MediShare

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GROUP 4

Problem Definition & Background Information

- Misuse of medication and paper waste are two of today's most serious issues.

- The E-sağlık system has been in use since 2005. Even though it is an effective system, it has some shortcomings.

Objectives

- Keeping a record of the prescribed medication and recording it quickly in the system.

- Making sure that only authorized people can access the system, prescribe and monitor medication.

- Letting the user know about the intake frequency and side effects of the recorded medicines.

- Keeping the health record up-to-date by establishing a connection with electronic health systems.

- Preventing paper waste by reducing the labels used on medicines.

- Preventing medication use at the wrong time or not taking medication on time.

- Helping patients quickly and accurately find answers to their medical questions.

Functional Requirements

1. Prescription Management

2. Account Management

3. Medication Information

4. Medication Reminder System

5. Live Support System

6. Educational Resources

7. Premium Membership for Companies

8. QR Code Integration

Non-Functional Requirements

1. Security

2. Reliability

3. Scalability

4. Usability

5. Performance

6. Accessibility

7. Compliance

8. Integration with E-Health Systems

9. Customer Support

10. Access Control

Process Model

SCRUM FRAMEWORK

Scrum Framework © 2020 Scrum.org
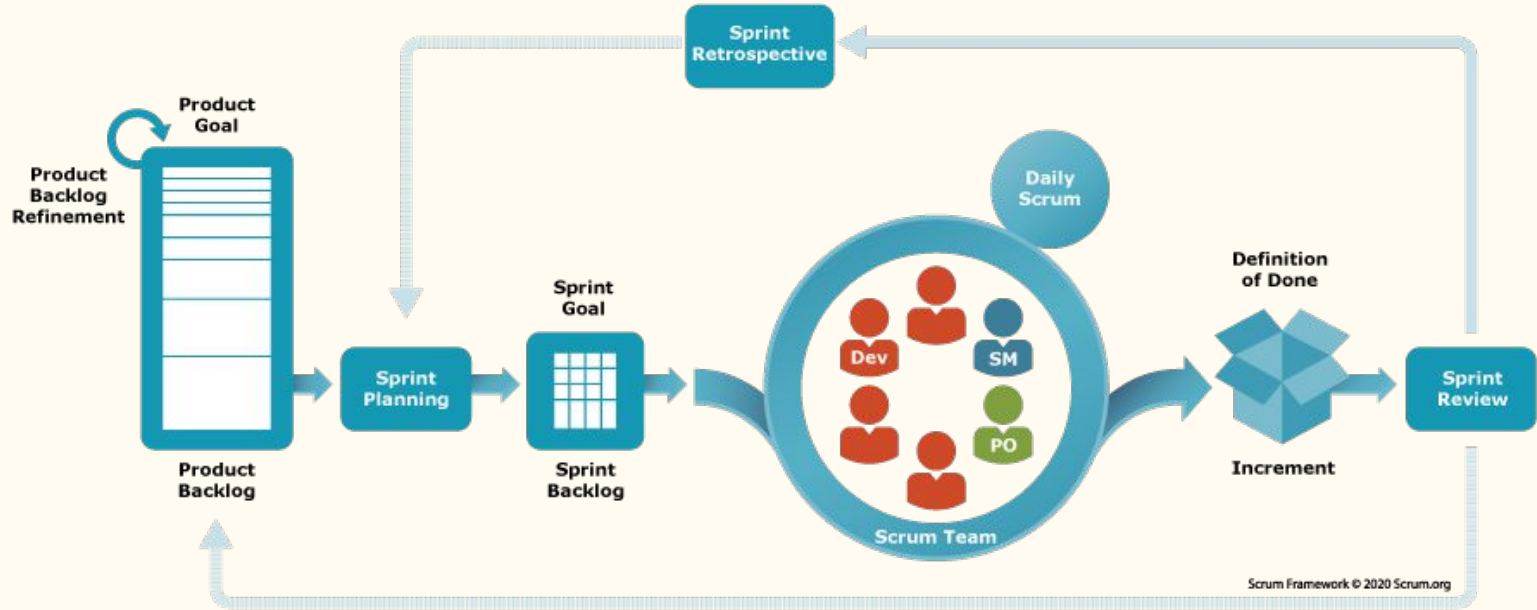
SOFTWARE TOOLS

