Assignment 1 Cover Sheet

IT1060 – Software Process Modeling   **Semester 2 - 2023**

PROJECT ID	MLB_04.02_12
CASE STUDY NAME	Blood Donation System
CAMPUS/CENTER	Malabe Campus

Group Details:

	Student Registration Number	Student Name
1	IT22246578	Weerasinghe W. P. D. A. S
2	IT22254948	Sanjaya W A I
3	IT22222640	Jayalath J R D S
4	IT22131324	Dinushani G G T B
5	IT22113122	Bandara T C N

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We hereby certify,

☑   The attached is our own work and no further changes will be made.
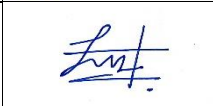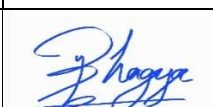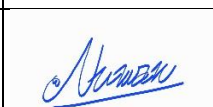
☑   We have contributed in this assignment to the best of our ability.

And we understand,

☑   We may be subject to student discipline processes in the event of an act of academic misconduct by us including an act of plagiarism or cheating.

Group Details:

	Student Name	**Student Registration Number**	**Date**	**Signature**
1	Weerasinghe W. P. D. A. S	IT22246578	15/09/2023	
2	Sanjaya W A I	IT22254948	15/09/2023	
3	Jayalath J R D S	IT22222640	15/09/2023	
4	Dinushani G G T B	IT22131324	15/09/2023	
5	Bandara T C N	IT22113122	15/09/2023	

Introduction

The Blood Donation System serves as a crucial and user-pleasant platform, streamlining the system of blood donation for individuals keen to make existence-saving contributions. Within this system, users come upon more than a few critical functions upon coming into the net software. They can rapidly register, access complete information approximately the donation method, find out ongoing promotions, and discover nearby donation facilities.

Upon registering, both neighborhood and worldwide users can create person debts, successfully managed through diligent system administrators. Additionally, the device incorporates monetary contributions, allowing customers, whether or not registered or no longer, to donate budget to guide the operational aspects of blood collection and distribution.

Registered users advantage the ability to schedule donation appointments, share their studies, and, whilst vital, cancel appointments, pending approval via directors. Admins efficaciously manage the device, oversee appointment cancellations, and facilitate refunds as wished. They also handle staff debts, preserve an energetic presence on social media, and update important data about donation facilities. Managers, with the considered necessary credentials, utilize the gadget to generate reviews, conduct evaluation, and effectively control funds.

In this orchestration, Guests and Registered Users are the primary actors, riding the system's middle features, while Managers and Administrators serve pivotal secondary roles. The machine's workflow is depicted through unique use case diagrams, elucidating its seamless operation in facilitating the noble act of blood donation.

