

2 January 2022

Blood Bank System

Software Engineering

Project charter :

Project name : Blood Bank System.

Project Sponsors : Ministry of health & Ministry of communications.

Purpose of the project : Facilitate and organize blood donation process.

Business case:

The propose of the blood bank management system is to simplify and automate the process of searching for blood in case of emergency and maintain the records of blood donors, recipients, blood donation programs and blood stocks in the bank and to ensure hospital to have good supply or inventories of blood bags and to support fast searching to find match blood bags for the right person.

Objective :

Provide a means for the blood bank to publicize and advertise blood donation programs.

Allow the probable recipient to make search and match the volunteer donors, and make request for the blood.

To provide an efficient donor and blood stock management functions to the blood bank by recording the donor and blood details.

To improve the efficiency of blood stock management by alerting the blood bank staffs when the blood quantity is below it par level or when the blood stock is expired.

To provide synchronized and centralized donor and blood stock database.

To provide immediate storage and retrieval and data and information.

Scope of the project:

The project will be executed in blood banks, hospitals and organisations that organize for blood donations events and it aims to implementing and creating a platform that will help in blood donation and holding successful blood drives. Blood drive system will enable the citizens who are well-wishers to contribute towards saving others life by donating blood.

Deliverables:

Collecting teams.

Dividing tasks between teams.

Contracting with hospitals .

Gathering information about hospitals, rare and available blood types and their quantities in stores by a team of doctors and specialists.

Making a model based on requirement specification.

Adding design specification of the model.

Programmers play the role of implementation by writing the code of system.

Project milestones (Time line of project):

- 1.In the first two weeks public relation team will contract with the hospitals and bring information about blood banks.
- 2.Building database
- 3.For a week, designers will make the model of system.
- 4.For 2 weeks, programmers will write the code and implement it.
- 5.For one week, front end developers will design the pages of website of system.
- 6.Testing the project for a month.

technical requirement:

- 1.Hardware
- 2.Operating system: linux
- 3.Database management system
- 4.Programming languages: java, python, java script, HTML, CSS.

Limitation:

New donors will have to go to a hospital to examine their blood types.

Not everybody will be able to use the system especially the computer illiterate people

Exclusion:

It is not allowed to donate or communicate with blood banks or hospitals from outside the government as this system is specific to a specific region.

Project resources:

1. Public relation team.
2. Designers team.
3. Programmers team (front end, back end programmers).
4. Budget \$300,000.
5. WLAN.
6. Servers.

Stakeholders :

- System owners.
- Staff.
- Doctors & specialists.
- Website users.

High level risks :

- Damage in the server.
- Increase in cost.
- The lack of sufficient efficiency in the team members.

Constraints :

- The project must take time less than three months.
- The cost should not be more than \$300,000.

Project scope :

- It is a site that helps users to know the nearest place where they can donate blood according to their blood type.
- The site also provides doctors with the advantage of entering their ID number to know the hospitals quantities of blood available in the nearest to them.
- The site also tells you if there is a deficiency or sufficient in a certain type of blood.

Project acceptance criteria :

- Giving doctors the ability to enter the ID number to know the available blood quantities.
- Attractive website design.
- The site is easy to use.

Project constraints :

- Rules and Policies.
- Budget.
- Time of submit.

project assumptions :

- This website cannot be run on IOS.

Budget baseline:

Servers:

- 100.000\$

Research:

- 30,000\$

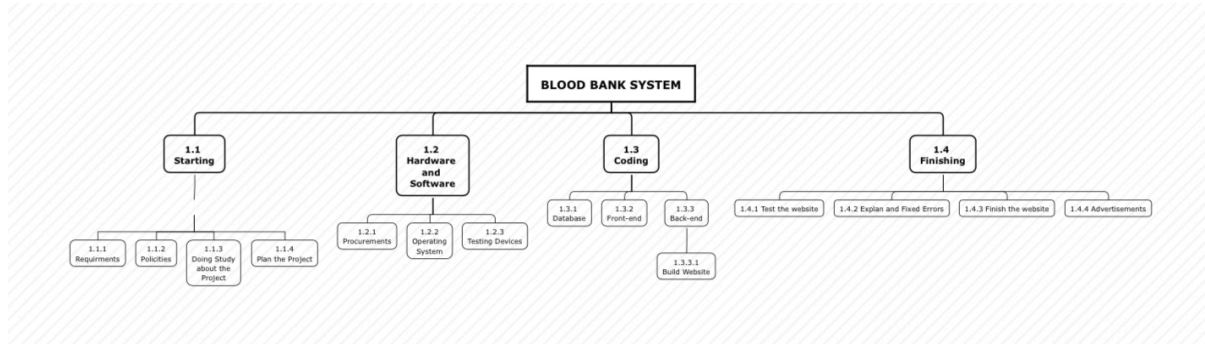
Project licenses:

