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
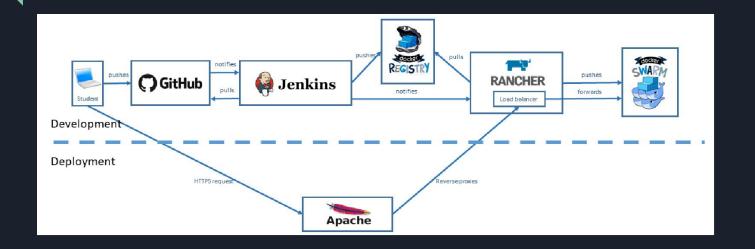
Developer Frontend - Sichao Jia

Developer Frontend - Jing Jin

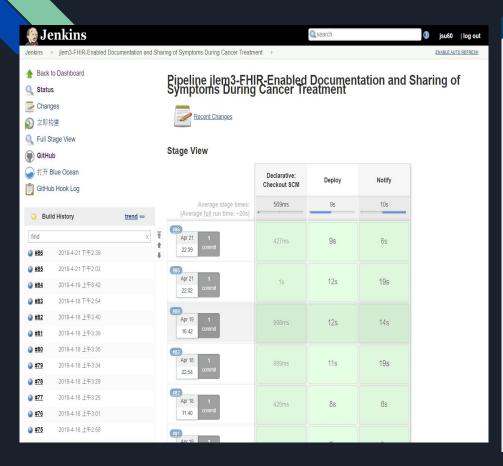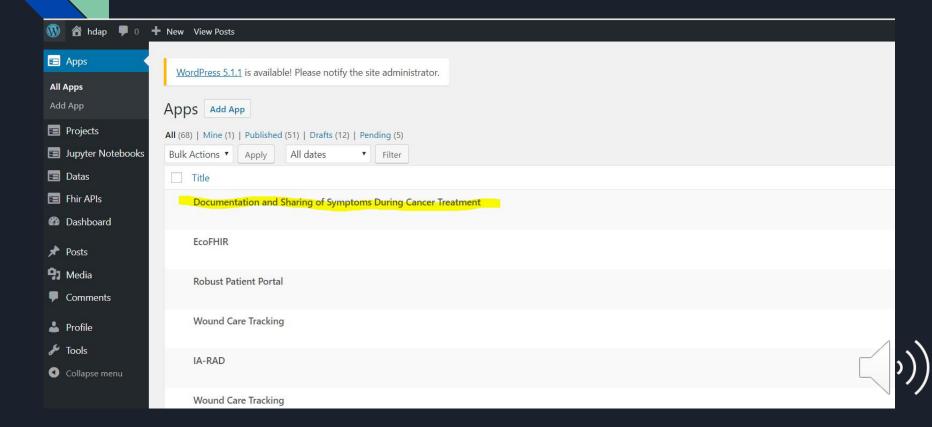External Mentor: David Qian
TA Mentor: John Lem

