System Design CSCC01 Sprint 2

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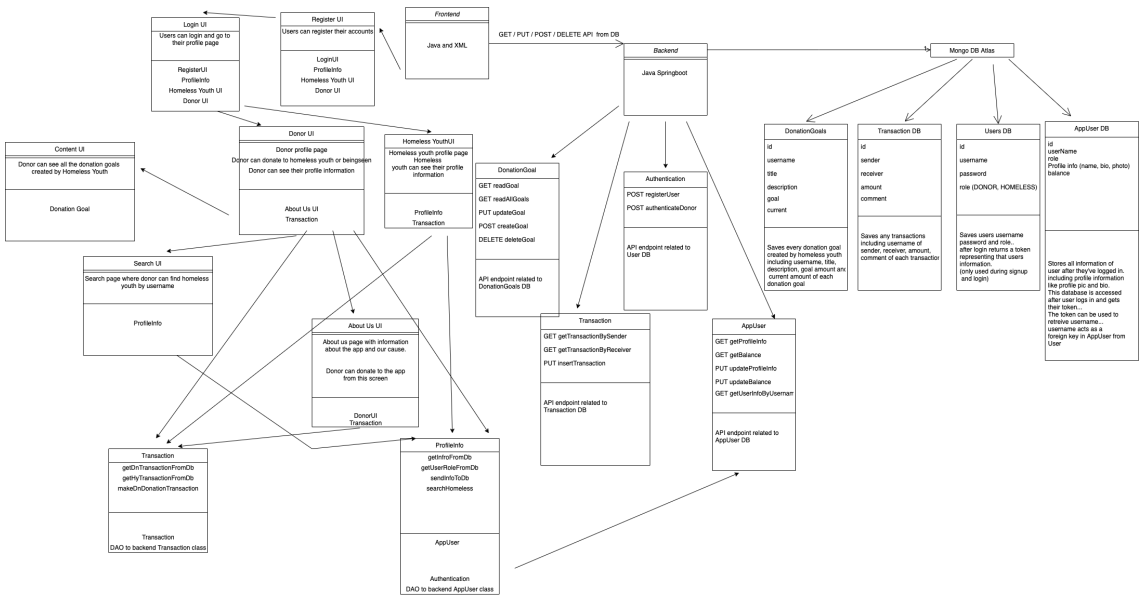
0. Table of Contents

CRC Cards

Login UI

Users can login and go to their profile page

RegisterUI
ProfileInfo
Homeless Youth UI
Donor UI

Register UI

Users can register their accounts

LoginUI
ProfileInfo
Homeless Youth UI
Donor UI

Frontend

Java and XML

GET / PUT / POST / DELETE API from DB

Backend

Java Springboot

Mongo DB Atlas

Content UI

Donor can see all the donation goals created by Homeless Youth

Donation Goal

Donor UI

Donor profile page
Donor can donate to homeless youth or beingseen
Donor can see their profile information

About Us UI
Transaction

Homeless YouthUI

Homeless youth profile page
Homeless youth can see their profile information

ProfileInfo
Transaction

DonationGoal

GET readGoal
GET readAllGoals
PUT updateGoal
POST createGoal
DELETE deleteGoal

API endpoint related to DonationGoals DB

Authentication

POST registerUser
POST authenticateDonor

API endpoint related to User DB

DonationGoals

id
username
title
description
goal
current

Saves every donation goal created by homeless youth including username, title, description, goal amount and current amount of each donation goal

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Transaction DB

id
sender
receiver
amount
comment

Saves any transactions including username of sender, receiver, amount, comment of each transaction

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Users DB

id
username
password
role (DONOR, HOMELESS)

Saves users username password and role., after login returns a token representing that users information.
(only used during signup and login)

AppUser DB

id
userName
role
Profile info (name, bio, photo)
balance

Stores all information of user after they've logged in. including profile information like profile pic and bio. This database is accessed after user logs in and gets their token.. The token can be used to retreive username... username acts as a foreign key in AppUser from User

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Search UI

Search page where donor can find homeless youth by username

ProfileInfo

About Us UI

About us page with information about the app and our cause.

Donor can donate to the app from this screen

DonorUI
Transaction

Transaction

GET getTransactionBySender
GET getTransactionByReceiver
PUT insertTransaction

API endpoint related to Transaction DB

AppUser

GET getProfileInfo
GET getBalance
PUT updateProfileInfo
PUT updateBalance
GET getUserInfoByUsername

API endpoint related to AppUser DB

Transaction

getDnTransactionFromDb
getInyTransactionFromDb
makeDnDonationTransaction

Transaction
DAO to backend Transaction class

ProfileInfo

getInfoFromDb
getUserRoleFromDb
sendInfoToDb
searchHomeless

AppUser

Authentication
DAO to backend AppUser class

Software Architecture Diagram

1. Display ui to user

2. After user click on button alert controller to save changes to object

Controller

Controller written in frontend as Java classes

Handles relevant if statements in terms of page navigation and what data to fetch from model

View

Display written in frontend controlled by android studio: Xml

Should handle display and storing and giving user button clicks/text-box inputs to controller

5. Alert that data has been changed and send new data to frontend

3. Before displaying next page send data to backend model

6. Fetch even more backend if it required and continue until all data necessary is obtained

Model

Model written in backend as spring boot application

End point for retrieving and sending data to view

4. Accesses DB via get/put calls