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Individual Project Plan

Fontys University of Applied Sciences

22/02/2024

Patient-Centric Healthcare System

The project aims to develop a digital healthcare platform that enhances a safe interaction between patients and healthcare providers. It is designed to streamline the process of managing medical appointments, accessing medical records, and providing a channel for feedback on healthcare services. Indeed, the primary <content> revolves around patient's medical data and some basic demographic details such as name, current age, and contact information. Importantly, this system comprises two interconnected applications: a web application for patients and a desktop application for healthcare providers.

Web Application

- User Registration and Authentication: Patients sign up using their social security number (Tax-Code such as BSN), creating a secure profile for accessing their medical information and services.
- Medical Profile Management: Patients can only view a summary of their medical history, including past appointments, vaccinations, prescribed medications and surgeries (if done any) in their profile.
- Appointment Scheduling: Enables patients to book appointments with available doctors, view upcoming appointments, and cancel appointments if necessary.
- Feedback Submission: After an appointment, patients can leave anonymous feedback about their experience with the doctor, contributing to quality improvement.

Desktop Application

- Appointment Management: Doctors can manage patient appointments, including viewing scheduled appointments, making changes, and adding new appointments.
- Access to Patient Medical Records: Healthcare providers can access and update patient medical records, adding information about recent visits, diagnoses, and treatments.

Content Entity

Patient's health records

This entity encompasses all data related to a patient's health history, including personal information, medical history, appointments, medications, vaccinations, and other health information.

Content Variation

Appointments & Feedback

Details of appointments between patients and healthcare providers. Includes past and upcoming appointments. Even more, feedback or reviews provided by patients regarding their appointments or general experiences with healthcare services.

Entities with Many-to-Many Relationships

Patients and Doctors (through Appointments): A patient can have appointments with multiple doctors, and a doctor can see multiple patients. So, this relationship is represented through the appointments entity (Patients and Doctors foreign keys)

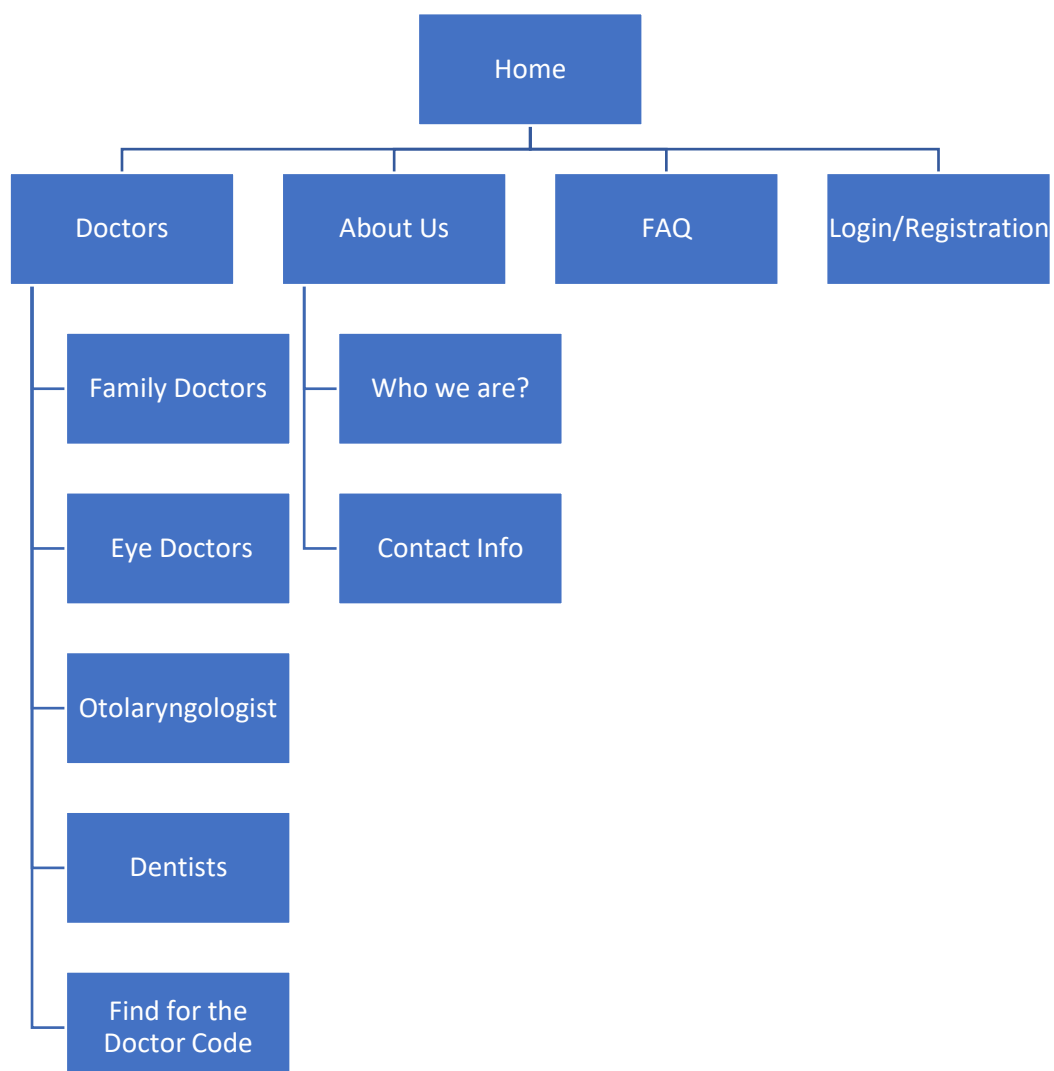## Non-Trivial Algorithmic Functionality: Recommendation System

