2/22/21 3:07 PM	Abby's ticket	Abby	Normal	NSPA Support
	969019	2/18/21 1:07 PM	📑 this is a test 🖉 🖂 4	Abby	Normal	NSPA Support
	876157	2/14/21 1:16 PM	📄 osTicket Installed!	osTicket Support	Normal	NSPA Support
	409593	2/28/21 4:30 PM	📑 lalalal testt 🔍 3	Abby	Low	NSPA Support
5	905470	2/25/21 6:18 PM	📑 foo1	Abby	Low	
	938474	2/25/21 2:55 PM	📑 subject 🖂 2	Abby	Low	NSPA Support
٦	493380	2/18/21 1:05 PM	🖹 hello	Test	Low	

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			© Ticket #493380 ♠ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
C Ticket #493380		■ ■ • ■ • ピ ⊖ • ピ ◆	
hello			Ticket Thread (1) Tasks
Status: Open	User:	🛔 Test (1) 📽 (Manage Collaborators)	Test posted 2/18/21 1:05 PM
Priority: Low	Email:	test@gmail.com	
Department: Maintenance	Source:	Web (73.172.12.22)	hello
Create Date: 2/18/21 1:05 PM			
Assigned To: — Unassigned —	Help Topic:	Feedback	Created by Test 2/18/21 1:05 PM
SLA Plan: Default SLA		2/18/21 1:05 PM	Flagged as overdue by the system 2/22/21 3:04 PM
Due Date: 2/22/21 1:05 PM	Last Response:		- Hagged as overlade by the System 2/22/21 0.04 him
			NSPA Support transferred this to Maintenance 2/22/21 4:15 PM
Request specifics	Allele		
	Empty Empty		A Marked overdue!
	Empty-		
When will you run out of your	Empty—		Post Reply Post Internal Note
current supply? (estimated).	Empty—		From: DSN NSPA <dsn.nspa@gmail.com> v</dsn.nspa@gmail.com>
Detailed item description (vital characteristics, brand, specs, —E	Empty-		
experience, size, etc.)):			Recipients: "Test" <test@gmail.com> Collaborators</test@gmail.com>
Date needed, pending —E	Empty—		
If resources request has been			Reply To: All Active Recipients
fulfilled regionally, please	Empty—		Baranaa
explain how: The resource CANNOT be			Response: Select a canned response
fulfilled locally:			↔ ¶ 🖸 A₀ B / U ⊱ ≔ 🗷 ⊡ 📰 ∞ — √² 🖺 🗎
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As of the request date, what is your current supply of each of the items, in individual units, you requested?:	Empty—		hellohellohello
For each item you requested, how many do you use each day when caring for emergent and urgent patients?:	Empty—		Hey User, From Ushello
care only?:	Empty-		can of tuna
What conservation measures —E have you put into place?:	Empty—		Hey User,
Have you cancelled elective surgeries and/or non-urgent outpatient appointments (if applicable)?:	Empty		From Us
			all changes saved
Ticket Thread (1) Tasl	ks		O Drop files here or choose them

3: BUILT SCRATCH ENVIRONMENT

RELATIONAL MODEL



How It Works

Model

- Info
- Ticket
- Specifics

Constructors Getters Setters

Database Access Obj

Add(Request) ListAll() Delete(Request)

Update(Request)

Server.java & Front End

- Establishes database connection
- Redirects to pages
- Provides data to our HTML

ABLE TO MEET CLIENT AND STAFF FUNCTIONALITIES

Admin Login

New Request?	Check Status of Existing Request?	
Û	i de la constante de la consta	
New Request Form	Check Status	

		Requester Contact Information
	Title	Phone Number Email Address
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Placeholder	
Request ID Number: 10 Unique request ID number specified in	confirmation email. \times
Placeholder	
Check Status start new search	
Request 123456	
Request Entered System on: 01/01/2001	
Request Approved by Staff on: 01/01/2001	
Request Priority: HIGH	

ABLE TO MEET CLIENT AND STAFF FUNCTIONALITIES

ABC Hospital 01/02/2021 113:35 user@test.com Requester 01/06/2021 14:20 user@test.com	20 bx. Nitrile Gloves L Request Item	Sort by Priority: Medium Status: Unfulfilled Priority: Provity
01/02/2021 13:35 user@test.com Requester 01/06/2021 14:20		Status: Unfulfilled
01/06/2021 14:20	Request Item	Priority: Prority
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	01/06/2021 14:20 user@test.com Requester 01/06/2021 14:20	01/06/2021 14:20 Request Item user@test.com Requester 01/06/2021 14:20 Request Item

	Welcome, Staff11 Logout
	Q Search Sort by 🔹
New Requests (5)	ABC Hospital Priority: Medium 01/02/2021 113:35 20 bx. Nitrile Gloves L Status: Unfulfilled
All Active	user@test.com Contact Requester Assigned to: Staff1
Assigned to Me	Requester Information
Archive	
	Request Details
	Additional Details
	Edit Request
	« 1 2 »
	« 1 2 »

WEEK 4: SET UP OSTICKET SERVER & WORK ON WEBSITE FROM SCRATCH

hostgator \rightarrow http://128.220.221.23/osTicket

- Download Dependencies
 - PHP 5.6
 - MariaDB
 - PHP Manager
- Download and Configure osTicket

WEEK 5: COMPARED METHODS

OSTICKET

Pros

- Provides a more immediate product that fulfills what we need
- Is already implemented for us

Cons

- Less flexible
- Troubleshooting is problematic
- Longevity of the system is limited
- The log in function is difficult to remove
- Several preexisting PHPs

SCRATCH

Pros

- Flexibility
- Not finished on week 1
- Valuable learning experiences

Cons

- Time consuming
- API/Library Sleuthing
 - **SparkJava** (server)
 - Sql2o, PostgreSQL (JDBC)
 - Velocity Template Engine (front end)
 - **Bootstrap** (refined front end)
 - **jBCrypt** (password hashing)
 - SendGrid (emails)
 - pdfcrowd? PDFbox? iText? (pdf's)
 - ... and more to come (probably)

WEEK 6: THE CHOICE...

Local \rightarrow http://rain3.cnds.jhu.edu/nspa

- Download Dependencies
- Setup Database
- Configure Build.Gradle
- Compile Code



http://rain3.cnds.jhu.edu/nspa



LIVE DEMO