Team: **Red cross warriors**

Project Title: Wayne State Blood Bank

Members:

1. Tia Gijo
2. Jacob Boesch
3. Kyle Macmillan Janssen
4. Lloyd Brombach
5. Khang Pham

|  |  |
| --- | --- |
| **Meeting date** | **Participants** |
| 9/21/2020 | Tia, Jacob, Kyle, Lloyd, Khang |
| 9/22/2020 | Tia, Jacob, Kyle, Lloyd, Khang |
| 9/23/2020 | Tia, Jacob, Kyle, Lloyd, Khang |

|  |  |
| --- | --- |
| **STAKEHOLDERS** | **FEATURES** |
| Blood donors (Wayne State Students, Professors, Faculty) | NR1 Restrict Access  NR2 Conditions while creating passwords  NR3 Email format  NR4 Age confirmation  NR5 Information privacy  NR6 Consent prior to storing information  NR7 Checking for invalid content or improper format data from the user  NR8. A tutorial video on how the features will work will be added to the homepage  NR12. 24/7 working  NR13. Web pages will be loaded within 5 seconds  FR1 Login  FR2 Registration  FR3 Verification email  FR4 Edit profile page  FR5. Delete Account by User  FR6. Upload info for incentives  FR7. Contact Email  FR8. Connect Social Media.  FR10. Notifying the Matching Donors  FR11. Logout  FR12. Send Feedback  FR13. Spam prevention |
| Blood requesters | NR1 Restrict Access  NR2 Conditions while creating passwords  NR3 Email format  NR5 Information privacy  NR6 Consent prior to storing information  NR7 Checking for invalid content or improper format data from the user  NR8. A tutorial video on how the features will work will be added to the homepage.  NR12. 24/7 working  NR13. Web pages will be loaded within 5 seconds  FR1 Login  FR2 Registration  FR3 Verification email  FR4 Edit profile page  FR5. Delete Account by User  FR7. Contact Email  FR8. Connect Social Media  FR10. Notifying the Matching Donors  FR11. Logout  FR12. Send Feedback  FR13. Spam prevention |
| Administrators | NR1 Restrict Access  NR2 Conditions while creating passwords  NR3 Email format  NR7 Checking for invalid content or improper format data from the user  NR12. 24/7 working  FR3 Verification email  FR7. Contact Email  FR8. Connect Social Media  FR11. Logout  FR12. Send Feedback  FR15. Admin Login  FR16. Update News and events  FR17. Delete Users  FR18. Add blood drive information  FR19. Adding stars to the users who donated |
| Hospitals (Hospitals will be contacted by the blood donors to know more information regarding the user. Hospital details are passed on to the potential donors from the requester.) | There are no features that are directly affecting them. |
| Blood donation drives(Red Cross) (We advertise the blood donation drives in the website, and in this way people will be informed about these blood drives and this will give way for more blood donation) | There are no features that are directly affecting them. |
| All | FR 9. Request Donors  FR14. Campus Blood Drive Search  NR10 Compatibility |

**NON - FUNCTIONAL REQUIREMENTS (NR)**

SECURITY

|  |  |  |
| --- | --- | --- |
| **NR1. Restrict Access** | | |
| Goal: The system should block unauthorized users from accessing restricted features. | | |
| Stakeholders: blood donors, blood requesters, administrators | | |
| Description: Given an unregistered, unverified, or unauthorized user.  When that user attempts to access a restricted feature  Then the system will block access to that feature and force the user to login with an authorized account before proceeding. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: HIGH |

|  |  |  |
| --- | --- | --- |
| **NR2. Conditions while creating passwords** | | |
| Goal: Force users to create secure passwords. | | |
| Stakeholders: blood donors, blood requesters, administrators | | |
| Description: When a user creates or changes their password the password must conform to the following restrictions:   * Must be at least 8 characters in length * Must contain at least one upper case letter * Must be at least one lower case letter * Must contain at least one numeric digit   If the password does not conform to these restrictions the user will be notified and their entered password will not be stored in the system until it satisfies the requirements. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

|  |  |  |
| --- | --- | --- |
| **NR3. Email format** | | |
| Goal: Force users to enter a valid wayne state email. | | |
| Stakeholders: blood donors, blood requesters, administrators | | |
| Description: When a user registers their email the email address must end in @wayne.edu.  If their email address doesn’t end in @wayne.edu the system will notify the user and it will not store the email address until it conforms to the requirement. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

|  |  |  |
| --- | --- | --- |
| **NR4. Age confirmation** | | |
| Goal: Prevent minors from blood donation. People must be 17 to donate blood voluntarily | | |
| Stakeholders: blood donors | | |
| Description: When a user registers, it is required they confirm their age. Because of security reasons, we don’t want the data of minors in the database.  According to state **law**, a person must be at least 17 years of **age** in order to **donate blood** without having to obtain parental consent. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