Database Management

Tool	PostgreSQL	MySQL	MongoDB
Cost	0 US$	$0.24	57 US$
Training Days	30	30	60
Functionality	65	45	70
Tool (Normalized)	PostgreSQL	MySQL	MongoDB
Cost	0	0.42	**100.0**
Training Days	50	50	**100.0**
Functionality	92	64	**100.0**
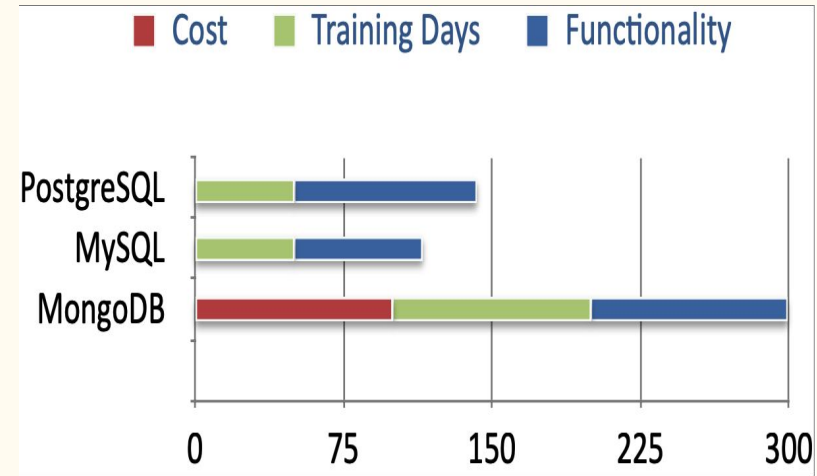
SOFTWARE TOOLS

Analytics and Reporting

Tool	Excel	SAS	Tableau
Cost	0 US$	10000 US$	900 US$
Training Days	5	30	15
Functionality	60	80	70
Tool (Normalized)	**Excel**	**SAS**	**Tableau**
Cost	0	**100.0**	0.09
Training Days	16.7	**100.0**	50
Functionality	75	**100.0**	87.5
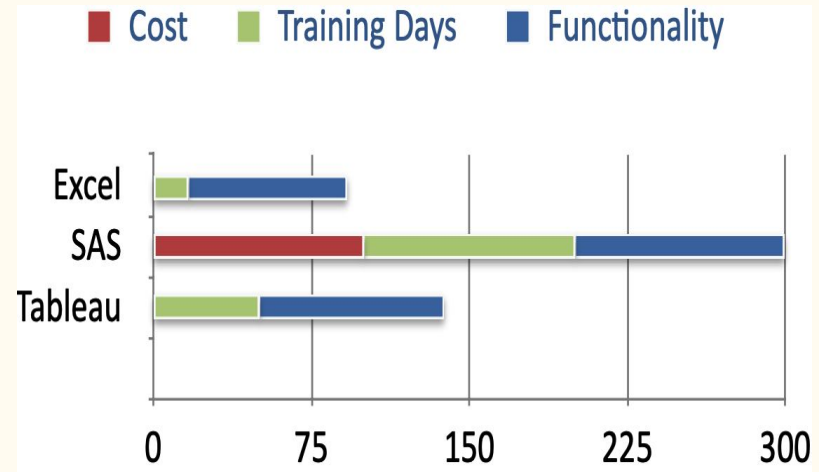
SOFTWARE TOOLS

Live Support

Tool	IBM Watson Assistant	Microsoft Bot Framework	Dialogflow
Cost	1680 US$	1188 US$	10000 US$
Training Days	20	20	20
Functionality	70	60	80

Tool (Normalized)	IBM Watson Assistant	Microsoft Bot Framework	Dialogflow
Cost	16,80	11,88	100.0
Training Days	100.0	100.0	100.0
Functionality	87.5	75	100.0
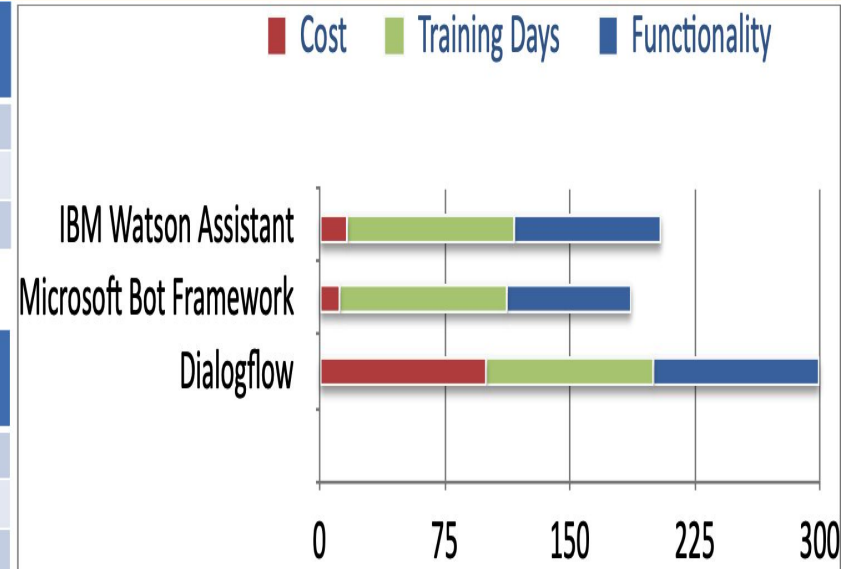
Software Measurements

