ReDi

6 Feb 2025 19:20:01

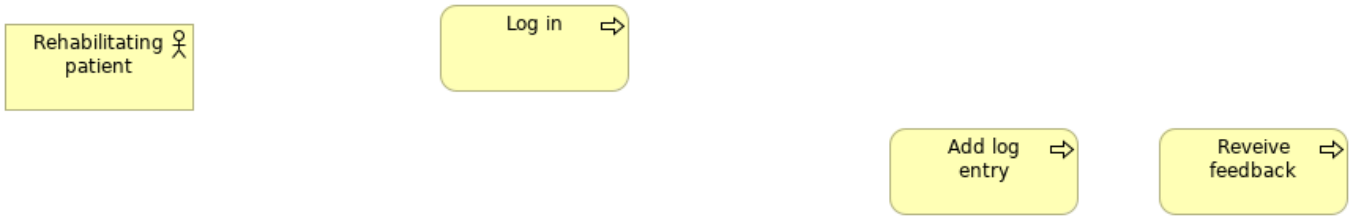
Purpose

This model documents the architecture of the ReDi Rehabilitation Diary application. This application was created as a solution for keeping track of and aiding rehabilitation progress using a microservices architecture.

Views

Add log entry

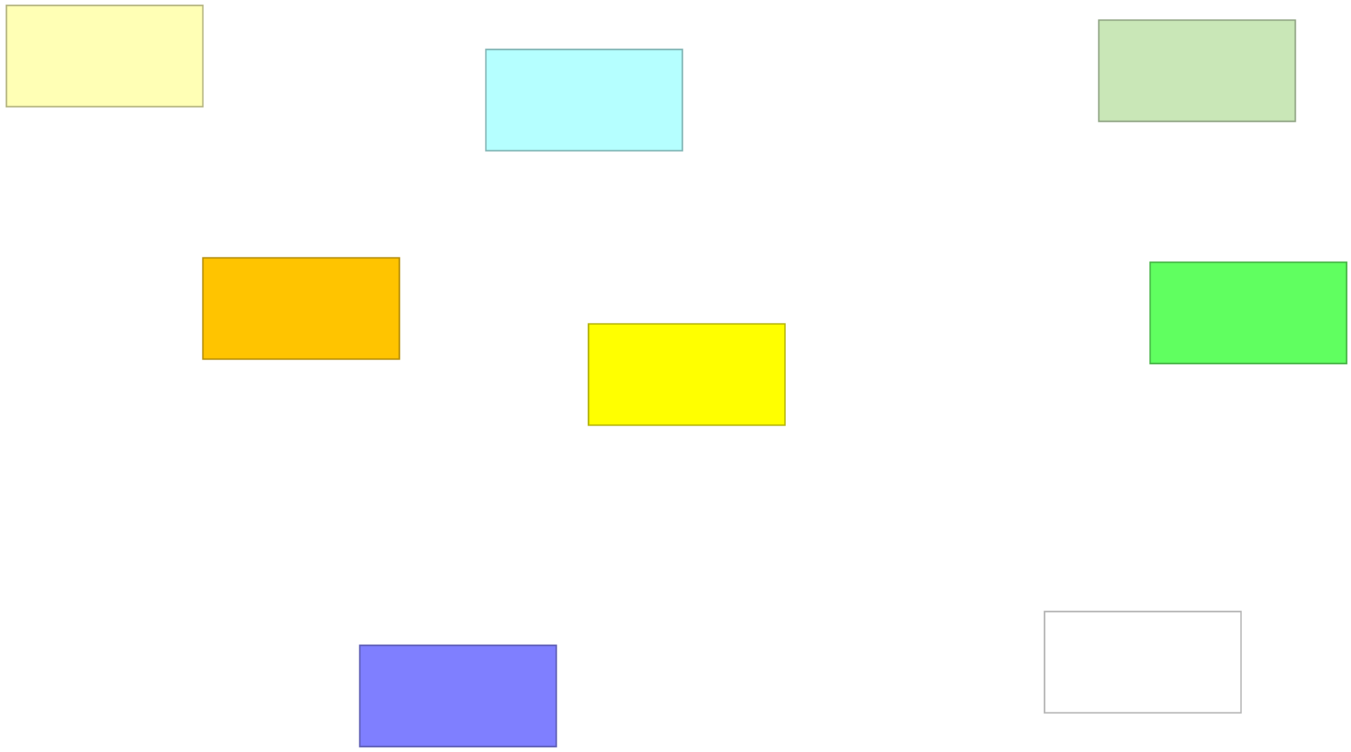
No viewpoint



Elements

Element	Type
Add log entry	Business Process
Log in	Business Process
Rehabilitating patient	Business Actor
Reveive feedback	Business Process

