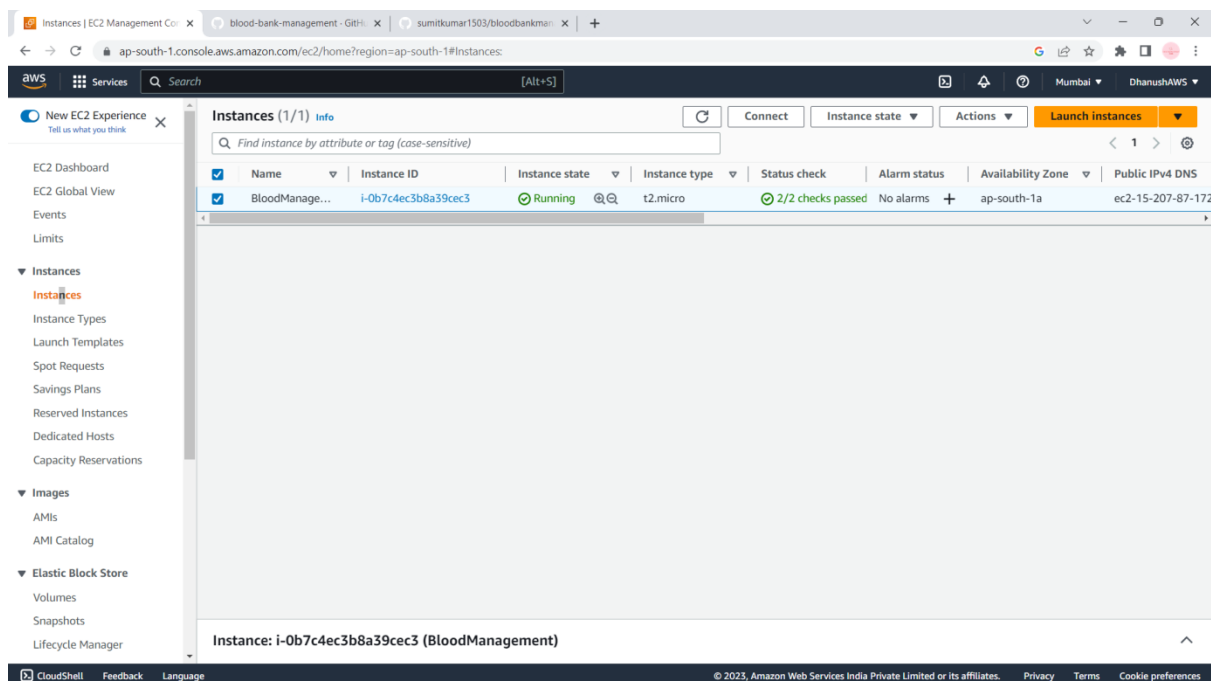# Blood Bank Management – MAIN PROJECT-by N.S.Dhanush

AIM: To create a Blood Bank management system using python and deploying it using the AWS.

RESOURCES USED: EC2, Linux Commands, Ubuntu

STEP 1: Create an instance named BlookManagement with the Ubuntu AMI such that we can use the Linux commands.

STEP2: Using the remote machine software also called as PUTTY connect to the EC2 machine using the given key pair.

STEP 3: Now create a website or an application using the HTML,CSS and python which has the ability to store the information of the Donors, Patients and the Admin.

- This application allows the user to login through the username and the password.
- This application also give the information about the Blood Quantity available for the Request from the console.
- The users can upload their information regarding the amount of blood they needed and they can also upload the amount of blood they are donating.
- The admin account is the master account where he can accept and manage all the requests from the donors and the patients who request the blood.
- This application automatically updates the dashboard which shows the amount of blood available for each blood group namely A+, A-, O+, O-,B+, B-,AB-, AB+.

