Informal user info REST API spec Capstone System Design Winter 2018 January 31 2018

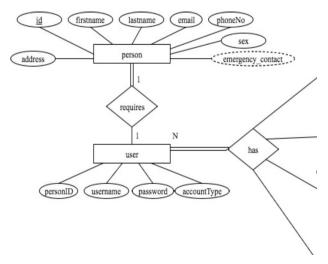
The following is the design spec for the user info REST API for the Design and Development of a Mobile, Wireless Health Monitor with Cloud Computing Support capstone project.

Platform:

node.js express.js sequelize psql connector chai.js

Database:

PostgreSQL, use schemas from PR1 in Fall term



Router Functionality/routes (may change in the future):

1. POST /api/users

- a. Creates a new user in the database
- Params all mandatory, if incomplete request received return HTTP code
 400 Bad Request
 - i. firstname
 - ii. lastname
 - iii. email
 - iv. phoneNo
 - v. sex
 - vi. address

- vii. emergency_contact
- viii. username
- ix. password
- x. accountType
- c. Returns
 - i. 201 created
 - ii. 409 conflict

2. GET /api/users/

- a. Gets all user info for current user logged in from the database or if given id+ admin user, returns all user info for that user
- b. Params
 - i. user id
- c. Returns
 - i. 200 OK

3. PUT /api/users/:id

- a. Updates the database with the parameters specified
- b. Params
 - i. value
- c. Returns
 - i. 200 OK
 - ii. 204 no content
 - iii. 404 not found

4. DELETE /api/users/:id

- a. Deletes the user from the database
- b. Params
 - i. username or id
- c. Returns
 - i. 200 OK
 - ii. 404 not found

5. /*

a. Disable all other routes, return HTTP code 405 Method Not Allowed

Other requirements:

- Passwords must be hashed + salted before stored in the database
- Make use of node's module functionality to enforce separation of concerns principles. Ex. model/view/controller/tests/validation subfolders
- Production instance managed by PM2
- All routes must utilize authentication (any library is acceptable Ex. passport.js)
- Production ready authentication schemes in psql
 - DB user permissions for this API must be set to CRUD related operations only
 - Drop table and related production breaking commands must be restricted to admin users only
- Must be fully unit tested with chai
- Include shell scripts and .sql files to automate the setup of users and schemas for fresh installs of Ubuntu