FIDDLE TO DEPLOY

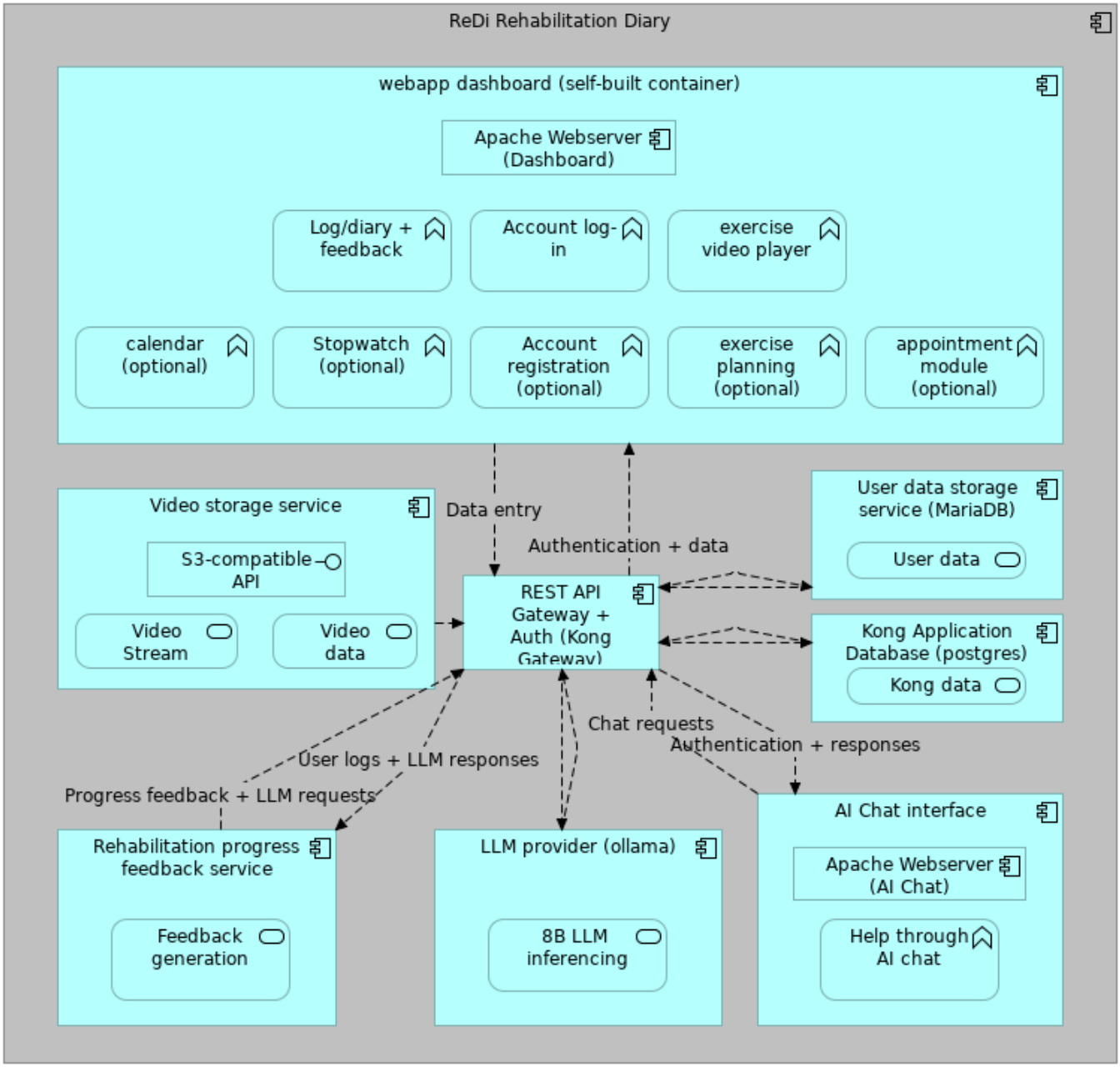


Properties

_hide_from_export_	true

Overview

No viewpoint



Elements

Element	Type
8B LLM inferencing	Application Service
Account log-in	Application Function
Account registration (optional)	Application Function
AI Chat interface	Application Component
Apache Webserver (AI Chat)	Application Component
Apache Webserver (Dashboard)	Application Component
appointment module (optional)	Application Function
calendar (optional)	Application Function
exercise planning (optional)	Application Function

Element	Type
exercise video player	Application Function
Feedback generation	Application Service
Help through AI chat	Application Function
Kong Application Database (postgres)	Application Component
Kong data storage	Application Service
LLM provider (ollama)	Application Component
Log/diary + feedback	Application Function
ReDi Rehabilitation Diary	Application Component
Rehabilitation progress feedback service	Application Component
REST API Gateway + Auth (Kong Gateway)	Application Component
S3-compatible API	Application Interface
Stopwatch (optional)	Application Function
User data	Application Service
User data storage service (MariaDB)	Application Component
Video data	Application Service
Video storage service	Application Component
Video Stream	Application Service
webapp dashboard (self-built container)	Application Component