Use Case Diagram and Use Case Scenarios

Blood Donation System
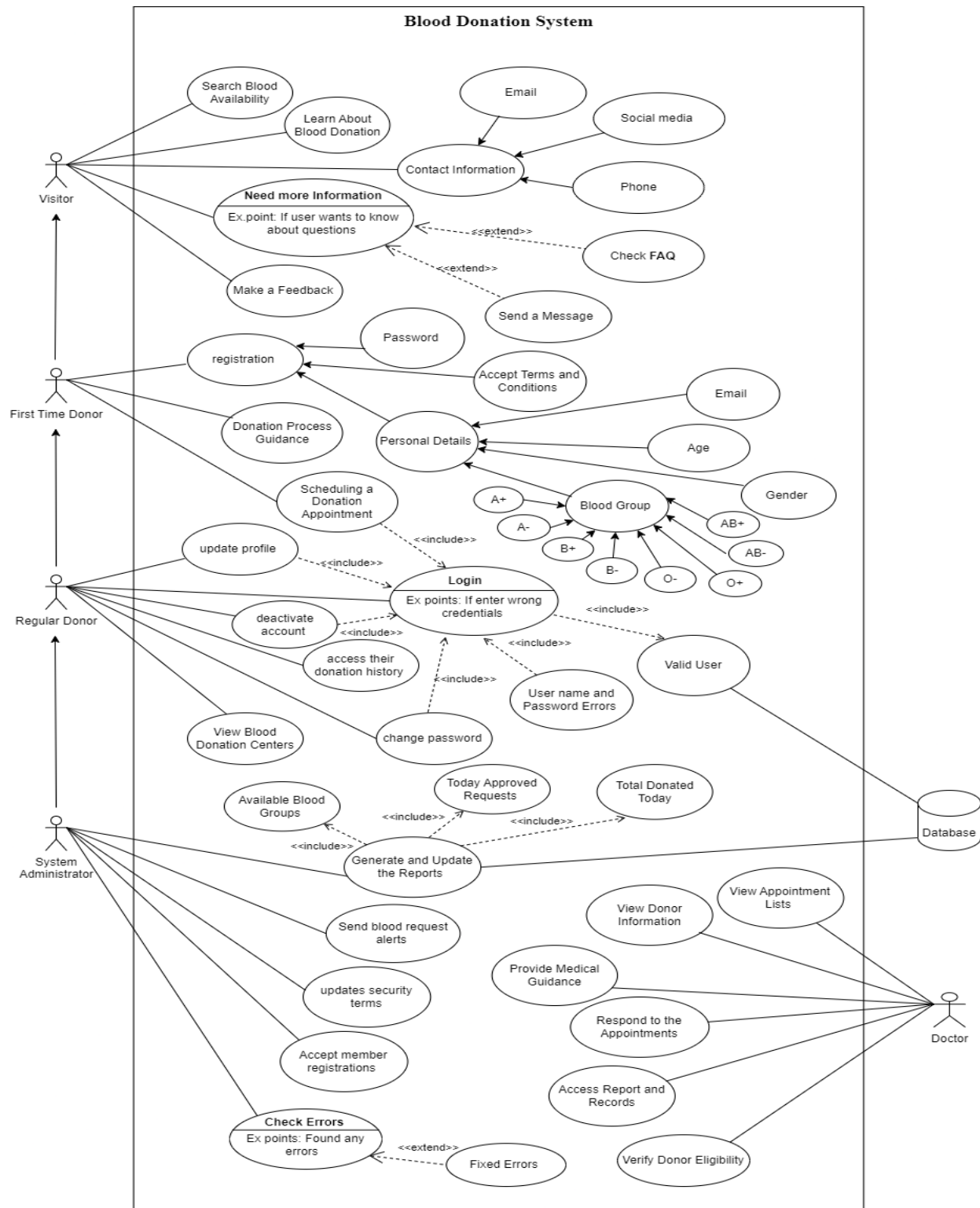
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IT22246578: Weerasinghe W. P. D. A. S

a) **Individual Contribution:**

- Worked on the actor – **Visitor**
- Worked on generalizing the use cases for actor visitor
- Created use case scenarios for,
  - ➢ Make a Feedback
  - ➢ Learn about Blood Donation

b) **Challenges faced:**

- We had an IWT task to publish, so we needed to manipulate our time.
- I needed to trade use case diagrams two or 3 times after thinking about the other individual's thoughts.
- Difficult to pick out use case generalization.
- Short period to do this assignment because of the upcoming mid-examination.

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Number	001
Name	Learn about Blood Donation
Summary	The visitor seeks information about blood donation.
Priority	03
Pre-condition	The visitor is required to visit the website.
Post-condition	Get an idea about blood donation.
Primary actor	Visitor
Trigger	Visitor wants to know about blood donation.

Main scenario	Step	Action
	1.	Visitor see an advertisement from Facebook.
	2.	Visitor Click the URL in the advertisement.
	3.	Visitor visits to the website.
	4.	Visitor click donation page.
	5.	System shows the details about blood donation.
	6.	Visitor click the FAQ page to get more information.
Extensions	**Step**	**Branching Action**
	2a	Visitor click the URL but does not open the Website.

