Blood Bank Management Software

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Description

- Blood Bank Management software is a web application that can be used in a Blood Bank.

- A blood Bank Staff has features to add donors, delete donors, edit existing donor details and view a list of registered donors. They can also view and manage bloodstock.

- Google map is used to display donor locations.

Features

- Basic CRUD functionalities include Add, Delete, List and Edit Donors.
- Search functionality – Option to search for donors based on location or blood type.
- Registration and Login features for Blood Bank Staff. Users can add donor details without logging into the website.
- Google map to display donor locations.
- Manage Blood Stock – Blood bank staff has an option to update the bloodstock.

Planning - User Stories

- Blood Bank Staff can register and login into the website.
- They have links to add donors, delete donors, list donors and edit donor details.
- Search page with an option to search donors based on location and blood group.
- Google Map to display the donor locations. Google Geocode API is used to get the latitude and longitude of donor location, which in turn is used in Google Map API to locate the place in the map.

Planning - Database

The database includes the following tables:

- Donor table with donor details.
- Address table with street, city and state details.
- Bloodstock table with blood group and quantity.
- Tables for login with user details.

The donor and address table has one to one relationship.

Technology Stack

- Language: C#
- ASP.NET Core MVC
- Visual Studio 2019
- Database: MySQL
- Bootstrap

Demo

https://www.youtube.com/watch?v=mbjL8MxWGec&t=61s

What I Learned

- Using custom validation attribute.
- How to use Google Maps API and Geocode API(used for plotting and marker clustering the donor locations)
- Parsing JSON response from API calls.
- Bootstrap for styling the UI.

What's Next

- Sorting and Pagination.
- Publish the project in Azure App Service.