

Frankenhaus - Hospital app

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30243

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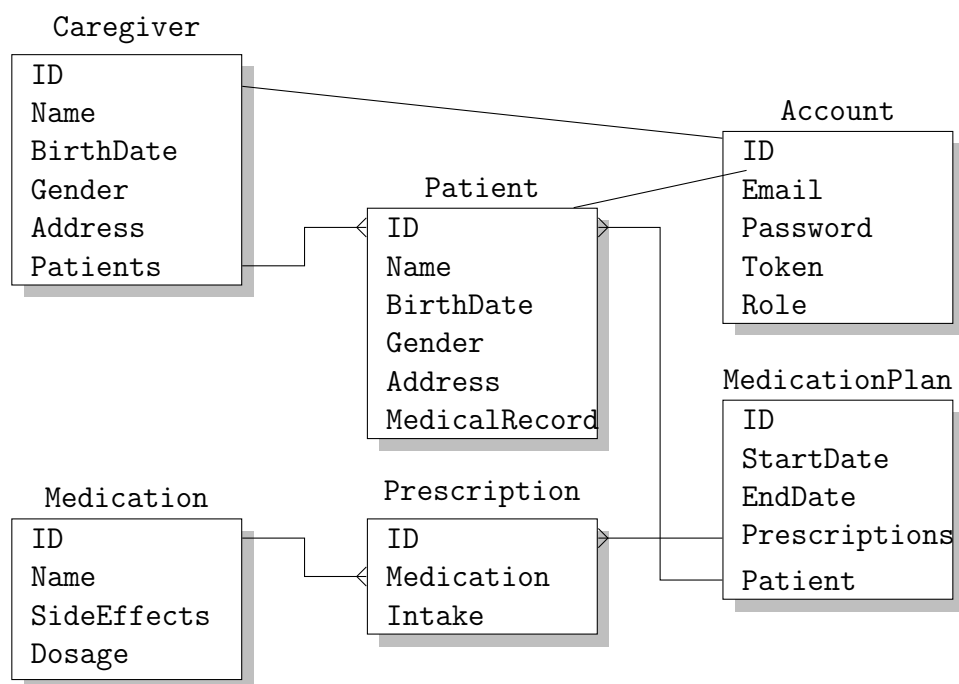
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1 Architecture



1.1 Database

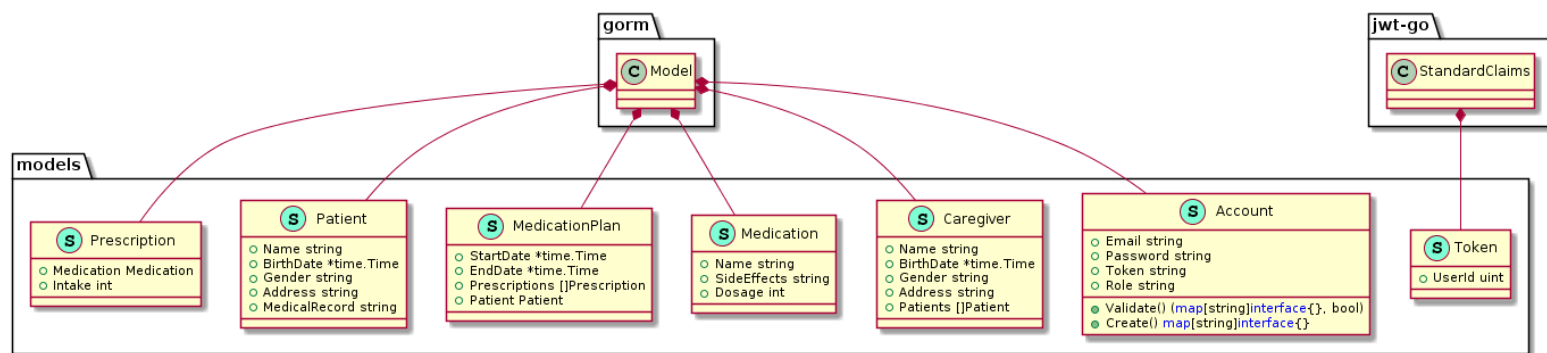
The database is located on a amazon webserver provided by heroku, it can be remotely accessed if proper credentials are provided by the backend and the communication port isn't blocked.



The Database uses the code-first model and it is auto-generated and updated by the **gorm** library, IDs and relationships were drawn for clarity, but they are only implicitly declared in code, gorm handles all the primary/-foreign key management without any explicit interaction.

1.2 Backend

The backend was written in go, much of the heavy lifting is done by libraries for ORM, JWT authentication and JSON decoder. I implemented generalized CRUD operations with reflection and handle the routing so that every route handles its designated object type with all CRUD operations.