PRIVACY

|  |  |  |
| --- | --- | --- |
| **NR5. Information privacy** | | |
| Goal: Prevent users from misusing data. | | |
| Stakeholders: Blood donors, Blood requesters | | |
| Description: Given I’m a user, none of my information will be publicly displayed unless I've consented it to be displayed. No information beyond what is consented to is given out. When a user requests blood, if they give consent to share the phone number, then the phone number will be added in the email sent to the matching donors. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ HIGH |

|  |  |  |
| --- | --- | --- |
| **NR6. Consent prior to storing information** | | |
| Goal: To increase the comfortability that users can use the website and request for blood without fear of losing data. | | |
| Stakeholders: Blood donors, Blood requesters | | |
| Description: When I request for a blood donor, I would be inputting the cell number, email id, blood type etc. This information won't be saved to the system, but would be considered as temporary data and will be only used while sending the email so the user need not worry while they enter the data in the blood request form. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ HIGH |

USABILITY

|  |  |  |
| --- | --- | --- |
| **NR7. Checking for invalid content or improper format data from the user** | | |
| Goal: Prevent users from inputting invalid responses. Prepare the user for inputs. Maintain the data consistency in the database. | | |
| Stakeholders: Blood donors, blood requesters, administrators | | |
| * The system will catch all improper input from all text fields and properly notify the user of the error. The user will not be able to submit any information until all responses are valid. * *Name Input:* When a user registers or changes their name the system must ensure that the input is alphabetical no numeric or special characters are allowed. * *Address Input*: When a user registers or changes their address the system must ensure that the input is alphanumeric no special characters are allowed for an address. * *Access Id Input:* When a user enters their access id it must be a six character input consisting of two characters and four digits. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ LOW |

|  |  |  |
| --- | --- | --- |
| **NR8. A tutorial video on how the features will work will be added to the homepage.** | | |
| Goal: People will have a better idea on how to use the features and they can use it more efficiently. | | |
| Stakeholders: Blood donors, blood requesters | | |
| * A video with detailed instructions will be available for the user to use anytime * If they want to know more about the website or any specific feature, they can always approach the video. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ LOW |

RELIABILITY

|  |  |  |
| --- | --- | --- |
| **NR9. Reliability of features** | | |
| Goal: The website main priority is to connect requesters to donors. | | |
| Stakeholders: Blood requesters, Blood donors | | |
| * Our website has many features and there are different types of priority for each of the features. * Our high priority features include: Requesting blood, login, registration. * We will make sure that these high priority features won’t be shut down for more than 30 minutes during website maintenance or updates. * We will ensure that the system updates would be done at a time when people use the system the least based on the website usage. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ HIGH |

|  |  |  |
| --- | --- | --- |
| **NR10. Compatibility Support** | | |
| Goal: The website will be easily viewed on all devices regardless of screen size, device, and browser. | | |
| Stakeholders: All | | |
| * Given a user uses smartphone, tablet, computer, laptop they will be able to access the entire website and all the services we provide * No matter the size of the device, the website can be viewed easily without messy layout. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

AVAILABILITY

|  |  |  |
| --- | --- | --- |
| **NR11. Website will be working 99% of the time** | | |
| Goal: The website services will remain up so long as wayne state services are up | | |
| Stakeholders: Blood donors, Blood requesters, Administrators | | |
| The system will be available 167 hours per week (out of 168) to all users except for scheduled maintenance days. The scheduled maintenance days will conform to Wayne States’ scheduled maintenance schedule. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ LOW |

PERFORMANCE

|  |  |  |
| --- | --- | --- |
| **NR12. Web pages will be loaded in less than 5 seconds** | | |
| Goal: Users will be more satisfied, when the performance is higher. This will increase the usage of the website by Wayne students, staff, and faculty members. | | |
| Stakeholders: Blood donors, Blood requesters | | |
| When the users attempt to access, respond to, or interact with any feature of the system they will receive an appropriate response within 5 seconds. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/21/2020 | Priority: ­ HIGH |