An algorithm that analyses a patient's medical history to generate personalized health tips and preventive care recommendations. For example:

Example 1: IF patient x assume ASPIRIN and ALCOHOL/SPICES often THEN patient x may get gastritis.
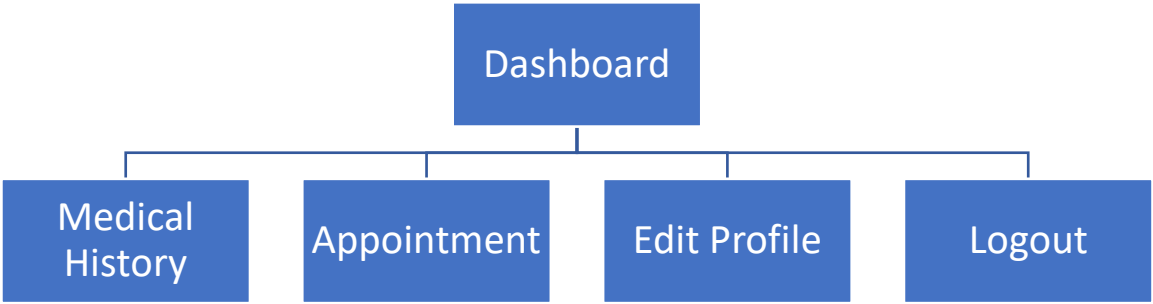
Example 2: IF patient x has CHOLESTEROL and DIABETES THEN patient x may get HEART DISEASES.

GIT Repository link: https://git.fhict.nl/I536154/individual-project-s2-2024.git

SITEMAP

SITEMAP after login

WIREFRAME

Home page

SelfCare+

Doctors   About Us   FAQ   **Login**

Your Personal Gateway to Health and Wellness

Registration

Emergency

- I got burnt
- I got a cut
- I fell down
- I think I'm having an allergic reaction
- Have a High Feveraction
- I'm experiencing chest pain

Call an ambulance

Medical History

Explore your health story with just a click. Our Medical History section invites you to delve into your past medical records, treatments, and consultations, providing a comprehensive overview of your health journey.

Check my Report

Appointment

Seamlessly connect with healthcare professionals through our Get an Appointment feature. Whether you need a routine check-up or a consultation for specific health concerns, easily schedule appointments with qualified doctors.

Get appointment

We're **determined** for your **better life.**

You can get the care you need 24/7 - be it online or in person.
You will be treated by caring specialist doctors.

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Patient Dashboard

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DASHBOARD

| Medical History | Prescribed Medication | Surgeries | Vaccines |
| Find Doctors | Schedule Appointment | Tips | Emergency |

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You can get the care you need 24/7 - be it online or in person.
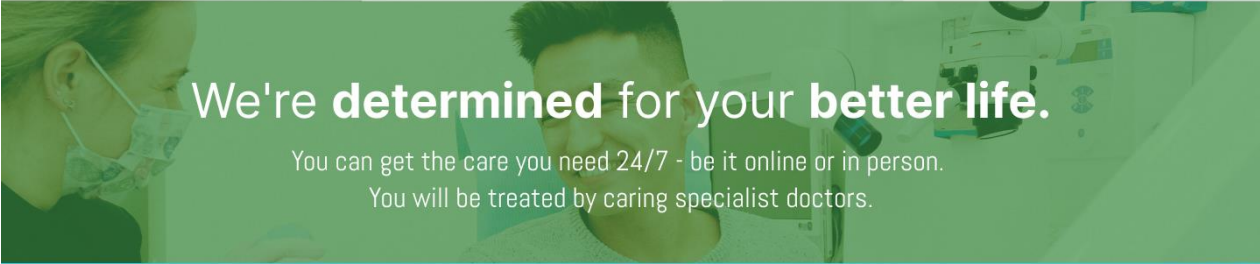You will be treated by caring specialist doctors.

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Medical History

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Medical History

From Date 01/01/2022	To Date 31/12/2022	Visit Type			FILTER	
Date*	**Doctor ID***	**Doctor Name***	**Visit Type***	**Diagnosis**	**Treatment Plan**	**Prescribed Medications**
01/01/2022	B6548985	Mario Rossi	Rout. Check			
01/02/2022	E6548155	Wilson Miller	Eye Check			
01/03/2022	E8598985	Taylor Smith	Ear Check			
01/04/2022	B6548985	Mario Rossi	Emergency	H. Cholest.	surgery req.	
01/05/2022	C7956324	John Brown	Cardiosurg.	Heart Attack		Aspirin/Morphine
01/05/2022	B6548985	Mario Rossi	Rout. Check			
01/05/2022	B6548985	Mario Rossi	Rout. Check			
01/06/2022	E6548155	Wilson Miller	Eye Check			Moxifloxacin
01/09/2022	B6548985	Mario Rossi	Referral			Lisinopril
01/10/2022	B6548985	Mario Rossi	Emergency	Headache		Aspirin
01/10/2022	B6548985	Mario Rossi	Rout. Check			
01/12/2022	B6548985	Mario Rossi	Rout. Check			

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