SOURCE CODE:

```css
/* ==========================================================================
   #FONT
   ========================================================================== */
.font-robo {
  font-family: "Roboto", "Arial", "Helvetica Neue", sans-serif;
}

.font-poppins {
  font-family: "Poppins", "Arial", "Helvetica Neue", sans-serif;
}

.font-opensans {
  font-family: "Open Sans", "Arial", "Helvetica Neue", sans-serif;
}

/* ==========================================================================
   #GRID
```

```css
   ==========================================================================
*/
.row {
  display: -webkit-box;
  display: -webkit-flex;
  display: -moz-box;
  display: -ms-flexbox;
  display: flex;
  -webkit-flex-wrap: wrap;
  -ms-flex-wrap: wrap;
  flex-wrap: wrap;
}

.row .col-2:last-child .input-group-desc {
  margin-bottom: 0;
}

.row-space {
  -webkit-box-pack: justify;
  -webkit-justify-content: space-between;
  -moz-box-pack: justify;
  -ms-flex-pack: justify;
  justify-content: space-between;
}

.row-refine {
  margin: 0 -15px;
}

.row-refine .col-3 .input-group-desc,
.row-refine .col-9 .input-group-desc {
  margin-bottom: 0;
}

.col-2 {
  width: -webkit-calc((100% - 30px) / 2);
  width: -moz-calc((100% - 30px) / 2);
  width: calc((100% - 30px) / 2);
}

@media (max-width: 767px) {
  .col-2 {
    width: 100%;
  }
}

.form-row {
  display: -webkit-box;
```

```css
  display: -webkit-flex;
  display: -moz-box;
  display: -ms-flexbox;
  display: flex;
  -webkit-flex-wrap: wrap;
  -ms-flex-wrap: wrap;
  flex-wrap: wrap;
  -webkit-box-align: center;
  -webkit-align-items: center;
  -moz-box-align: center;
  -ms-flex-align: center;
  align-items: center;
  margin-bottom: 40px;
}

.form-row .name {
  width: 125px;
  color: #555;
  font-size: 15px;
  font-weight: 700;
}

.form-row .value {
  width: -webkit-calc(100% - 125px);
  width: -moz-calc(100% - 125px);
  width: calc(100% - 125px);
}

@media (max-width: 767px) {
  .form-row {
    display: block;
  }
  .form-row .name,
  .form-row .value {
    display: block;
    width: 100%;
  }
  .form-row .name {
    margin-bottom: 7px;
  }
}

.col-3,
.col-9 {
  padding: 0 15px;
  position: relative;
  width: 100%;
  min-height: 1px;
```

```css
}

.col-3 {
  -webkit-box-flex: 0;
  -webkit-flex: 0 0 25%;
  -moz-box-flex: 0;
  -ms-flex: 0 0 25%;
  flex: 0 0 25%;
  max-width: 25%;
}

@media (max-width: 767px) {
  .col-3 {
    -webkit-box-flex: 0;
    -webkit-flex: 0 0 35%;
    -moz-box-flex: 0;
    -ms-flex: 0 0 35%;
    flex: 0 0 35%;
    max-width: 35%;
  }
}

.col-9 {
  -webkit-box-flex: 0;
  -webkit-flex: 0 0 75%;
  -moz-box-flex: 0;
  -ms-flex: 0 0 75%;
  flex: 0 0 75%;
  max-width: 75%;
}

@media (max-width: 767px) {
  .col-9 {
    -webkit-box-flex: 0;
    -webkit-flex: 0 0 65%;
    -moz-box-flex: 0;
    -ms-flex: 0 0 65%;
    flex: 0 0 65%;
    max-width: 65%;
  }
}

/* =========================================================================
   #BOX-SIZING
   ========================================================================= 
*/
/**
 * More sensible default box-sizing:
```

```css
 * css-tricks.com/inheriting-box-sizing-probably-slightly-better-best-practice
 */
html {
  -webkit-box-sizing: border-box;
  -moz-box-sizing: border-box;
  box-sizing: border-box;
}

* {
  padding: 0;
  margin: 0;
}

*, *:before, *:after {
  -webkit-box-sizing: inherit;
  -moz-box-sizing: inherit;
  box-sizing: inherit;
}

/* =========================================================================
   #RESET
   ========================================================================= 
*/
/**
 * A very simple reset that sits on top of Normalize.css.
 */
body,
h1, h2, h3, h4, h5, h6,
blockquote, p, pre,
dl, dd, ol, ul,
figure,
hr,
fieldset, legend {
  margin: 0;
  padding: 0;
}

/**
 * Remove trailing margins from nested lists.
 */
li > ol,
li > ul {
  margin-bottom: 0;
}

/**