1. Number of Tests

2. Number of Errors

3. Lines of Code

4. Time Spent on Project

5. Number of Methods Added in that Sprint

6. Number of Added Requirements

7. Time Spent on Sprint Retrospective

8. Number of Git Commits

9. Stakeholder Reviews

Stakeholders

1. Doctors

2. Nurses

3. Hospital Receptionists

4. Patients

5. Pharmacists

6. Pharmaceutical Manufacturers

7. Doctor Supervisors

8. Lawyers

9. Developers

10. Government

Software Needs

1. Version Control

2. Languages

3. Database

4. IDE

5. Dialogflow

6. Documentation

7. Statistic

8. Communication

Hardware Needs

1.Server

2.Network

Support Needs

1. Technical Support

2. Training Support

3. Stakeholder Support

Risks

1. Testing

2. Data Loss

3. Rate of Bugs

4. Change in Requirements

5. Budget

6. Integration with Old Systems

7. Design Complexity

8. Project Expansion

9. Change in Laws

10. Tools

Gantt Chart

ID		Task Mode	Task Name	Duration	Start	Finish	May '24				Jun '24			Jul '24			Aug
	○						15 | 22 | 29	6 | 13 | 20 | 27	3 | 10 | 17 | 24	1 | 8 | 15 | 22 | 29 | 5						
1		⚑	**Project Planning**	**8 days**	**Mon 15.04.24**	**Tue 23.04.24**											
2		⚑	Background Information	3 days	Mon 15.04.24	Wed 17.04.24											
3		⚑	Listing stakeholders	1 day	Thu 18.04.24	Thu 18.04.24											
4		⚑	List Risk and needs	1 day	Fri 19.04.24	Fri 19.04.24											
5		⚑	Select measurements	2 days	Sat 20.04.24	Mon 22.04.24											
6		⚑	Review plan	1 day	Tue 23.04.24	Tue 23.04.24											
7		⚑	**Requirements Gathering**	**7 days**	**Wed 24.04.24**	**Thu 2.05.24**											
8		⚑	Schedule meetings	2 days	Wed 24.04.24	Thu 25.04.24											
9		⚑	Talk to doctors	2 days	Fri 26.04.24	Mon 29.04.24											
10		⚑	Talk To patients	1 day	Tue 30.04.24	Tue 30.04.24											
11		⚑	talk to pharmacists	1 day	Wed 1.05.24	Wed 1.05.24											
12		⚑	List Requirements	1 day	Thu 2.05.24	Thu 2.05.24											
13		⚑	**Design And Architecture**	**21 days**	**Fri 3.05.24**	**Fri 31.05.24**											
14		⚑	System Architecture	14 days	Fri 3.05.24	Wed 22.05.24											
15		⚑	User Interface	7 days	Thu 23.05.24	Fri 31.05.24											
16		⚑	**Development**	**182 days**	**Mon 3.06.24**	**Tue 11.02.25**											
17		⚑	Testing	168 days	Fri 21.06.24	Tue 11.02.25											
18		⚑	**Sprint 1: Database**	**182 days**	**Mon 3.06.24**	**Tue 11.02.25**											
19		⚑	Design And Architecture	14 days	Mon 3.06.24	Thu 20.06.24											
20		⚑	Implementation	21 days	Fri 21.06.24	Fri 19.07.24											
21		⚑	Recover Old data	7 days	Mon 22.07.24	Tue 30.07.24											

Gantt Chart

ID		Task Mode	Task Name	Duration	Start	Finish	Gantt bars
22			Sprint 2: User Authentication	21 days	Wed 31.07.24	Wed 28.08.24	
23			Back-end logic	10 days	Wed 31.07.24	Tue 13.08.24	
24			Access control system	11 days	Wed 14.08.24	Wed 28.08.24	
25			Sprint 3: Prescription and Medicine System	42 days	Thu 29.08.24	Fri 25.10.24	
26			Prescription and Record System	35 days	Thu 29.08.24	Wed 16.10.24	
27			Reminders System	7 days	Thu 17.10.24	Fri 25.10.24	
28			Sprint 4: Live Support	35 days	Mon 28.10.24	Fri 13.12.24	
29			DialogFlow training	21 days	Mon 28.10.24	Mon 25.11.24	
30			Implementation	14 days	Tue 26.11.24	Fri 13.12.24	
31			Sprint 5: Monitoring System	21 days	Mon 16.12.24	Mon 13.01.25	
32			Define irregularities	7 days	Mon 16.12.24	Tue 24.12.24	
33			Implement monitoring system	14 days	Wed 25.12.24	Mon 13.01.25	
34			System Testing	21 days	Tue 14.01.25	Tue 11.02.25	
35			Deployment	7 days	Wed 12.02.25	Thu 20.02.25	
36			Training Medical staff	7 days	Fri 21.02.25	Mon 3.03.25	
37			User acceptance Testing	7 days	Tue 4.03.25	Wed 12.03.25	
38			Launch	2 days	Thu 13.03.25	Fri 14.03.25	