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Number	002
Name	Make a Feedback
Summary	Visitor makes a Feedback
Priority	3
Pre-conditions	Visitor has logged in to the account
Post-conditions	Visitor submit the feedback
Primary Actor	Visitor
Trigger	Visitor can express his/her own idea

Main Scenario	Steps	Actions
	01	The visitor opens the website.
	02	The visitor enters their username and password to access their account.
	03	The visitor selects the "Feedback" option at the top of the webpage.
	04	The system shows a page where the visitor can provide feedback.
	05	The visitor writes his/her own feedback in the text box.
	06	The visitor submits their feedback by clicking the "Submit" button.
	07	The system sends an email confirming receipt of the feedback.
Extension	Steps	Branching Action
	2a	Visitor entered user name or password are invalid.
	6a	The visitor provided feedback but did not complete the submission.
	7a	Visitor did not receive an email confirming receipt of the feedback.

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IT22131324 – Dinushani G G T B

a) **Individual Contribution:**

- Worked on the actor – **First -Time doner**
- Worked on generalizing the use cases for First-Time doner
- related use case scenarios for,
    - Registration
    - Scheduling a Donation Appointment

b) **Challenges faced:**

- We held online meetings in addition to on-campus ones to discuss and complete assignments effectively.
- Efficient time management was essential to meet deadlines for assignments in other modules.

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Number	003
Name	Registration
Summary	Create a new account
Priority	2
Pre-condition	Should visit to the website
Post-condition	First time donor has a new account
Primary actor	First Time Donor
Trigger	First time donor wants to create a new account
Main scenario	**Step**	**Action**
	1.	The visitor opens the website.
	2.	first-time donor selects the "Registration" button.
	3.	The system shows a form for the donor to fill out.
	4.	The donor provides their name, username, email address, and password in the form.
	5.	The system sends an email with the pin number to confirm the E-mail and First-time donor enters the pin number for verification.
	6.	The donor submits the registration form by clicking the "Submit" button.
Extensions	**Step**	**Branching Action**
	4a	The system notifies First time donor that the entered email is not valid.
	4b	The system notifies first time donor that the entered username already exists.
	4c	The system notifies first time donor that the created password is weak.
	4d	The system notifies first time donor that the re-entered password is not match with previous password.
	6a	The system notifies that the user does not confirm the e-mail.

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Number	004
Name	Scheduling a Donation appointment
Summary	First time donor Request a donation appointment
Priority	3
Pre-condition	First time donor login visits to the website
Post-condition	Make appointment successfully
Primary actor	First Time Donor
Trigger	First time donor wants know about donation ability

Main scenario	Step	Action
	1.	The first-time donor enters their username and password to access the system.
	2.	The donor selects the "Registration" button.
	3.	The donor chooses the type of blood donation they want to make.
	4.	The donor picks an available appointment slot.
	5.	The donor submits their registration by clicking the "Submit" button.
Extensions	**Step**	**Branching Action**
	1a	The first-time donor entered an invalid username and password.
	5a	The Submission did not Complete successfully.

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IT22254948: Sanjaya W. A. I

a) **Individual Contribution**

- Worked on the actor – **Regular Doner**
- Worked on generalizing the use cases for Regular Doner
- Created use case scenarios for,
  - ➢ Change Password
  - ➢ View Blood Donation Centers

b) **Challenges faced**

- Had Assignments from other modules, requiring efficient time management to meet all deadlines.

Number	005	
Name	Change Password	
Summary	Regular donor wants to change Password	
Priority	1	
Pre-condition	Regular donor log in to the account	
Post-condition	Regular donor received a new password	
Primary actor	Regular donor	
Trigger	Regular donor needs to improve the account privacy	
Main scenario	**Step**	**Action**
	1.	Regular donor goes to the website
	2.	Regular donor Click the login button
	3.	System displays the login page to regular donor.
	4.	Regular donor enters username and password
	5.	System verifies the regular donor as a valid user
	6.	Regular donor goes to his own profile
	7.	Click on the change password
	8.	Change the password and submit.
Extensions	**Step**	**Branching Action**
	4a	A regular donor provided an invalid username or a weak password during the login.
	8a	The password used by the regular donor was deemed weak during the login process.