 * Remove default table spacing.
 */
```

```css
table {
  border-collapse: collapse;
  border-spacing: 0;
}

/**
 * 1. Reset Chrome and Firefox behaviour which sets a `min-width: min-content;`
 *    on fieldsets.
 */
fieldset {
  min-width: 0;
  /* [1] */
  border: 0;
}

button {
  outline: none;
  background: none;
  border: none;
}

/* =========================================================================
   #PAGE WRAPPER
   ========================================================================= */
.page-wrapper {
  min-height: 100vh;
}

body {
  font-family: "Open Sans", "Arial", "Helvetica Neue", sans-serif;
  font-weight: 400;
  font-size: 14px;
}

h1, h2, h3, h4, h5, h6 {
  font-weight: 400;
}

h1 {
  font-size: 36px;
}

h2 {
  font-size: 30px;
}
```

```css
h3 {
  font-size: 24px;
}

h4 {
  font-size: 18px;
}

h5 {
  font-size: 15px;
}

h6 {
  font-size: 13px;
}

/* =======================================================================
   #BACKGROUND
   ======================================================================= 
*/
.bg-blue {
  background: #2c6ed5;
}

.bg-red {
  background: #fa4251;
}

.bg-gra-01 {
  background: -webkit-gradient(linear, left bottom, left top, from(#fbc2eb), to(#a18cd1));
  background: -webkit-linear-gradient(bottom, #fbc2eb 0%, #a18cd1 100%);
  background: -moz-linear-gradient(bottom, #fbc2eb 0%, #a18cd1 100%);
  background: -o-linear-gradient(bottom, #fbc2eb 0%, #a18cd1 100%);
  background: linear-gradient(to top, #fbc2eb 0%, #a18cd1 100%);
}

.bg-gra-02 {
  background: -webkit-gradient(linear, left bottom, right top, from(#fc2c77), to(#6c4079));
  background: -webkit-linear-gradient(bottom left, #fc2c77 0%, #6c4079 100%);
  background: -moz-linear-gradient(bottom left, #fc2c77 0%, #6c4079 100%);
  background: -o-linear-gradient(bottom left, #fc2c77 0%, #6c4079 100%);
  background: linear-gradient(to top right, #fc2c77 0%, #6c4079 100%);
}

.bg-gra-03 {
```

```css
  background: -webkit-gradient(linear, left bottom, right top, from(#08aeea),
to(#b721ff));
  background: -webkit-linear-gradient(bottom left, #08aeea 0%, #b721ff 100%);
  background: -moz-linear-gradient(bottom left, #08aeea 0%, #b721ff 100%);
  background: -o-linear-gradient(bottom left, #08aeea 0%, #b721ff 100%);
  background: linear-gradient(to top right, #08aeea 0%, #b721ff 100%);
}

/* ========================================================================
   #SPACING
   ========================================================================
*/
.p-t-100 {
  padding-top: 100px;
}


.p-t-130 {
  padding-top: 130px;
}


.p-t-180 {
  padding-top: 180px;
}


.p-t-45 {
  padding-top: 45px;
}


.p-t-20 {
  padding-top: 20px;
}


.p-t-15 {
  padding-top: 15px;
}


.p-t-10 {
  padding-top: 10px;
}


.p-t-30 {
  padding-top: 30px;
}


.p-b-100 {
  padding-bottom: 100px;
}
```

```css
.p-b-50 {
  padding-bottom: 50px;
}

.m-r-45 {
  margin-right: 45px;
}

.m-r-55 {
  margin-right: 55px;
}

.m-b-55 {
  margin-bottom: 55px;
}

/* ======================================================================
   #WRAPPER
   ====================================================================== 
*/
.wrapper {
  margin: 0 auto;
}

.wrapper--w960 {
  max-width: 960px;
}

.wrapper--w790 {
  max-width: 790px;
}

.wrapper--w780 {
  max-width: 780px;
}

.wrapper--w680 {
  max-width: 680px;
}

/* ======================================================================
   #BUTTON
   ====================================================================== 
*/
.btn {
  display: inline-block;
  line-height: 50px;
  padding: 0 50px;
```

```css
  -webkit-transition: all 0.4s ease;
  -o-transition: all 0.4s ease;
  -moz-transition: all 0.4s ease;
  transition: all 0.4s ease;
  cursor: pointer;
  font-size: 15px;
  text-transform: uppercase;
  font-weight: 700;
  color: #fff;
  font-family: inherit;
}

.btn--radius {
  -webkit-border-radius: 3px;
  -moz-border-radius: 3px;
  border-radius: 3px;
