D4 Final Project Presentation

FHIR Enabled Documentation and Sharing of Symptoms During Cancer Treatment

By Shennong Info Tech

Team members: Su Jingren(Speaker1), Jia Sichao(Speaker2), Jin Jing(Speaker3), Han Xi, Shuai Jie

Presentation Video Link: https://youtu.be/pdDPZtTs_KA



Our Team

PM/ Developer - Jingren Su

Developer Backend - Jie Shuai

Developer Backend - Xi Han

Developer Frontend - Sichao Jia

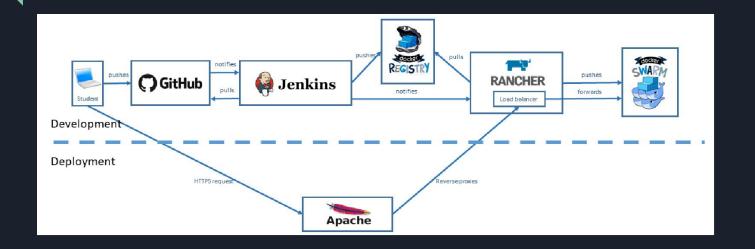
Developer Frontend - Jing Jin

External Mentor: David Qian

TA Mentor: John Lem

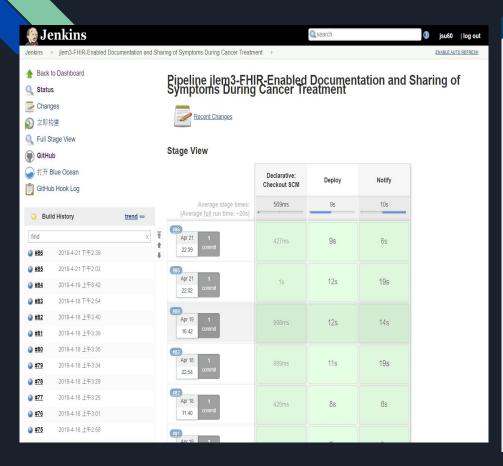


HDAP Deployment



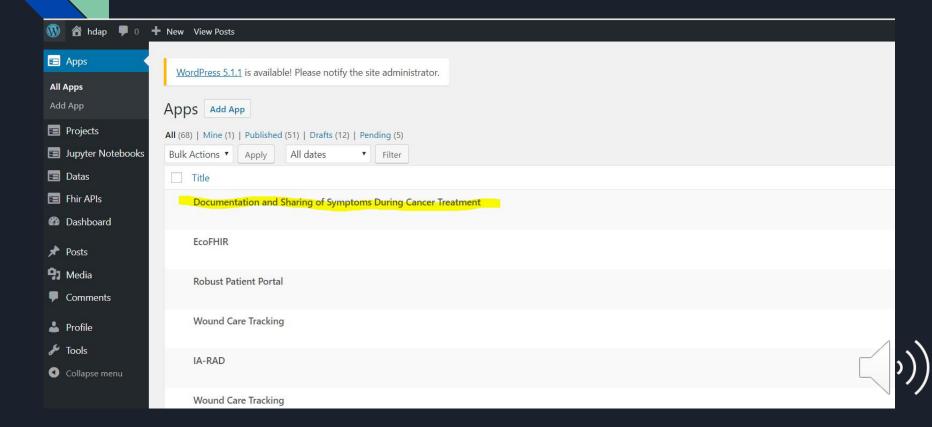


Github-Jenkins-Docker-Rancher



	invironment	SWARM	INFRASTRUCTURE	API			
ervice	:	~	in ShennongInfoTec	ch	- Active	N	:
Type: Service							
Scale:	ŀ						
lmage: build.hd	ap.gatech.edu/si	it-python-doc	:ker-web-app:latest				
Entrypo	int.						
	anc.						
None Comma							
None Comma None	nd:						
None Comma	nd:	Labels Log					
Comman None	nd:						
None Commal None Port	nd: ts Containers						
None Comman None Port	nd: ts Containers State: ORunning	nfoTech-webap;					
None Commai None Port	nd: ts Containers State:	nfoTech-webap					
None Comman None Port	nd: ts Containers State: ORunning Name: ShennongIr PAddress: 10.42.:	nfoTech-webapy 212.158 swarm2		latest			
None Comman None Port	nd: ts Containers State: ORunning Name: ShennongIr PAddress: 10.42.:	nfoTech-webapy 212.158 swarm2	p-1	latest			

HDAP Gallery



Project status

100%

Project Development Frontend/Backend

100%

Function Testing and Issue tracking

100%

Final Project Deployment on HDAP



- Data Chart Visualization
- Date System Back/Front end
- Front End jquery display login
- Patient Menu Bar display
- SQL relationship design
- Patient Symptoms Logging Menu