**FUNCTIONAL REQUIREMENTS**

|  |  |  |
| --- | --- | --- |
| **FR1. Login** | | |
| Goal: Log a user into the system | | |
| Stakeholders: Blood donors, Blood requesters | | |
| Given that a user provides their login information consisting of their registered email and password.  When the user submits this information for login, the system will check if they are a verified user and that their credentials match an account in our system. If the user is a verified user they will be logged into the system.  If the user is not a verified user they will be notified that they must verify their email before proceeding.  If the users credentials do not match any account on record they will be notified that they’ve used the wrong email or password. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ HIGH |

|  |  |  |
| --- | --- | --- |
| **FR2. Registration** | | |
| Goal: Register a new user | | |
| Stakeholders: Blood donors, Blood requesters | | |
| When a user registers to be in our system providing the following information:  · First name  · Last Name  · Blood Type  · Address  · Access Id  · Wayne State Email  · Password  · Would you like to be a blood donor (yes or no)  - Are you over 17? (yes or no)  If all input fields are valid and the user submits this information. Then the user will be added as an unverified user in the system.  Alternate scenarios  If any of the inputs provided by the user are invalid. Then the user will be notified which fields are invalid and the proper format of those fields. The user will not be registered until all fields are valid.  Linked requirements: NR2, NR3, NR7  The user should choose their blood type from a list of predefined blood types. | | |
| Origin: Initial brainstorm by the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ HIGH |

|  |  |  |
| --- | --- | --- |
| **FR3. Verification Email** | | |
| Goal: Verify a user | | |
| Stakeholders: Blood donors, Blood requesters | | |
| Given that a user has registered to be in our system, a verification email will be sent to the user's email provided by their registration.  When a user clicks on the link in the verification email they will be verified in our system and they’ll be able to access all features restricted to registered users.  If the verification email fails to send the user will be notified on the registration page and their information will not be saved in the system. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

|  |  |  |
| --- | --- | --- |
| **FR4. Edit Profile page** | | |
| Goal: Allow logged-in users to edit editable fields in their profile | | |
| Stakeholders: Blood Donors, Blood Requesters | | |
| When a logged-in user is viewing their profile, they shall have a button to enable editing their:  Name, address, location, donor status, donor history, password.  This feature is restricted to verified users only. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: MEDIUM |

|  |  |  |
| --- | --- | --- |
| **FR5. Delete Account by User** | | |
| Goal: Allow logged-in users to delete their account and all of their information | | |
| Stakeholders: Blood Donors, Blood Requesters | | |
| Description:  When a user is logged in viewing their profile, they will have the option to delete their account and all associated information with their account. The system must fully inform the user that their account will be permanently deleted. And the user must confirm that they would like to delete their account  This feature is restricted to verified users only. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ MEDIUM |

|  |  |  |
| --- | --- | --- |
| **FR6. Upload info for incentives** | | |
| Goal: Upload proof of donation. | | |
| Stakeholders: Blood Donors | | |
| Description: Users are rewarded with an electronic star for confirmed donations. Once a donation is complete, in their profile page they will submit evidence to the admin team who can then award a star. The number of stars will be visible from the users profile page  This feature is restricted to verified users only. | | |
| Origin: Initial brain-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ LOW |

|  |  |  |
| --- | --- | --- |
| **FR7. Contact Email** | | |
| Goal: Provide a quick pathway for people using the site to write an email to us. | | |
| Stakeholders: Blood Donors, Blood requesters, Admin | | |
| Description: Users are taken to their default email site and the website’s contact email is auto-filled in for them in the recipient bar.  This feature is unrestricted and can be accessed with or without an account. | | |
| Origin: Initial brain-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ LOW |

|  |  |  |
| --- | --- | --- |
| **FR8. Connect Social Media** | | |
| Goal: Give direct paths to the website’s social media platforms. | | |
| Stakeholders: All | | |
| Description:  Any user of the site either registered or unregistered will be able to access the social media profiles associated with the site. These social media profiles will be easily identifiable by displaying the official company icon of the platform to the user.  Social media platforms include:   * Facebook * Twitter * Instagram   This feature is unrestricted and can be accessed with or without an account. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ LOW |

|  |  |  |
| --- | --- | --- |
| **FR 9. Request Donors** | | |
| Goal: Being able to send a blood request to donors that fit the description of the requester | | |
| Stakeholders: All | | |
| Description:  When a user requests a blood donation they must include the following information:   * Hospital Name * Hospital Location * Message describing their situation * Phone number   When the user submits this information all registered donors with the same blood type will be notified as to the name of the user who requested the blood, the name of the hospital, the location of the hospital, and the description provided by the requesting user.    This feature is restricted to verified users. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­HIGH |

|  |  |  |
| --- | --- | --- |
| **FR10. Notifying the Matching Donors** | | |
| Goal: The main goal of this requirement is that the matching donor will be contacted via email immediately after requesting | | |
| Stakeholders: Blood donors, Blood Requesters | | |
| Description:  When a request for blood is processed, the system will retrieve a list of registered donors with the same blood type as the blood requester.  Each registered donor will receive an email containing the phone number of the blood requester, hospital name, hospital location, and the description of the situation.  This function only applies to the people(verified users) who are found as matches when a person requests blood. | | |
| Origin: Main idea of the project | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ High |

