SE 216 – SOFTWARE PROJECT MANAGEMENT
PROJECT NEEDS DOCUMENT

PROJECT NAME: MediShare

GROUP NUMBER and MEMBERS:

#	SOFTWARE NEEDS	DESCRIPTION
1	Version Control	We will use Github Desktop version 3.3.13, which is the latest available. Each developer should install it on their own computer. Our team does not require an upgrade unless there is a security update. If an update is necessary, it should be done on a Saturday, unless it is critical. In such cases, it should be done as early as possible and during break times.
2	Languages and librares	
3	Database	PostgreSQL version 15.3.1 is a reliable and scalable database capable of handling large amounts of data smoothly. It is recommended that each developer performs their own setup of PostgreSQL. Any updates should be made on one computer firstly then other computers on weekends.
4	İde	In MediShare, Visual Studio version 1.88 will be used. Each developer will set up its own computer. We will not need any update.
5	DialogFlow	The latest version (April 4 2024) of Dialog Flow will be used, and installation will be carried out by the IT team during the specific sprint. Any updates will be monitored and installed at 6 pm.
6	Documentation	Google Docs will be used as it is an online platform that does not require installation or updates.
7	Statistic	For our project, we will be using Tableau version 2024.1.1. This version has new capabilities that can aid in faster and better decision-making with trusted generative AI. Each developer will install the latest version of Tableau on their own computer. On Sunday, there will be an update break to ensure that the project is not interrupted due to updates.

8	Communication	For our project's communication, we will be using Discord version 284140. Each developer is required to install Discord on their own computer. Discord updates are quick and error-free, but to be safe, we will have an update break on Sundays.

#	HARDWARE NEEDS	DESCRIPTION
1	Server	Our project will use a client-server architecture, with each feature (entering medication, making appointments, looking at old treatments and medications, live support) processed on a separate server. This approach prevents disruptions to other processes in case of a crash. We require at least five servers with powerful processors and high GB RAM. Finally, these servers must implement load balancing in case the process is overloaded and other operations are not performed. For this algorithm, we have considered weighted minimum connection because it is both dynamic and we do not assume that each process will consume the same power.
2	Testing Devices	Identifying testing device needs involves specifying the essential functionalities required for thorough testing procedures. These devices encompass a range of tools such as testing frameworks, simulators, emulators, and physical testing devices tailored to the project's requirements. Each testing device necessitates corresponding software interfaces or drivers for seamless integration with testing environments and automation frameworks. Team members, comprising quality assurance engineers, developers, and product managers, may require access to these testing devices to execute comprehensive testing activities across various stages of the development lifecycle. Aligning the acquisition and deployment of testing devices with the project's timeline is

		critical, emphasizing early implementation to establish an effective testing infrastructure and ensure the timely detection and resolution of software defects.
3	Network	A hardware device that connects and routes data communications between devices in a network. Each port facilitates communication between devices. Manageable switches provide a web-based interface or console access for configuration and management. Supporting equipment such as Ethernet cables and mounting equipment is required. It is used during the network setup phase of the project and at the beginning of communication between devices. System administrators manage and configure it.
4	Computer	Identifying computer hardware needs involves specifying the required functionalities such as processing power, memory, storage, and connectivity. Each computer hardware component, such as CPUs, GPUs, RAM, storage drives, and network interface cards, requires corresponding software drivers for proper operation and integration with the operating system. Team members including developers, testers, and system administrators may need access to these computer hardware devices to fulfill their roles. The timeline for acquiring and deploying computer hardware should align with the project's overall schedule, with an emphasis on providing sufficient resources to support development, testing, and deployment activities.
5	Security	Identifying security hardware needs involves specifying required functionalities. These include firewall protection, intrusion detection, encryption, and authentication devices. Each piece of hardware requires corresponding software for configuration and management, along with supporting equipment such as appliances or sensors. To fulfill their roles, team members, including system administrators, network engineers, and security analysts, may need access to these

		hardware devices. The timeline for acquiring and deploying security hardware should align with the project's overall schedule. It is important to emphasize early implementation to establish a secure foundation and mitigate risks from the outset.

#	SUPPORT NEEDS	DESCRIPTION
1	Database support	As the MediShare project aims to share health data, database support is crucial. This support can begin with design consultancy and continue throughout the project. However, we should only consider database support as a last resort. We will have backup data to prevent situations such as However, we may require additional support in situations where our resources are inadequate. As Postgresql does not offer support, we have determined that Profelis is the most suitable support provider for our needs. This is due to their ability to provide Turkish language support, 24/7 online service, and expertise in data migration.
2	DialogFlow	We will integrate Dialogflow into our live support section. The support team will be available to assist us promptly in case of any issues. Google Dialogflow, with enhanced support via Google Cloud, will meet our needs and provide 24/7 availability.
3	Tableau	We will require support from Tableau in case of any issues. As we use this application for the first time in this project and will be included in the report for premium membership companies, it is crucial to promptly resolve any problems that may arise. Therefore, we have opted for Tableau's premium technical support, which provides online or phone support 24/7.
4	Technical support	Technical support will be required, particularly if any issues arise after the server installation and during the project

		development phase. They will also assist in resolving any server-related problems encountered during testing. Hardware and software related to both computers and servers should be sold with or without the help of support technicians. Support technicians should provide remote or onsite support.
6	Security	The IT security team is responsible for implementing and maintaining security measures like firewalls, intrusion detection systems, and encryption protocols to ensure the project's security. Regular assessments, audits, and incident response protocols are provided to reduce security concerns. A commitment from the team is crucial for confidence in the project's security posture, requiring open communication, agreement on security requirements, and early reporting of security events or vulnerabilities. (Security)
7	Training support	Training specialists are essential for project team members to learn new technologies, tools, and procedures. These specialists should be planned at significant project milestones, providing interactive sessions, online courses, and training resources. The project can benefit from a knowledgeable staff if training specialists commit to providing continuous support. Resolving training gaps and showing gratitude for their support are crucial aspects of maintaining a positive working relationship with training professionals. The team should also provide feedback on the effectiveness of the training.
8	Stakeholder Support and Feedback:	Stakeholder engagement teams play a crucial role in gathering input and feedback from project stakeholders, ensuring project outputs align with expectations and take their input into account. This support is provided at all stages of the project through regular meetings, questionnaires, interviews, and feedback channels. Maintaining stakeholder satisfaction and project success requires active participation, transparency in project progress, and responsiveness to stakeholder needs and input

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