- Issue tracking
- Function Optimizing
- Full Use Case Testing



- Docker Deployment
- HDAP Gallery Adding
- HDAP Initial Setup



Final Gantt Chart For D4

А	В	С	D	E	F (BC	BD	BE	BF	BG I	вн в	BI B	BK	BL	вм	BN E	80 B	ВС	BR	BS	ВТ	BU	BV	BW	вх
D1 Presenter	Jie Shuai																								
D2 Presenter	Jia Sichao, Hanxi																								
D3 Presenter	Jingren Su, Jin Jing																								
D4 Presenter	Jingren Su, Jia Sichao,Jin Jing																								
Shennong Info Tech					_												able								
Task Name	Task Owner	Start Date	Target Dat	Status	Progres	s: N	1201	12019 12019	2019	2019	10/0/1	27,00	18/20/S	1201°	201	3070	2019	25.20	10 CO V	16/1	1/2/20	180°	3/2/2 3/2/2	5,50,5	878'S
Final Delivery Document	Everyone	4/18/2019	4/21/2019	Completed	100%	5																			
Research Document	Jie Shuai, Sichao	4/18/2019	4/21/2019	Completed	100%	5																			
Issue Tracking and Solving	Jingren, Jie Shuai, Sichao	3/31/2019	4/21/2019	Completed	100%	5																			
Function Optimizing	Jingren, Jie Shuai, Jin Jing	4/15/2019	4/21/2019	Completed	100%	5																			
Docker Deployment	Jingren, Jie Shuai	3/21/2019	4/21/2019	Completed	100%	5																			
Summary Generation Function	Jin Jing	3/31/2019	4/15/2019	Completed	100%																				
Full Use Case Testing	Jin Jing	4/13/2019	4/15/2019	Completed	100%	5																			
Data Chart Visualization	Jia Sichao, Jingren	3/15/2019	4/15/2019	Completed	100%	5																			
Patient Symptoms Backend Data	Jie Shuai, Hanxi	3/21/2019	4/15/2019	Completed	100%	5																			
Date System Back end	Jingren, Jie Shuai, Hanxi	3/22/2019	4/8/2019	Completed	100%	5																			
Date System front end	Jia Sichao, Jin Jing	3/24/2019	4/8/2019	Completed	100%	0																			
Physician Backend function	Jie Shuai, Hanxi	3/24/2019	4/8/2019	Completed	100%	5																			
Physician FrontEnd Display	Jia Sichao	3/21/2019	4/8/2019	Completed	100%	5																	1	0	
Patient Symptoms Logging Menu	Jie Shuai, Hanxi	3/21/2019	4/8/2019	Completed	100%	5																	ç	11	1
Front End jquery display menu	Jia Sichao, Jin Jing	3/24/2019	4/8/2019	Completed	100%	5																	9)))	
Full Dataset making	Han Xi	3/26/2019	4/5/2019	Completed	100%	5																/			
SQL relationship design	Jia Sichao	3/24/2019	4/5/2019	Completed	100%	5																			

Final Gantt Chart For Previous Deliverable D1&D2

						a de la constantina		No. of Contract	T-200-200	42128		_			1	- Carriera	eli avge	1020	Soles in the	State State	200				1		
Shennong Info Tech						D1	Topic	Pres	senta	tion						D2 1											
Task Name	Task Owner	Start D	Targe	€ Status	Progress	21	12019	1,350	45049	2010	11/201	37797	30,30	1,500	354 304	125/2	1970	1/20/2	377	3/2/2	190	69019 A12019	3/0/9	3/1/2	18/201 5/8/3/9/	3000	320
Backend login authorization	Shuai Jie, Jia Sichao	3/24/20	3/31/	Completed	100%																						
Front End jquery display login	Jia Sichao, Jin Jing	3/24/20	3/31/	Completed	100%																						
Detail requirement finalized	Jingren, Han Xi	3/12/20	3/28/	Completed	100%																						
Backend database initial setup for	Shuai Jie	3/24/20	3/31/	Completed	100%																						
docker set up for d3	Jingren, Shuai Jie	3/24/20	3/31/	Completed	100%																						
Learn (Python+flask) framework	Shuai Jie, Su Jingren, Han X	3/15/20	3/31/	Completed	100%																						
Learn CCS/Javascript/HTML	Everyone	3/4/201	3/31/	Completed	100%																						
D2 Presentation	Han Xi, Sichao	3/9/201	3/10/	Completed	100%																						
HDAP deployment	Shuai Jie, Su Jingren, JinJing	3/8/201	3/10/	Completed	100%																						
Meeting w/mentor	Everyone	3/9/201	3/9/2	Completed	100%																						
APP UI Design	Shuai Jie	2/25/20	3/9/2	Completed	100%																						
Use case/Test case design	Jin Jing	2/25/20	3/8/2	Completed	100%																						
Architectural Diagram	Jingren Su	2/25/20	3/9/2	Completed	100%																						
Team meeting	Everyone	2/27/20	2/27/	Completed	100%																						
Learn FHIR implement	Everyone	2/20/20	3/3/2	Completed	100%																						
Meeting w/mentor	Everyone	2/15/20	2/15/	Completed	100%																						
PPT_Topic Intro	Jia Sichao	2/12/20	2/16/	Completed	100%																						
PPT_Reseach	Jin Jing&Wang Yang	2/12/20	2/16/	Completed	100%																						
PPT_Business Case	Han Xi&Jingren	2/12/20	2/16/	Completed	100%																						
Gantt Chart for D1	Su Jingren	2/11/20	2/12/	Completed	100%																						9
Weely Report	Su Jingren	2/16/20	2/17/	Completed	100%																						5)
Presentation Video	Shuai Jie	2/16/20	2/17/	Completed	100%																						Č

