# Vida Life Coach App

## Homework #2

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#### IT Requirements

- 1. Application Server
  - 1.1. Physical Requirements
    - 1.1.1. 2 Gigabytes of Memory and 30 Gigabytes of Hard Disk
    - 1.1.2. Once the App goes live and users increase, a cluster of servers will be put together along with proper load balancers in order to not overwhelm the system. The memory and
  - 1.2. Virtual System Requirements
    - 1.2.1. Linux: Ubuntu
    - 1.2.2. One backup image of the application
  - 1.3. Connectivity
    - 1.3.1. Will have a static IP assigned to this server
    - 1.3.2. This server will be connected on the back end to the Main Database Server and the internet
- 2. Postgres Server
  - 2.1. Physical Requirements
    - 2.1.1. 2 Gigabytes of memory and 30 Gigabytes of Hard Disk
    - 2.1.2. Once the amount of users and data increases, there will be multiple data centers in order to handle all of the new data
  - 2.2. Virtual System Requirements
    - 2.2.1. Linux: Ubuntu
    - 2.2.2. One image per day on a separate server, each day the prior image is deleted
  - 2.3. Connectivity
    - 2.3.1. The database will have a static IP assigned to it
    - 2.3.2. The server will only be connected to the web server and also the backup server
- 3. Reliability
  - 3.1. Service Level Agreements
    - 3.1.1. Hosted privately through IBM Mainframe allows for 99.999% uptime
    - 3.1.2. Response time of less than 20ms
- 4. Recoverability
  - 4.1. The Database will be backed up weekly to another server that it is connected to.
  - 4.2. The only person with access to the backup database would be system admin. If the main database goes down, there will be the option to switch the back end to the backup while the primary is recovered.
  - 4.3. All of the data stored in the database needs to be stored long term. In order to comply with federal and state regulations and also for the system to be able to go back in time for each user.
- 5. Security and Privacy
  - 5.1. Database

5.1.1. The Admin can only add and update the Coach profiles in the database. The Super-Coach can update and view coach profiles, view and update client profiles and everything in the database. For Coaches, they can update and access their own coach profile along with their clients information.

#### 5.2. Account Information

#### 5.2.1. User data

- 5.2.1.1. Personal data saved to Postgresql database and will be protected through private web hosting. Registered clients information will only be accessible to a clients assigned coach. No other coach has ability to view an unassigned clients information.
- 5.2.1.2. Saved information will consist of notes, events, and ... No sensitive data will be stored.

#### 5.2.2. FERPA/Privacy Considerations

5.2.2.1. Although client/coach information will be stored, no sensitive data will be collected, along with the data being encrypted on the backend in the database.

#### 5.3. Admin Access Controls

5.3.1. The Original Admin only needs to create a single Super-Coach. After that there is a single Admin user to maintain the database. For adding and removing users after that, the Super-Coach creates other Super-Coaches and also Coaches. Then Coaches create their client accounts.

#### 6. Maintenance

- 6.1. Planned down time requirements
  - 6.1.1. Database maintenance will occur bimonthly to keep up-to-date with new clients entering the system and current clients leaving the program
  - 6.1.2. Course information will change around holidays
  - 6.1.3. Maintenance done between 12AM-5AM, once every four months (Seasonally)
  - 6.1.4. The system should be up and running year round

### **VIDA ER DIAGRAM**