}

.btn--radius-2 {
  -webkit-border-radius: 5px;
  -moz-border-radius: 5px;
  border-radius: 5px;
}

.btn--pill {
  -webkit-border-radius: 20px;
  -moz-border-radius: 20px;
  border-radius: 20px;
}

.btn--green {
  background: #57b846;
}

.btn--green:hover {
  background: #4dae3c;
}

.btn--blue {
  background: #4272d7;
}

.btn--blue:hover {
  background: #3868cd;
}

.btn--red {
  background: #ff4b5a;
```

```css
}

.btn--red:hover {
  background: #eb3746;
}


/* ========================================================================
   #DATE PICKER
   ======================================================================== */
td.active {
  background-color: #2c6ed5;
}

input[type="date" i] {
  padding: 14px;
}

.table-condensed td, .table-condensed th {
  font-size: 14px;
  font-family: "Roboto", "Arial", "Helvetica Neue", sans-serif;
  font-weight: 400;
}

.daterangepicker td {
  width: 40px;
  height: 30px;
}

.daterangepicker {
  border: none;
  -webkit-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  -moz-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  display: none;
  border: 1px solid #e0e0e0;
  margin-top: 5px;
}

.daterangepicker::after, .daterangepicker::before {
  display: none;
}

.daterangepicker thead tr th {
  padding: 10px 0;
}


.daterangepicker .table-condensed th select {
```

```css
  border: 1px solid #ccc;
  -webkit-border-radius: 3px;
  -moz-border-radius: 3px;
  border-radius: 3px;
  font-size: 14px;
  padding: 5px;
  outline: none;
}

/* ========================================================================
   #FORM
   ======================================================================== 
*/
input {
  outline: none;
  margin: 0;
  border: none;
  -webkit-box-shadow: none;
  -moz-box-shadow: none;
  box-shadow: none;
  width: 100%;
  font-size: 14px;
  font-family: inherit;
}

.radio-container {
  display: inline-block;
  position: relative;
  padding-left: 30px;
  cursor: pointer;
  font-size: 16px;
  color: #666;
  -webkit-user-select: none;
  -moz-user-select: none;
  -ms-user-select: none;
  user-select: none;
}

.radio-container input {
  position: absolute;
  opacity: 0;
  cursor: pointer;
}

.radio-container input:checked ~ .checkmark {
  background-color: #e5e5e5;
}
```

```css
.radio-container input:checked ~ .checkmark:after {
  display: block;
}

.radio-container .checkmark:after {
  top: 50%;
  left: 50%;
  -webkit-transform: translate(-50%, -50%);
  -moz-transform: translate(-50%, -50%);
  -ms-transform: translate(-50%, -50%);
  -o-transform: translate(-50%, -50%);
  transform: translate(-50%, -50%);
  width: 12px;
  height: 12px;
  -webkit-border-radius: 50%;
  -moz-border-radius: 50%;
  border-radius: 50%;
  background: #57b846;
}

.checkmark {
  position: absolute;
  top: 50%;
  -webkit-transform: translateY(-50%);
  -moz-transform: translateY(-50%);
  -ms-transform: translateY(-50%);
  -o-transform: translateY(-50%);
  transform: translateY(-50%);
  left: 0;
  height: 20px;
  width: 20px;
  background-color: #e5e5e5;
  -webkit-border-radius: 50%;
  -moz-border-radius: 50%;
  border-radius: 50%;
  -webkit-box-shadow: inset 0px 1px 3px 0px rgba(0, 0, 0, 0.08);
  -moz-box-shadow: inset 0px 1px 3px 0px rgba(0, 0, 0, 0.08);
  box-shadow: inset 0px 1px 3px 0px rgba(0, 0, 0, 0.08);
}

.checkmark:after {
  content: "";
  position: absolute;
  display: none;
}

.input--style-5 {
  background: #e5e5e5;
```

```css
  line-height: 50px;
  -webkit-border-radius: 5px;
  -moz-border-radius: 5px;
  border-radius: 5px;
  padding: 0 22px;
  font-size: 16px;
  color: #555;
}

.input-group-desc {
  position: relative;
}

@media (max-width: 767px) {
  .input-group-desc {
    margin-bottom: 40px;
  }
}

.input-group {
  position: relative;
  margin: 0;
}

.label {
  color: #555;
  font-size: 15px;
  font-weight: 700;
}

.label--block {
  width: 100%;
}

.label--desc {
  position: absolute;
  text-transform: capitalize;