- 70,000\$

Software engineers:

- 100.000\$

WBS :



Dictionary of WBS :

1.1 STARTING

Work Package ID, Work Package name, Description, Person, Start date ,End date	1.1.1 Requirement Meeting with team,Stakeholder and Spenser Manager & Team Members 1 /1/ 2022 - 3 /1/ 2022
Work Package ID, Work Package name, Description, Person, Start date ,End date	1.1.2 Policies Know the Policies and Recommends of the minister Manager 3 /1/ 2022 - 5/1/ 2022
Work Package ID, Work Package name, Description,Person, Start date ,End date	1.1.3 Doing Study about the Project Collecting all information about the project Manager and Team Member 5 /1/ 2022 - 7 /1/ 2022
Work Package ID, Work Package name, Description, Person, Start date ,End date	1.1.4 Plan the Project Make meeting to get plan for the project project Manager and team members 7 /1/ 2022 - 9 /1/ 2022

1.2 HARDWARE AND SOFTWARE

Work Package ID, Work Package name, Description, Person, Start date ,End date	1.2.1 Procurements Develop a budget for the purchase of project supplies Team members 9/1/2022 - 13/1/2022
Work Package ID, Work Package name, Description, Person, Start date ,End date	1.2.2 Operation System Meeting with team to a gree on a specific Operating System Manager and team members 13/1/2022 - 17/1/2022
Work Package ID, Work Package name, Description,Person, Start date ,End date	1.2.3 Testing devices Determining a-period for testing the the device team member 17/1/2022 - 20/1/2022

1.3 CODING

Work Package ID, Work Package name, Description, Person, Start date ,End date	1.3.1 Database create a database with information collected team members 20 /1/ 2022 - 21 /1/ 2022
Work Package ID, Work Package name, Description, Person, Start date ,End date	1.3.2 Front-end create a suitable front-end Programmers 21 /1/ 2022 - 23 /1/ 2022
Work Package ID, Work Package name, Description,Person, Start date ,End date	1.3.3 Back-end create a suitable Back-end Programmers 23 /1/ 2022 - 25 /1/ 2022
Work Package ID, Work Package name, Description,Person, Start date ,End date	1.3.3.1 Build website putting all information and software that has accomplished in website Programmers 25 /1/ 2022 - 27 /1/ 2022