Final Gantt Chart For Previous Deliverable D3

S	hennong Info Tech						D3 Tech Presentation
Т	ask Name	Task Owner	Start D	Targe	Status	Progress	
F	unction Optimizing	Jingren, Jie Shuai,Jin Jing	4/15/20	4/21/2	Completed	100%	
D	ocker Deployment	Jingren, Jie Shuai	3/21/20	4/21/2	Completed	100%	
S	ummary Generation Function	Jin Jing	3/31/20	4/15/2	Completed	100%	
F	ull Use Case Testing	Jin Jing	4/13/20	4/15/2	Completed	100%	
D	ata Chart Visualization	Jia Sichao, Jingren	3/15/20	4/15/2	Completed	100%	
P	atient Symptoms Backend Data	Jie Shuai, Hanxi	3/21/20	4/15/2	Completed	100%	
D	ate System Back end	Jingren, Jie Shuai, Hanxi	3/22/20	4/8/2	Completed	100%	
D	ate System front end	Jia Sichao, Jin Jing	3/24/20	4/8/2	Completed	100%	
P	hysician Backend function	Jie Shuai, Hanxi	3/24/20	4/8/2	Completed	100%	
Р	hysician FrontEnd Display	Jia Sichao	3/21/20	4/8/2	Completed	100%	
P	atient Symptoms Logging Menu	Jie Shuai, Hanxi	3/21/20	4/8/2	Completed	100%	
F	ront End jquery display menu	Jia Sichao, Jin Jing	3/24/20	4/8/2	Completed	100%	
F	ull Dataset making	Han Xi	3/26/20	4/5/2	Completed	100%	
S	QL relationship design	Jia Sichao	3/24/20	4/5/2	Completed	100%	
P	atient Menu Bar display	Shuai Jie	3/15/20	3/31/2	Completed	100%	
В	ackend login authorization	Shuai Jie, Jia Sichao	3/24/20	3/31/2	Completed	100%	
F	ront End jquery display login	Jia Sichao, Jin Jing	3/24/20	3/31/2	Completed	100%	
D	etail requirement finalized	Jingren, Han Xi	3/12/20	3/28/2	Completed	100%	
В	ackend database initial setup fo	Shuai Jie	3/24/20	3/31/2	Completed	100%	
d	ocker set up for d3	Jingren, Shuai Jie	3/24/20	3/31/2	Completed	100%	
L	earn (Python+flask) framework	Shuai Jie, Su Jingren, Han X	3/15/20	3/31/2	Completed	100%	
		Everyone			Completed	100%	
HĒ							



Following Items:

1.Project design and research part By Sichao Jia

2.Project Video Demonstration By Jing Jin

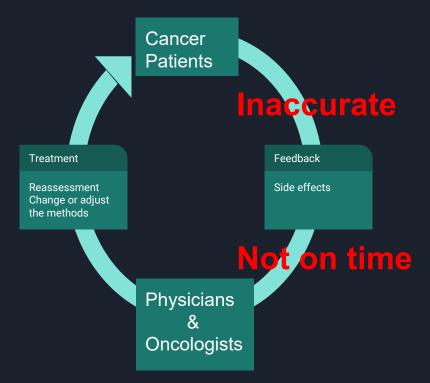


Research - problems

Current problems:

- Patients
- Difficulties in updating symptoms accurately given the challenges and pains in fighting cancer.
- Physicians

Delays in symptom reporting due to time gaps in appointments. Not able to plan/adjust treatments in a timely manner.





Research – end-user requirements

Requirements:

A solution should be designed to allow:

- patients to log daily symptoms during cancer treatment;
- physicians to track these logs in real time;
- the electronic medical record to auto-populate summary information at interval appointments.



Research – current solutions

- Paper symptom diary
- Low efficiency and accuracy.
- Mobile apps
- Most of them only focus on appointment making, fast consulting, or act as patient and doctor communication platform
- Fails to connect the patients with physicians.
- Scattered data, no consistency, no straightforward or to-thepoint summary.



App Symple symptom logging page