HDAP Deployment

Github-Jenkins-Docker-Rancher

HDAP Gallery

Project status

100%

Project Development Frontend/Backend

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

100%

Function Testing and Issue tracking

- Issue tracking
- Function Optimizing
- Full Use Case Testing

100%

Final Project Deployment on HDAP

- Docker Deployment
- HDAP Gallery Adding
- HDAP Initial Setup

Final Gantt Chart For D4

	A	B
	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 — Final Deliverable

Task Name	Task Owner	Start Date	Target Date	Status	Progress
Final Delivery Document	Everyone	4/18/2019	4/21/2019	Completed	100%
Research Document	Jie Shuai, Sichao	4/18/2019	4/21/2019	Completed	100%
Issue Tracking and Solving	Jingren, Jie Shuai, Sichao	3/31/2019	4/21/2019	Completed	100%
Function Optimizing	Jingren, Jie Shuai, Jin Jing	4/15/2019	4/21/2019	Completed	100%
Docker Deployment	Jingren, Jie Shuai	3/21/2019	4/21/2019	Completed	100%
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%
Data Chart Visualization	Jia Sichao, Jingren	3/15/2019	4/15/2019	Completed	100%
Patient Symptoms Backend Data	Jie Shuai, Hanxi	3/21/2019	4/15/2019	Completed	100%
Date System Back end	Jingren, Jie Shuai, Hanxi	3/22/2019	4/8/2019	Completed	100%
Date System front end	Jia Sichao, Jin Jing	3/24/2019	4/8/2019	Completed	100%
Physician Backend function	Jie Shuai, Hanxi	3/24/2019	4/8/2019	Completed	100%
Physician FrontEnd Display	Jia Sichao	3/21/2019	4/8/2019	Completed	100%
Patient Symptoms Logging Menu	Jie Shuai, Hanxi	3/21/2019	4/8/2019	Completed	100%
Front End jquery display menu	Jia Sichao, Jin Jing	3/24/2019	4/8/2019	Completed	100%
Full Dataset making	Han Xi	3/26/2019	4/5/2019	Completed	100%
SQL relationship design	Jia Sichao	3/24/2019	4/5/2019	Completed	100%

Final Gantt Chart For Previous Deliverable D1&D2

Shennong Info Tech						D1 Topic Presentation	D2 Topic Presentation
Task Name	Task Owner	Start D	Targe	Status	Progress		
Backend login authorization	Shuai Jie, Jia Sichao	3/24/20	3/31/2	Completed	100%		
Front End jquery display login	Jia Sichao, Jin Jing	3/24/20	3/31/2	Completed	100%		
Detail requirement finalized	Jingren, Han Xi	3/12/20	3/28/2	Completed	100%		
Backend database initial setup fc	Shuai Jie	3/24/20	3/31/2	Completed	100%		
docker set up for d3	Jingren, Shuai Jie	3/24/20	3/31/2	Completed	100%		
Learn (Python+flask) framework	Shuai Jie, Su Jingren, Han X	3/15/20	3/31/2	Completed	100%		
Learn CCS/Javascript/HTML	Everyone	3/4/201	3/31/2	Completed	100%		
D2 Presentation	Han Xi, Sichao	3/9/201	3/10/2	Completed	100%		
HDAP deployment	Shuai Jie,Su Jingren, JinJing	3/8/201	3/10/2	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	2/27/2	Completed	100%		
Learn FHIR implement	Everyone	2/20/20	3/2/2(	Completed	100%		
Meeting w/mentor	Everyone	2/15/20	2/15/2	Completed	100%		
PPT_Topic Intro	Jia Sichao	2/12/20	2/16/2	Completed	100%		
PPT_Reseach	Jin Jing&Wang Yang	2/12/20	2/16/2	Completed	100%		
PPT_Business Case	Han Xi&Jingren	2/12/20	2/16/2	Completed	100%		
Gantt Chart for D1	Su Jingren	2/11/20	2/12/2	Completed	100%		
Weely Report	Su Jingren	2/16/20	2/17/2	Completed	100%		
Presentation Video	Shuai Jie	2/16/20	2/17/2	Completed	100%		

Final Gantt Chart For Previous Deliverable D3

Following Items:

1.Project design and research part
By Sichao Jia
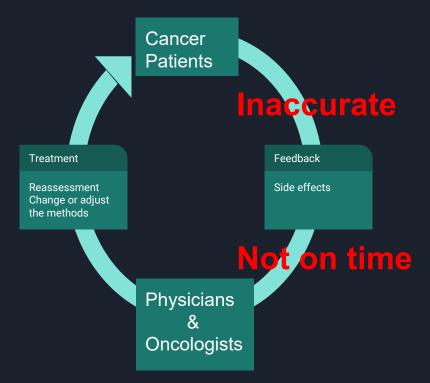
2.Project Video Demonstration
By Jing Jin

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.

Cancer Patients

Inaccurate

Treatment

Reassessment
Change or adjust the methods

Feedback

Side effects

Not on time

Physicians & Oncologists

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-the-point summary.

App Symple symptom logging page