

Project Livermore Task List

		Infrastructure
Done	Cheryl	Set up docker-compose.yml for 3 docker shells: webui, mysql, fhircxn
Done	Team	Settle on architecture and technologies to use.
Done	Cheryl	Set up Jenkins file to deploy to HDAP and run hello world app
Done	Cheryl	Push skeletal directory structure to git for shared development
Done	Team	Develop working application framework for one disease.
		WebUI
Done	Marcos	Create base html template for web page
Done	Andy	CSS styling and JavaScript behaviors for web page
Done	Andy	Identify list of behaviors for web page
Done	Andy	3D Graphics (three.js) and web UI <ul style="list-style-type: none"> • Initial patient load • Select patient: load disease model and educational material • Select topic and adjust material displayed • Action (slider, etc) -> changes disease model
Done	Jennifer	Write python code to query patient and disease information from MySQL, insert into Flask/Jinja2 Template in a generic way
Done	Andy	Work out interaction between 3D image and action bar (slider, other controls)
Done	Jennifer	Create enough 3D images to show gradual change from normal to messed up so slider thing can work for disease: Fatty Liver disease
Done	Cheryl	Create enough 3D images to show gradual change from normal to messed up so slider thing can work for disease: Cirrhosis
Done	Rafay	Create enough 3D images to show gradual change from normal to messed up so slider thing can work for disease: Liver Cancer
Done	Andy	Create enough 3D images to show gradual change from normal to messed up so slider thing can work for disease: Benign Liver Tumors
Done	Marcos	Create enough 3D images to show gradual change from normal

		to messed up so slider thing can work for disease: Polycystic Liver Disease
Deferred	Rafay/Andy	Label parts on Liver in 3D images
Done	Andy	Convert and edit 3D files for consistency and compatibility with three.js
Done	Jennifer, Cheryl	Develop Flask, web page, and DB integration.
Done	Jennifer, Rafay, Marcos	Develop educational materials for loading into database.
Done	Team	Develop and integrate 3+ additional disease models.
		FHIR connector (fhircxn)
Done	Rafay, Marcos	Decide on FHIR server to use (based on offerings from HDAP doc) or create one. Find one with a patient for each of all of the 25 liver conditions. Get SNOMED codes and patient IDs. create pre-canned patient id list in patient.sql file per schema. <Complete: decided to do our own FHIR server instead of using an existing one>
Done	Marcos	Create JSON files containing each patient. JSON files to be fed into the FHIR server image so it's available on preload.
Done	Marcos	Write code to query database for pre-canned patient id list. For each patient, query FHIR server and get information (name, symptoms, etc)
Done	Marcos	Write code to take patient list information and populate patient, patient disease tables in MySQL.
Done	Cheryl	Stand up FHIR server if needed with patient information preloaded.
Done	Rafay	Develop patient data FHIR JSON files for patients.
Done	Cheryl	Develop FHIR server data loading automation.
		MySQL
Done	Jennifer, Cheryl	Create schema for database and tables
Done	Jennifer	Create snomedXXXXXX data file for data for Fatty Liver Disease. Complete thorough research on what to put into the fields. Put all data/csv/sql files into the MySQL directory.

Done	Cheryl	Create snomedXXXXXX data file for data for Cirrohsis. Complete thorough research on what to put into the fields. Put all data/csv/sql files into the MySQL directory.
Done	Jennifer, Marcos, Andy, Rafay, Cheryl	Create snomedXXXXXX data file for data. Complete thorough research on what to put into the fields. Put all data/csv/sql files into the MySQL directory.
Done	Jennifer	Update dockerfile to create DB and tables and import *.sql files
Done	Jennifer, Cheryl	Develop database loading automation.