FIT3077 Software Engineering: Architecture and Design
S1 2020 - Assigment 2

#JustLookAtMyInterface
Khai Dinh Nguyen   - ID 29010691
Matthew Hoang Viet Pham   - ID 29667437

An online version could be found at:
https://patmonitor.online/

DataModel

FHIRServer
+ rootUrl: string;

- extractNextUrl(data: {link:[]}): string
- decodePatients(data: any[]): Patient[]

**<<interface>>
DataSource**
+ getPractitioner(practitionerIdentifier: Identifier): Promise<MaybePractitioner>
+ getPatientList(practitionerIDs: string[], progressCallback: (data: Patient[] progress: Progress) => void): Promise<Patient[]>
+ getCholesterol(patientID: string): Promise<Observation | null>;
+ getBloodPressure(patientID: string, count: number): Promise<BloodPressure[] | null>;

**<<provider>>
store**
+ patients: PatientsState
+ practitioner: PractitionerState
+ system: SystemState

Practitioner
+ identifier: Identifier
+ ids: string[]
+ name: Name[]
+ address: Address[]

+ Practitioner(identifier: Identifier, ids: string[], name: Name[], address: Address[])

Patient
+ id: string
+ name: Name[]
+ gender: string
+ birthDate: string
+ address: Address[]
+ cholesterol: ClinicalData<Observation>
+ bloodPressure: ClinicalData<BloodPressure[]>

+ Patient(newId: string, newName: Name[], newGender: string, newBirthDate: string, newAddress:Address[])

Identifier
system: string
value: string

+ Identifier(system: string, value: string)
+ toString(): string

Name
+ family: string
+ given: string[]
+ prefix: string[]
+ use: string

+ Name(newFamily: string, newGiven: string[], newPrefix: string[], newUse: string)
+ toString(): string

Address
+ line: string[]
+ city: string
+ state: string
+ postalCode: string
+ country: string

+ Address(newLine: string[], newCity: string, newState: string, newPostalCode: string, newCountry: string)

ClinicalData<T>
+ monitored: boolean
+ loading: boolean
+ data: T | undefined | null

+ ClinicalData<T>()

Measurement
+ unit: string
+ value: number

+ Measurement(newUnit: string, newValue: number)
+ toString(): string

Observation
+ effectiveDateTime: string
+ value: Measurement
+ coding: Coding

+ Observation(value: Measurement, effectiveDateTime: string, coding:Coding)

BloodPressure
+ diastolic: Observation
+ systolic: Observation

+ BloodPressure(diastolic: Observation, systolic: Observation)

Coding
+ code: string
+ display: string
+ system: string

+ Coding(code: string, display: string, system: string)

components

**<<views>>
PatientsMonitor**
- patients: Patient[]

+ render():HTMLElement

**<<views>>
MainContent**
- reloadTimeout: int
- loading: boolean

+ render():HTMLElement

**<<views>>
PatientsSelect**
- patients: Patient[]
- loading: boolean

+ render(patient: Patient): HTMLElement

**<<views>>
PatientInfoDialog**
+ isOpen: boolean

+ render(patient: Patient): HTMLElement

**<<views>>
PatientsTable**

+ render(columns[], data: Patient[], onClickRow(), noDataMessage: string): HTMLElement

**<<views>>
Sidebar**
- practitioner: Practitioner
- loadingPatients: boolean
- loadingPractitioners: boolean

+ render(): HTMLElement