Number	006	
Name	View blood donation centres	
Summary	Regular donor finds a Blood donation centre	
Priority	2	
Pre-condition	Regular donor must visit the website	
Post-condition	Regular donor confirmed a Blood Donation center	
Primary actor	Regular donor	
Trigger	Regular donor wants to know nearest center	
Main scenario	**Step**	**Action**
	1.	Regular donor logs in to the system.
	2.	System displays the Dashboard.
	3.	Regular donor goes to the donation page and select the location section.
	4.	System shows the blood donation canters.
	5.	Regular donor picks the nearest canter where he can go easily.
	6.	System shows the direction where regular donor selection.
Extensions	**Step**	**Branching Action**
	1a	Regular Donar entered invalid User name or Password.

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IT21377280: Jayalath J. R. D. S

a) Individual Contribution:

- Worked on the actor – **Doctor**
- Worked on generalizing the use cases for an actor as a doctor
- Created use case scenarios for,
  - ➢ Respond to the Appointments
  - ➢ Access Report and Records

b) Challenges Faced:

- I encountered difficulty identifying the appropriate primary scenarios for specific use cases while writing them.

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Number	007
Name	Respond to the Appointments
Summary	Doctor Response to the Appointments
Priority	5
Pre-condition	Doctor must visit the Website
Post-condition	Send the confirmation mail
Primary actor	Doctor
Trigger	Doctor receives an appointment requests

Main scenario	Step	Action
	1.	Doctor goes to the website.
	2.	The doctor securely logs in by entering their username and password.
	3.	doctor reviews and approves appointment requests, considering factors like urgency and availability.
	4.	Doctor Approves Appoint Request.
	5	System sends the user an appointment confirmation email.
Extensions	**Step**	**Branching Action**
	2a	Doctor entered invalid Username or Password.
	5a	Those Who have made an appointment did not receive confirmation mail.

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Number	008
Name	Access reports and records
Summary	Doctor access the reports and records
Priority	4
Pre-condition	Doctor must visit the Website
Post-condition	Adding Recommendations
Primary actor	Doctor
Trigger	Doctor wants to access reports and records

Main scenario	Step	Action
	1.	Login to the Website.
	2.	The doctor enters their username and password for authentication.
	3.	After logging in, the doctor lands on the home page.
	4.	The doctor uses the search bar to access the "Search Records" option.
	5.	Within the "Search Records" section, the doctor views donor information.
	6.	The doctor navigates to donation reports for further insights.
	7.	While reviewing records, the doctor adds recommendations as necessary.
	8.	The doctor logs out of their account.

Extensions	Step	Branching Action
	2a	Doctor entered invalid Username or Password.

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IT22113122: Bandara T. C. N

c) Individual Contribution:

- Created the use case diagram for **Send Blood Request alerts**
- Worked on the actor – **Admin**
- Worked on creating use case scenario for **Admin sends Blood Request Alert**

d) Challenges Faced:

- there was a time management problem

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Number	009
Name	Send Blood Request Alert
Summary	Admin sends Blood Request Alert
Priority	3
Pre-condition	Admin log in to the admin account
Post-condition	Regular donors have received notification massage
Primary actor	System Administrator
Trigger	Admin wants to send a blood request massage to registered donors

Main scenario	Step	Action
	1.	Admin goes to the website.
	2.	Login using with admin credentials.
	3.	Admin checks the reports.
	4.	Admin will identify which blood groups are missing.
	5.	Admin check the donor's information.
	6.	Admin sends the blood donation request alert to the selected donors.

Extensions	Step	Branching Action
	2a	Admin entered username or password invalid.
	6a	Registered donors have not received the blood donation request alert