EH203 - Final Project Specification

Overview

You are to develop some of the components of a basic EMR system. You will be assigned one of the following three requirement sets:

1. Patient administration
2. Drug regimen management
3. Encounter management

However, so that your EMR components can be tested, you are required to produce a fully working system, implemented as a web application.

Submission

You are required to submit a WAR file of your project, as well as the project directory.

This project has a lot of server side functionality for each of the three requirement sets. Focus your effort on the server side functionality before the front-end graphics, look-and-feel, etc.
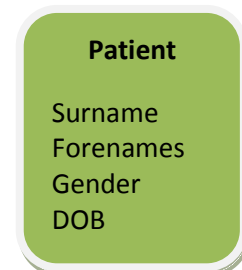
Common Requirements

Functional

1. A login system - users of your system are required to login with a username and password before they can make any modifications.

Technical

1. Use CSS to create a web application whose pages are valid XHTML Transitional, and render correctly in both Mozilla Firefox and Microsoft Internet Explorer
2. Use JSTL and EL instead of scriptlets where possible
3. Use MySQL for storage, with Hibernate mappings to your Java classes. Do not use JDBC.

Data model

You must include *at least* the following entities and fields:

User

Login
Password

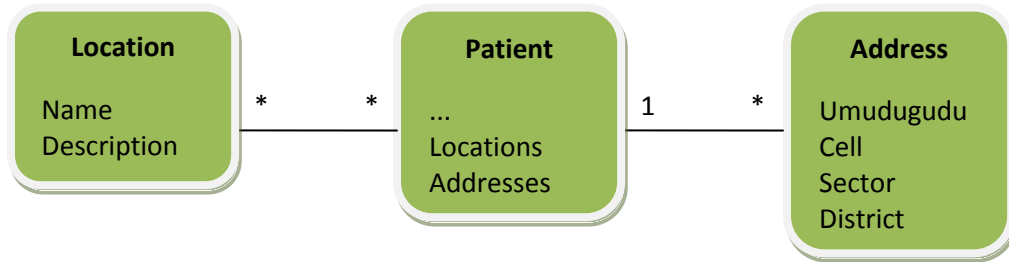**Patient**

Surname
Forenames
Gender
DOB

Requirement Sets

1. Patient administration

These components will be used by the

receptionist of a clinic, to register new patients and retrieve records of existing patients. The following functionality is required:
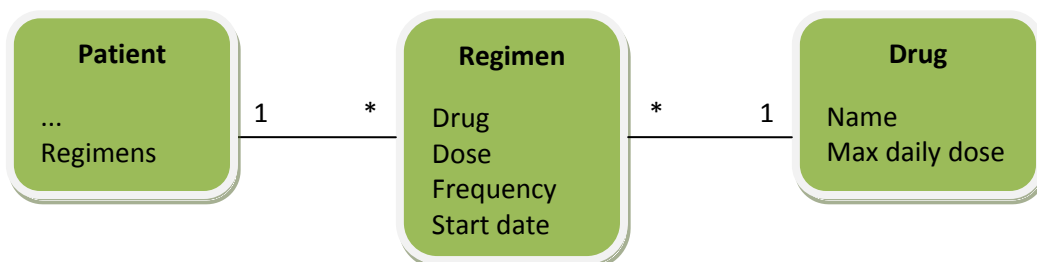
1. Create new patient records
2. Search for existing patients by partial name (displays a list of patients)
3. Modify existing patient records (including their addresses)
4. Assign locations to a patient
5. Delete existing patient records (this should also delete that patient's addresses)

Location		Patient		Address
Location Name Description	* *	**Patient** ... Locations Addresses	1 *	**Address** Umudugudu Cell Sector District

2. Drug regimen management

These components will be used by doctors to prescribe drugs to patients. The following functionality is required:

1. Search for an existing drug by name (displays list of drugs)
2. Assign a regimen to a patient
3. Edit an existing regimen
4. Delete a patient's existing regimen
5. Prevent creating a regimen with a dose that exceeds the drug's maximum daily dose

Patient		Regimen		Drug
Patient ... Regimens	1 *	**Regimen** Drug Dose Frequency Start date	* 1	**Drug** Name Max daily dose

components will be used by doctors to record patient visits. Rather than use concepts like in OpenMRS, the system can use simple name-value pairs to store observations, e.g. name might be "height" and value might be "150cm". The following functionality is required:

1. Search for an existing patient by name (displays list of patients)
2. Display a list of previous encounters for a patient
3. Create a new encounter for a patient
4. Edit an existing an encounter
5. Add observations to encounters
6. Delete an observation from an encounter

Patient			Encounters			Observation
... Encounters	1	*	Location Date Doctor	1	*	Name Value