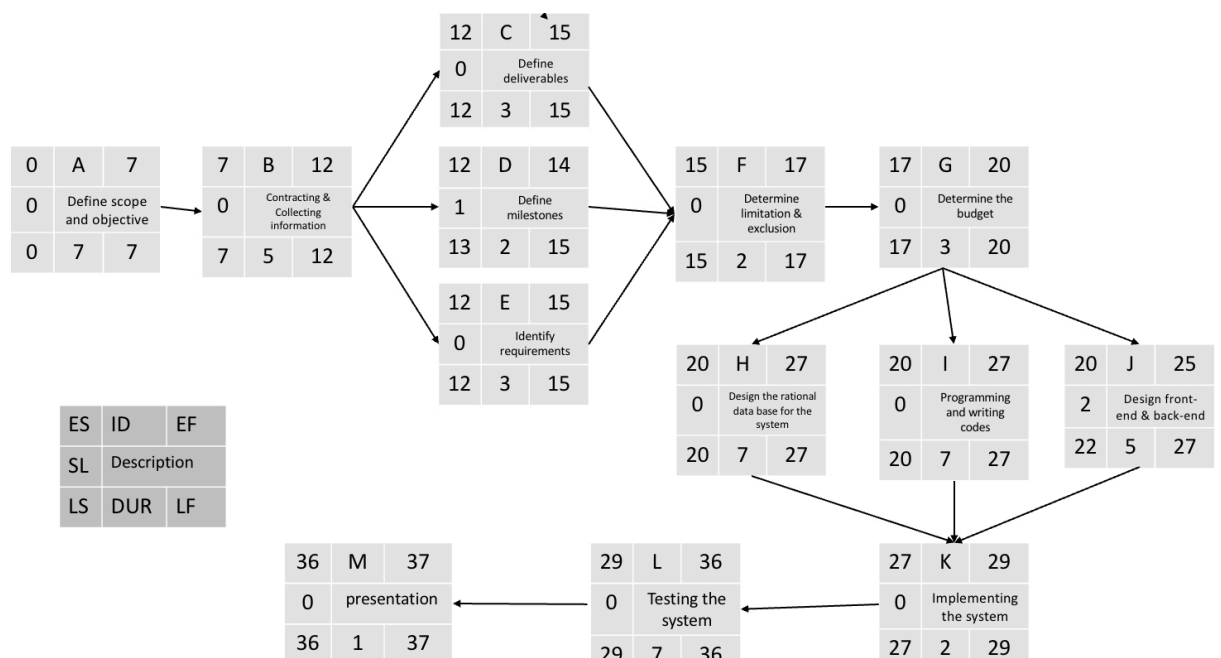
1.4 FINISHING

Work Package ID, Work Package name, Description, Person, Start date ,End date	1.4.1 Test the website doing test for a website Manager and team members 27/1/2022 - 29/1/2022
Work Package ID, Work Package name, Description, Start date ,End date	1.4.2 Explain and fixed errors Meeting the team for explain and fixed the errors 29/1/2022 - 31/1/2022
Work Package ID, Work Package name, Description,Person, Start date ,End date	1.4.3 Finish the website Finish the website , according to the Modification Team members 31/1/2022 - 3/2/2022
Work Package ID, Work Package name, Description, Person, Start date ,End date	1.4.4 Advertisements meeting with sponsor and stockholder to make and manager 3/2/2022 - 6/2/2022

Responsibility matrix :

Tasks	ID	Nada	Eman	Nourhan	Rawan	Asmaa
Define scope and objective	A	N	E		R	
Contracting & Collecting information	B		E	NO	R	
Define deliverables	C				R	A
Define milestones	D		E		R	A
Identify requirements	E	N				A
Determine limitation & exclusion	F	N		NO		
Determine the budget	G	N	E	NO		A
Design the rational data base for the system	H			NO	R	
Programming and writing codes	I	N	E	NO	R	A
Design front-end & back-end	J		E			A
Implementing the system	K	N		NO		
Testing the system	L		E		R	A
presentation	M	N	E	NO	R	A

Project Network :



Resource-constrained schedule:

ID	RES	DUR	ES	LF	SL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	2P	7	0	7	0																																					
B	2P	5	7	12	0																																					
C	3P	3	12	15	0																																					
D	2P	2	12	15	1																																					
E	1P	3	12	15	0																																					
F	1P	2	15	17	0																																					
G	1P	3	17	20	0																																					
H	1P	7	20	27	0																																					
I	1P	7	20	27	0																																					
J	2P	5	20	27	2																																					
K	1P	2	27	29	0																																					
L	1P	7	29	36	0																																					
M	1P	1	36	37	0																																					
TOTAL						2P	2P	2P	2P	2P	2P	2P	2P	2P	2P	2P	2P	6P	6P	4P	1P	1P	1P	1P	1P	4P	4P	4P	4P	4P	2P	2P	1P	1P	1P	1P	1P	1P	1P	1P	1P	
AVAILABLE RES						6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P	6P

Risks:

Negative risks:

- Internet connectivity is needed for the online blood management system . Internet speed is necessary for system effectiveness and efficiency.
- The budget is more than expected.
- Damage in the receivers.
- The lack of sufficient efficiency in the team members.

Positive risks:

- The budget is less than expected.
- Finished before the deadline.
- The website run on Android and windows operating system.

Team Members: (84)

Nada Salah El-Din Hassan Mohammed

Eman Diao El-Din

Norhan Amr

Asmaa sayed

Rawan Khaled