  display: block;
  color: #999;
  font-size: 14px;
  margin: 0;
  margin-top: 7px;
  left: 0;
}

/* ============================================================================
   #SELECT2
```

```css
    ============================================================================
*/
.select--no-search .select2-search {
  display: none !important;
}

.select2-container--open .select2-dropdown--below {
  border: none;
  -webkit-border-radius: 3px;
  -moz-border-radius: 3px;
  border-radius: 3px;
  -webkit-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  -moz-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  border: 1px solid #e0e0e0;
  margin-top: 5px;
  overflow: hidden;
}

.select2-container--default .select2-results__option {
  padding-left: 22px;
}

.rs-select2 .select2-container {
  width: 100% !important;
  outline: none;
  background: #e5e5e5;
  -webkit-border-radius: 5px;
  -moz-border-radius: 5px;
  border-radius: 5px;
}

.rs-select2 .select2-container .select2-selection--single {
  outline: none;
  border: none;
  height: 50px;
  background: transparent;
}

.rs-select2 .select2-container .select2-selection--single .select2-
selection__rendered {
  line-height: 50px;
  padding-left: 0;
  color: #555;
  font-size: 16px;
  font-family: inherit;
  padding-left: 22px;
  padding-right: 50px;
```

```css
}

.rs-select2 .select2-container .select2-selection--single .select2-
selection__arrow {
  height: 50px;
  right: 15px;
  display: -webkit-box;
  display: -webkit-flex;
  display: -moz-box;
  display: -ms-flexbox;
  display: flex;
  -webkit-box-pack: center;
  -webkit-justify-content: center;
  -moz-box-pack: center;
  -ms-flex-pack: center;
  justify-content: center;
  -webkit-box-align: center;
  -webkit-align-items: center;
  -moz-box-align: center;
  -ms-flex-align: center;
  align-items: center;
}

.rs-select2 .select2-container .select2-selection--single .select2-
selection__arrow b {
  display: none;
}

.rs-select2 .select2-container .select2-selection--single .select2-
selection__arrow:after {
  font-family: "Material-Design-Iconic-Font";
  content: '\f2f9';
  font-size: 24px;
  color: #999;
  -webkit-transition: all 0.4s ease;
  -o-transition: all 0.4s ease;
  -moz-transition: all 0.4s ease;
  transition: all 0.4s ease;
}

.rs-select2 .select2-container.select2-container--open .select2-selection--
single .select2-selection__arrow::after {
  -webkit-transform: rotate(-180deg);
  -moz-transform: rotate(-180deg);
  -ms-transform: rotate(-180deg);
  -o-transform: rotate(-180deg);
  transform: rotate(-180deg);
}
```

```css
/* ======================================================================
   #TITLE
   ====================================================================== */
.title {
  font-size: 24px;
  text-transform: uppercase;
  font-weight: 700;
  text-align: center;
  color: #fff;
}


/* ======================================================================
   #CARD
   ====================================================================== */
.card {
  -webkit-border-radius: 3px;
  -moz-border-radius: 3px;
  border-radius: 3px;
  background: #fff;
}

.card-5 {
  background: #fff;
  -webkit-border-radius: 10px;
  -moz-border-radius: 10px;
  border-radius: 10px;
  -webkit-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  -moz-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
  box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
}

.card-5 .card-heading {
  padding: 20px 0;
  background: #1a1a1a;
  -webkit-border-top-left-radius: 10px;
  -moz-border-radius-topleft: 10px;
  border-top-left-radius: 10px;
  -webkit-border-top-right-radius: 10px;
  -moz-border-radius-topright: 10px;
  border-top-right-radius: 10px;
}

.card-5 .card-body {
  padding: 52px 85px;
  padding-bottom: 73px;
```

```css
}

@media (max-width: 767px) {
  .card-5 .card-body {
    padding: 40px 30px;
    padding-bottom: 50px;
  }
}
```