|  |  |  |
| --- | --- | --- |
| **FR11. Logout** | | |
| Goal: Secures user data | | |
| Stakeholders: Blood Requesters, Blood Donors, Administrators | | |
| Description: When a user is inactive in the website for more than 30 minutes, they will be automatically logged out of the system. Along with that, the user will have the option to self logout when needed. All temporary information will be deleted.  This feature is restricted to anyone who has an account on the website. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ Medium |

|  |  |  |
| --- | --- | --- |
| **FR12. Send Feedback** | | |
| Goal: Improve the website and solve problems | | |
| Stakeholders: Blood Donors, Blood Requesters, Administrators | | |
| Description: When a user feels there should be an additional feature or any other concern regarding any other features, they always have the chance to leave feedback to the administrator.  The feedback provided by the user will consist of a textual message describing their situation.  When a user submits this information the administrators will be notified of the name of the user submitting feedback, their email address, and the message describing their situation.  Administrators will then reply to the users feedback using their email address.  This feedback is restricted to verified users. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ Medium |

|  |  |  |
| --- | --- | --- |
| **FR13. Security measures: Spam prevention** | | |
| Goal: To make sure our service can not cause intentional or unintentional spam | | |
| Stakeholders: blood donors, blood requesters | | |
| Description:   * To prevent *intentional spam*, we will limit the amount of times a blood requester can make a request to once per day. * To prevent *unintentional spam*, we will provide a confirmation that warns a blood requester that the email has been sent and may take some time to receive a feedback | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ HIGH |

|  |  |  |
| --- | --- | --- |
| **FR14. Campus Blood Drive Search** | | |
| Goal: To provide a way for users to find blood drives that the wayne state campus is hosting | | |
| Stakeholders: ALL | | |
| All users of the site will be provided a list of campus blood drives.  The list of blood drives will include the date, time, location, and title of the blood drive.  Each blood drive on the list will include a link for additional information on the blood drive that takes the user to the official page of the campus blood drive.  This is an unrestricted feature any user can access it with or without an account. | | |
| Origin: Initial brain storm from the group | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­Low |

**FUNCTIONAL ADMIN FEATURES**

|  |  |  |
| --- | --- | --- |
| **FR15. Admin Login** | | |
| Goal: Separate the regular users from the administrators of the website, so the regular users will be restricted from using the admin privileges. | | |
| Stakeholders: Administrators | | |
| Description: Whoever is given in charge of the website administration will have special login credentials that can give access to the admin features. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ High |

|  |  |  |
| --- | --- | --- |
| **FR16. Update News and events** | | |
| Goal: Make the website a source of information to the users by keeping them updated with the news and events in campus | | |
| Stakeholders: Administrators | | |
| Description:   * Add any important news and events happening on the campus that are related to blood donation or Red Cross, such as an information talk about blood donation, any health related activities such as Yoga, meditations etc.   + The administrator will input the following information for each event     - Event title     - Event description     - Event Date * Delete any expired events | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ LOW |

|  |  |  |
| --- | --- | --- |
| **FR17. Delete Users** | | |
| Goal: Deleting fraudulent users to ensure safety of other users. | | |
| Stakeholders: Administrators | | |
| Description: Admins will have the right to review the profile of any user that is found to be fraudulent. If any user has a complaint about another existing user, they will have access revoked if proven fraudulent. Admins can only view the name of the user, access id of the user, blood type of the user. Admins can also search users using their access id or name. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ High |

|  |  |  |
| --- | --- | --- |
| **FR18. Add blood drive information** | | |
| Goal: Users of our website will be given information about the blood drives happening near the drives and this will lead to blood donation. | | |
| Stakeholders: Administrators | | |
| Description: Admins will be given the feature to add information about the blood drives conducted in Wayne state or nearby places. The location, time, date of the blood drives, and title of blood drives will be included. Admins can also delete the expired drives from the website. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ High |

|  |  |  |
| --- | --- | --- |
| **FR19. Adding stars to the users who donated** | | |
| Goal: Users will be kept updated about the number of stars they have and make use of it for any incentives. | | |
| Stakeholders: Administrators | | |
| Description: Once the user uploads the proof of donation, the admins will review those carefully. If it confirms the donation, the admins will add stars to the user profile. Admin will add the stars for those people who upload the documents first, first come first serve basis. | | |
| Origin: Initial brian-storm | | |
| Version: 1.0 | Date: 9/22/2020 | Priority: ­ High |