

**SE 216 – SOFTWARE PROJECT MANAGEMENT**  
**PROJECT NEEDS DOCUMENT**

**PROJECT NAME:** VitalBand

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#	SOFTWARE NEEDS	DESCRIPTION
	Tableau	It is used for analysis and reporting purposes according to the data analysis, reporting and visualization needs of the project. Tableau offers user-friendly and interactive visualization tools. Also offers live data monitoring capability
	MySQL	Since the main aim of the project is to collect and manage health data, a reliable database is required. Health data contains sensitive information and therefore data security and integrity are of great importance. MySQL increases data security by providing robust access control.
	Documentation Tool	Documentation software for documenting and sharing the wristband and application development process.
	Microsoft Teams	Effective communication and balanced work distribution are important for successful management of the project. Microsoft Teams offers instant messaging, video conferencing, and file sharing tools that facilitate project team communication.
	Testing and Debugging Tools	Test automation tools and bug tracking systems to support testing and debugging processes for the wristband and application.
	PyTorch	We aim to benefit from artificial intelligence in future versions of the project. Artificial intelligence and machine learning tools will be needed to analyze health data and diagnose diseases early.
	React Native	We use React Native for the mobile app of our VitalBand project because it allows us to build the app for multiple platforms using JavaScript, making development faster and more efficient

#	HARDWARE NEEDS	DESCRIPTION
	Sensor	It has been used to measure health information from the user. For instance to measure pulse rate, to measure blood pressure and to measure stress levels.
	Mobile Devices	Various mobile devices are needed for testing the application on mobile platforms (iOS, Android).
	Testing and Debugging Tools:	Some potential tests are performed against the difficulties that the user will face in daily life, such as the fact that the sensors do not encounter any problems when in contact with water, that the sensors continue to work when exposed to any impact.

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	Programmable Circuit Boards	Programmable circuit boards are essential for developing and testing the software on the wristband.
	Data Storage	Sufficient data storage space is required for storing project files, data backups, and documents.
	Battery	We optimized the app to minimize battery consumption and maximize device uptime. We implemented efficient coding practices so that it doesn't overheat on the user's arm.

#	SUPPORT NEEDS	DESCRIPTION
	Manufacturing Group	The Manufacturing Group will provide essential assistance by ensuring timely production according to specifications, requiring coordination at the project's outset to avoid delays.
	Technology Team	The Technology Team's commitment is crucial throughout the project, tasked with developing and maintaining the application for feedback, necessitating ongoing collaboration and technical expertise.
	Logistic Team	Logistics support, provided by the Logistics Team, is vital for efficient distribution and timely availability, demanding meticulous planning and execution before the project launch.
	Marketing Team	The Marketing Team's commitment is pivotal for promoting the wristbands and application, requiring proactive engagement and strategic campaigns to maximize reach and impact.
	Customer Service Team	The Customer Service Team's commitment is indispensable for addressing inquiries and issues post-launch, necessitating continuous support and effective communication channels.
	Research and Development Team	Research and Development (R&D) Team plays a critical role by continuously innovating and enhancing the wristband technology and application features, requiring ongoing collaboration and feedback integration to meet evolving user needs.
	Quality Assurance	Quality Assurance (QA) Team's commitment is essential for ensuring the reliability and accuracy of the wristbands' vital monitoring and feedback systems, necessitating rigorous testing and compliance checks throughout the production and distribution phases.