This is the code for the Applicaton made using the HTML,CSS and python.

SOURCE CODE FOR THE RUNNING APPLICATION:

```python
#!/usr/bin/env python
"""Django's command-line utility for administrative tasks."""
import os
import sys


def main():
    os.environ.setdefault('DJANGO_SETTINGS_MODULE',
'bloodbankmanagement.settings')
    try:
        from django.core.management import execute_from_command_line
    except ImportError as exc:
        raise ImportError(
            "Couldn't import Django. Are you sure it's installed and "
            "available on your PYTHONPATH environment variable? Did you "
            "forget to activate a virtual environment?"
        ) from exc
    execute_from_command_line(sys.argv)


if __name__ == '__main__':
    main()
```

STEP 4: Now upload the above code in the github repository.

- After connecting to the putty use the linux commands given below
- Sudo apt-get update -> this code updates the virtual remote machine
- Sudo apt-get install python -> install python in putty
- Git lone <Git Hub Link of Code> -> clone the github code in putty.

- Python3 –m pip install –r requirements.txt -> installs the requirements like the Django, Widget Tweaks, and the sqlparse, pytz, which are required for the Code to run.

- Sudo apt-get install python3-pip -> install the pip required for the python3 to install certain packages.
- Sudo apt install Pillow -> required for the migrations of the contents of the file for the Django to run.
- Python3 manage.py makemigrations
- Python3 manage.py migrate

- Python3 manage.py runserver -> runs the deployment server at the link https://127.0.0.1:8000 as this is the official server which is available till our remote machine is working.
- Open the link or else we can open the Public IPv4 address of the EC2 isntance to view the live website

OUTPUT:

