

Key Features

1. User Registration and Profile Management

- Users can register and create profiles, providing essential information for personalized healthcare interactions.

2. Notifications and Alerts

- Automated notifications keep users informed about appointment confirmations, updates, and relevant healthcare news.

3. Waitlist Preferences

- Users can set preferences for specific healthcare service locations, optimizing their access to preferred providers.
- Waitlist preferences enable users to align their healthcare choices with their location and provider preferences.

4. Provider and Location Management

- Healthcare providers are categorized by location, allowing users to easily find and select providers based on their preferred geographical area.
- Location-based provider management simplifies the coordination of healthcare services.

5. User Waitlist

- Users can join waitlists for healthcare providers, managing their position, status, and estimated wait time.

6. News Feed

- A dedicated news feed keeps users informed about general healthcare updates, wellness tips, and important health alerts.

Brief software features

1. Register Feature

2. Log In Feature

3. News Feed and Notifications Feature

4. Waitlist Overview: Users can view their waitlist location, healthcare providers, and check the status, position, and estimated wait time.

5. Add Waitlist Location: Users can add their waitlist location. The system prefers examples in Ottawa and random healthcare providers. When users add a location, it automatically suggests the best top 3 healthcare providers to minimize wait times. However, users can also manage (add and delete) healthcare providers based on their preferences and location.

Note: If users update their location, it will clear and remove their waitlist healthcare providers automatically. The system will then repeat the process of suggesting the best top 3 healthcare providers based on their newly selected location.

Database design

Business Rules

1. User Registration

Users can register with the system, providing personal details such as username, password, contact information, etc.

2. Notifications

Users receive notifications related to their activities, appointments, and system updates.

3. Waitlist Preferences

Users can set preferences for specific locations they prefer for healthcare services.

4. Providers and Locations

Healthcare providers are associated with specific locations where they offer services.

5. User Waitlist

Users can join the waitlist for healthcare providers, indicating their position, status, and estimated wait time.

6. Communication

Notifications are used to communicate important information to users, such as appointment confirmations, updates, and news.

7. Relationships

7.1 Users have relationships with notifications, waitlist preferences, and the user waitlist.

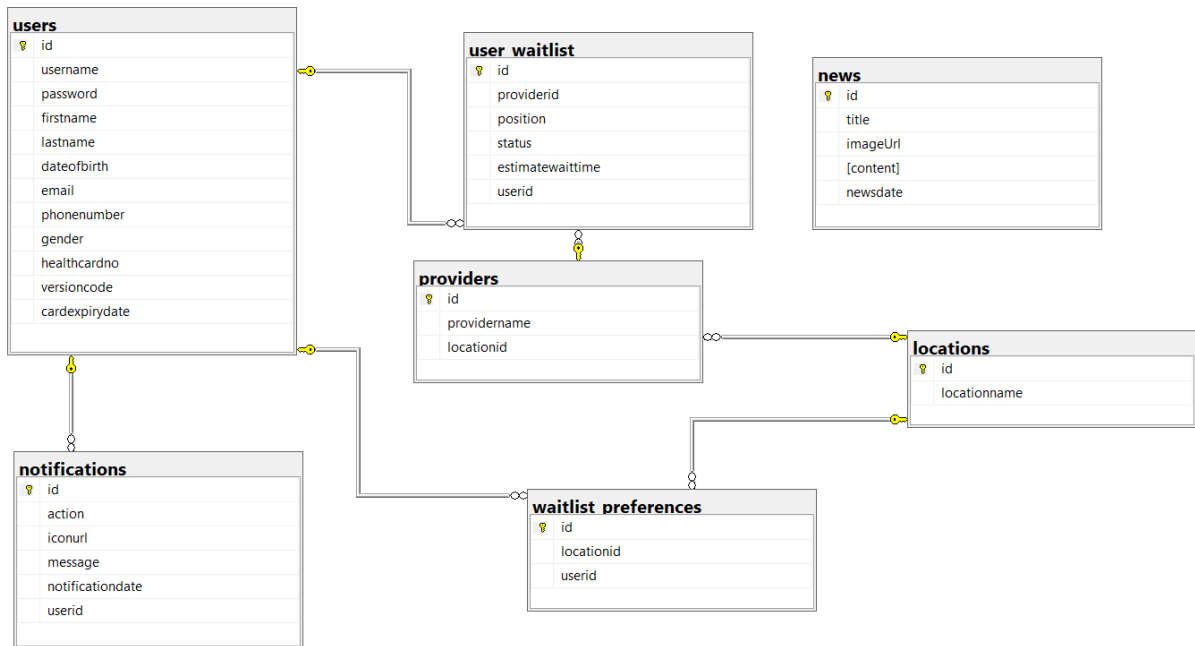
- Each user can receive multiple notifications, but each notification is associated with only one user.
- Each user can have preferences for multiple locations, but each waitlist preference is associated with only one user.
- Each user can choose multiple providers in their preferred location, and each provider can have multiple users in the waitlist. Note: This is achieved through the combination of the one-to-many relationships between users and waitlist_preferences, and between providers and user_waitlist.

7.2 Locations have relationships with providers and waitlist preferences.

- Each location can be linked to multiple providers, but each provider is associated with only one location.
- Each location can be the preference for multiple users, but each waitlist preference is associated with only one location.

7.3 Providers have relationships with locations and user waitlist entries.

- Each healthcare provider can have multiple users in the waitlist, but each user in the waitlist is associated with only one provider.



Entities

1. User

Description: Stores information about users.

Attributes: id, username, password, firstname, lastname, dateofbirth, email, phonenumber, gender, healthcardno, versioncode, cardexpirydate

Relationships:

One-to-Many with Notifications

One-to-Many with Waitlist Preferences

One-to-Many with User Waitlist

2. Notification

Description: Stores notifications for users.

Attributes: id, action, iconurl, message, notificationdate, userid

Relationships:

Many-to-One with User

3. Location

Description: Stores information about locations.

Attributes: id, locationname

Relationships:

One-to-Many with Providers

One-to-Many with Waitlist Preferences

4.Provider

Description: Stores information about healthcare providers.

Attributes: id, providername, locationid

Relationships:

Many-to-One with Location

One-to-Many with User Waitlist

5.Waitlist Preference

Description: Stores preferences for users regarding the waitlist.

Attributes: id, locationid, userid

Relationships:

Many-to-One with Location

Many-to-One with User

6.User Waitlist:

Description: Stores information about users in the waitlist.

Attributes: id, providerid, position, status, estimatewaittime, userid

Relationships:

Many-to-One with Provider

Many-to-One with User

7.News:

Description: Stores news articles.

Attributes: id, title, imageUrl, content, newsdate