Business Layer

Add log entry

Type	Business Process

Log in

Type	Business Process

Rehabilitating patient

Type	Business Actor

Reveive feedback

Type	Business Process

Application Layer

8B LLM inferencing

Type	Application Service

Account log-in

Type	Application Function

Account registration (optional)

Type	Application Function

AI Chat interface

Type	Application Component

Apache Webserver (AI Chat)

Type	Application Component

Apache Webserver (Dashboard)

Type	Application Component

appointment module (optional)

Type	Application Function

> maken van afspraken

calendar (optional)

Type	Application Function

exercise planning (optional)

Type	Application Function

> weergeven schema (e.g. oefening X en Y 4x per week)

exercise video player

Type	Application Function

Feedback generation

Type	Application Service

Help through AI chat

Type	Application Function

Kong Application Database (postgres)

Type	Application Component

Kong data storage

Type	Application Service

LLM provider (ollama)

Type	Application Component

Log/diary + feedback

Type	Application Function

ReDi Rehabilitation Diary

Type	Application Component

> ReDi is a

Rehabilitation progress feedback service

Type	Application Component

REST API Gateway + Auth (Kong Gateway)

Type	Application Component

> paired with external auth using https://github.com/aunkenlabs/kong-external-auth/

S3-compatible API

Type	Application Interface

Stopwatch (optional)

Type	Application Function

User data

Type	Application Service

User data storage service (MariaDB)

Type	Application Component

Video data

Type	Application Service

Video storage service

Type	Application Component

> Minio is an S3-compatible storage provider

Video Stream

Type	Application Service

webapp dashboard (self-built container)

Type	Application Component

Relations

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	Stopwatch (optional)

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	Log/diary + feedback

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	LLM provider (ollama)

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	calendar (optional)

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	Rehabilitation progress feedback service

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	Kong Application Database (postgres)

Realization relation

Type	Realization relation
Source	Video storage service
Target	Video Stream

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	AI Chat interface

Realization relation

Type	Realization relation

Source	Rehabilitation progress feedback service
Target	Feedback generation

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	User data storage service (MariaDB)

Flow relation

Type	Flow relation
Source	Video storage service
Target	REST API Gateway + Auth (Kong Gateway)

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	Account registration (optional)

Flow relation

Type	Flow relation
Source	User data storage service (MariaDB)
Target	REST API Gateway + Auth (Kong Gateway)

Realization relation

Type	Realization relation
Source	AI Chat interface
Target	Help through AI chat

Composition relation

Type	Composition relation
Source	webapp dashboard (self-built container)
Target	Apache Webserver (Dashboard)

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	appointment module (optional)

Flow relation

Type	Flow relation
Source	Kong Application Database (postgres)
Target	REST API Gateway + Auth (Kong Gateway)

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	Video storage service

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	Account log-in

Realization relation

Type	Realization relation
Source	Kong Application Database (postgres)
Target	Kong data storage

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	exercise planning (optional)

Realization relation

Type	Realization relation
Source	User data storage service (MariaDB)
Target	User data

Composition relation

Type	Composition relation
Source	AI Chat interface
Target	Apache Webserver (AI Chat)

Flow relation

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)
Target	Kong Application Database (postgres)

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	webapp dashboard (self-built container)

Composition relation

Type	Composition relation
Source	Video storage service
Target	S3-compatible API

Flow relation

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)
Target	LLM provider (ollama)

Serving relation

Type	Serving relation
Source	Stopwatch (optional)
Target	webapp dashboard (self-built container)

Realization relation

Type	Realization relation
Source	webapp dashboard (self-built container)
Target	exercise video player

Flow relation

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)
Target	User data storage service (MariaDB)

Realization relation

Type	Realization relation
Source	LLM provider (ollama)
Target	8B LLM inferencing

Composition relation

Type	Composition relation
Source	ReDi Rehabilitation Diary
Target	REST API Gateway + Auth (Kong Gateway)

Realization relation

Type	Realization relation
Source	Video storage service
Target	Video data

Flow relation

Type	Flow relation
Source	LLM provider (ollama)
Target	REST API Gateway + Auth (Kong Gateway)

Authentication + data

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)

Target	webapp dashboard (self-built container)

Authentication + responses

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)
Target	AI Chat interface

Chat requests

Type	Flow relation
Source	AI Chat interface
Target	REST API Gateway + Auth (Kong Gateway)

Data entry

Type	Flow relation
Source	webapp dashboard (self-built container)
Target	REST API Gateway + Auth (Kong Gateway)

Progress feedback + LLM requests

Type	Flow relation
Source	Rehabilitation progress feedback service
Target	REST API Gateway + Auth (Kong Gateway)

User logs + LLM responses

Type	Flow relation
Source	REST API Gateway + Auth (Kong Gateway)
Target	Rehabilitation progress feedback service