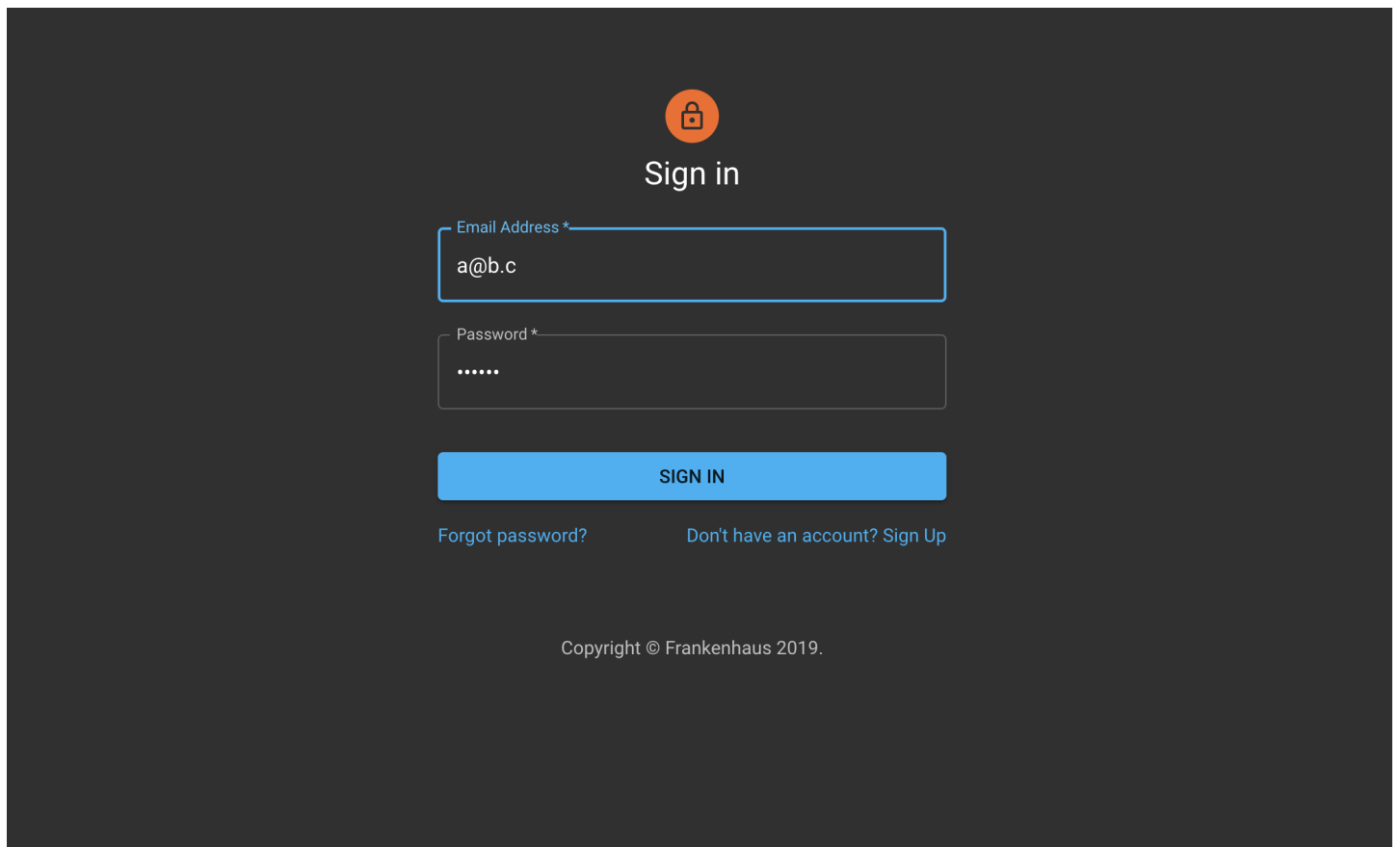


1.3 Frontend

The frontend was written in React, it all revolves around a generalized table editing component which is repurposed for the different objects and use cases.

Welcome, Doctor!						LOGOUT
						NEW ENTRY
Name	Birth date	Gender	Address	Medical Records	Actions	
Jane	2011-01-01T23:28:56.782Z	female	21st Av.	mild allergies	EDIT	REMOVE
Kool Kid	2012-01-01T23:28:56.782Z	alien	Mars	<u>spontane</u> combustion on human to	SUBMIT	CANCEL
The sick one	2012-01-01T23:28:56.782Z	male	dorolab3	clinic sanatos	EDIT	REMOVE
Mark	2012-01-01T23:28:56.782Z	male	Observator	clinic sanatos	EDIT	REMOVE

All users can sign in to get to their respective application and everything is secured with an authentication token, so that no unauthorized party can access someone else's data.

A dark-themed sign-in form. At the top center is an orange circular icon with a white padlock. Below it is the text "Sign in" in white. The form consists of two input fields: "Email Address *" with the text "a@b.c" and "Password *" with masked characters ".....". Below these fields is a blue button with the text "SIGN IN" in white. At the bottom, there are two links: "Forgot password?" and "Don't have an account? Sign Up". At the very bottom, centered, is the copyright notice "Copyright © Frankenhaus 2019." data-bbox="43 229 957 620"/>

Sign in

Email Address *

a@b.c

Password *

.....

SIGN IN

[Forgot password?](#) [Don't have an account? Sign Up](#)

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2 Installation

To run this application the following **dependencies** must be met:

1. textbfGo (see [installing go](#))
2. textbfNode with textbfNPM (see [installing npm](#))
3. Port 5432 is not blocked(DB access)

The textbfsetup is pretty straight-forward:

1. Run in the **backend** folder:

(a) `./run.sh`

2. Run in the **frontend** folder:

(a) `sudo npm i`

(b) `npm run start`

If the application doesn't start automatically, access `localhost:3000`