This is the Homepage of the Application of the BloodBank management
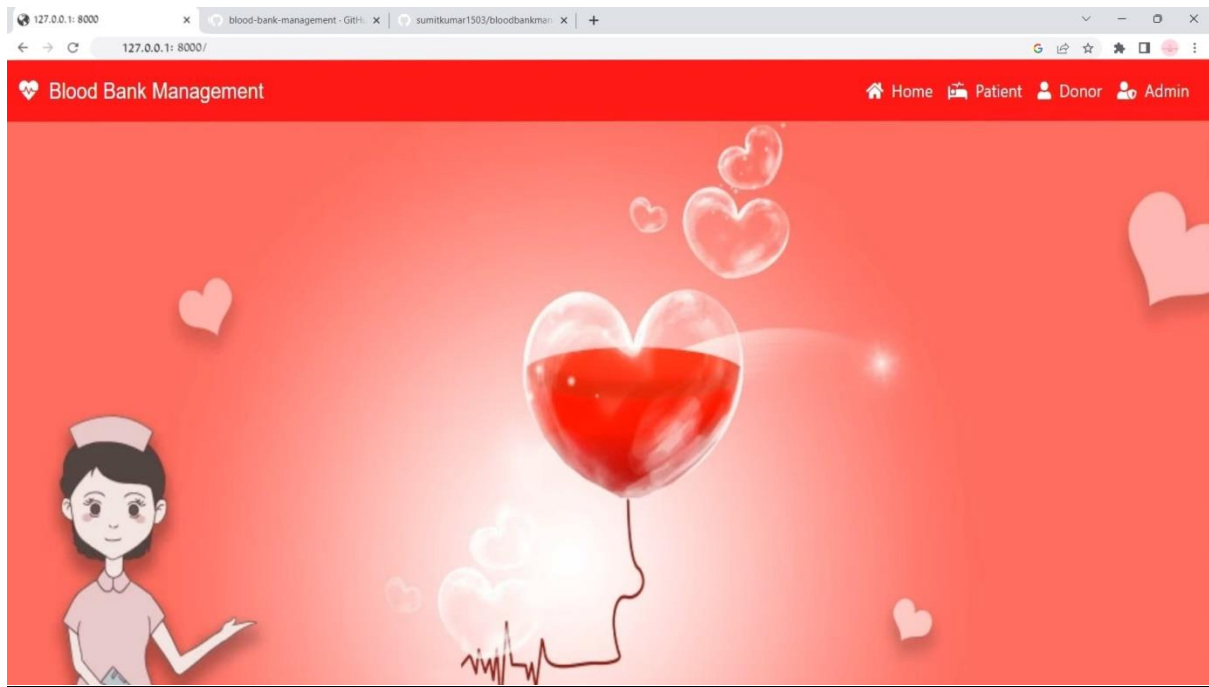
- This is the Dashboard of the application
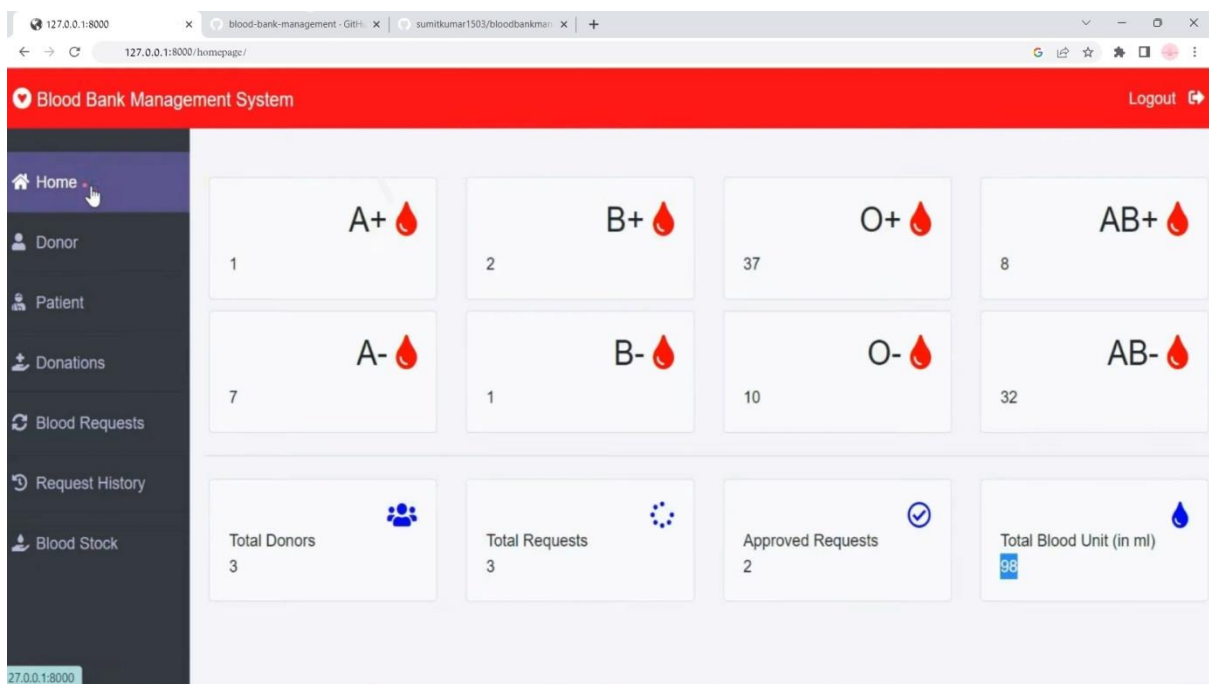
- This is the admin login page: all the data about the users and the donors and the patients can be available here.

- This is the patient or the donor login page both are similar and they can change their login at the top right of the screen

The Users can view the quantity of the blood available for the request

RESULTS: Hence the application for the Blood Bank Management has been deployed using the AWS.