**PROJECT NAME: VitalBand**

**GROUP MEMBERS: Enes YAVUZ, Ecem DOĞANER, Utkuhan ERGENE, Orhan Ege ÖZŞEN**

|  |  |
| --- | --- |
| # | NECESSARY NEEDS FROM THE ORGANIZATIONAL PROCESS |
| 1. | Management's full support and commitment are essential for successful adoption of Scrum. This involves providing resources, removing obstacles, and endorsing self-organization and empowerment principles. Active management involvement is crucial for effective implementation and operation. |
| 2. | In Scrum, it's vital to define clear roles and responsibilities for everyone involved. This includes the Scrum Master, Product Owner, and Development Team members. Each person must understand their role and how it contributes to the project's success. Clarity in roles ensures effective collaboration and progress tracking throughout the project lifecycle |
| 3. | Form cross-functional teams with all required skills to deliver a potentially shippable product increment by each sprint's end. This fosters collaboration and minimizes team dependencies. |
| 4. | Establish efficient communication channels for seamless collaboration among teams and stakeholders. This can involve regular meetings, shared tools, and transparent reporting. |
| 5. | Promote an agile mindset and culture emphasizing values like transparency, inspection, and adaptation. Encourage experimentation, continuous improvement, and learning from failures. |
| 6. | Allocate resources such as budget, time, and personnel to align with the iterative and incremental approach of Scrum. Maintain flexibility in resource allocation to accommodate shifting priorities and evolving requirements. |
| 7. | Manage resource allocation, encompassing budget, time, and personnel, to effectively complement the iterative and incremental structure of Scrum. Incorporate flexibility and adaptability into resource allocation processes to address evolving priorities and requirements. |
| 8. | Implement mechanisms for continuous improvement at both team and organizational levels. Foster regular retrospectives to review past experiences, pinpoint areas for enhancement, and take actionable measures to address them. |

|  |
| --- |
| SOFTWARE PROCESS NAME: SCRUM |
| SOFTWARE PROCESS DESCRIPTION: |
| ****Planning and Preparation****: The Scrum process is typically divided into specific time periods called "Sprints." Before each sprint, team members select work items and set goals. During this stage, a sprint plan is created, and tasks are allocated among team members.  ****Sprint****: A sprint is a time-boxed period, usually lasting 2-4 weeks. During the sprint, the team works on selected work items and creates an increment (a potentially shippable product increment).  ****Daily Scrum Meetings****: Every day, team members come together for a short meeting to share information about what was done the previous day, what will be done today, and any obstacles encountered.  ****Review Meeting****: At the end of the sprint, the team holds a review meeting to showcase the increment and gather feedback from stakeholders. During the review meeting, the product owner and other stakeholders evaluate the progress on the product.  ****Retrospective****: Following the review meeting, the team holds a retrospective meeting to evaluate their own process. During the retrospective, the team discusses what went well, what could be improved, and how they can be more effective in the future. |
| SOFTWAREPROCESS MODEL: |
| Planning and Sprint Preparation: The project begins with sprint planning, where the Scrum team, including developers, testers, and product owners, selects user stories from the backlog. In addition to traditional backlog items, the team considers health and wellness goals derived from VitalBand data, such as improving daily step count or achieving better sleep quality.  Daily Stand-ups and Health Tracking: Each day, the team holds a brief stand-up meeting to discuss progress and plans for the day. During these meetings, team members may also share their health metrics tracked by VitalBand, such as activity levels, heart rate, or sleep patterns. This allows the team to consider individual well-being alongside project progress. Sprint Execution and Health Insights: Throughout the sprint, team members work on their assigned tasks while monitoring their health data collected by VitalBand. By integrating this data into their workflow, they gain insights into how their work habits and stress levels impact their health. This awareness helps them make adjustments to maintain a healthy work-life balance.  Sprint Review with Health Analysis: At the end of each sprint, the team conducts a sprint review to demonstrate completed work to stakeholders. In addition to discussing project deliverables, the team analyzes health trends and insights derived from VitalBand data. They may identify correlations between work intensity, stress levels, and health outcomes, informing future sprint planning and team well-being initiatives. |
| REASONS TO CHOOSE THIS MODEL: |
| -The Scrum framework's agility and focus on efficiency allow teams to swiftly progress through project phases, saving both time and money.  -Scrum framework works by dividing the large product into small sub-products. It’s like a divide and conquer strategy  -Scrum's frequent feedback loops enable continuous evaluation and feedback from users and healthcare experts. This facilitates ongoing improvement of the user experience and ensures project progression in the right direction. For instance, during a Sprint Retrospective, you can discuss ways to better visualize health data or enhance usability.  -Short sprints were performed in order to make the feedback from the VitalBand when it measures a high stress level as useful as possible.  -In Scrum, ensuring customer satisfaction is paramount, guiding teams to deliver top-notch products that meet user needs, thereby building strong customer relationships.    -When developing software in the healthcare sector, Scrum facilitates rapid adaptation to changing needs, enabling quick response to new technologies and market conditions. For instance, in the next Sprint, you might add a new health measurement device or develop a patient tracking feature.  Formun Üstü  -In the healthcare sector, emergencies often occur, requiring urgent action. Thanks to Scrum's flexible and rapid responsiveness, software developers can more effectively manage emergencies and deliver priority features quickly.  -Data security and compliance are significant concerns. Scrum's repeatable and traceable processes can assist healthcare software developers in meeting data security and compliance requirements. Particularly, Sprint Retrospective meetings provide an important opportunity to identify and address security vulnerabilities.  -The transparent and iterative nature of Scrum fosters trust and collaboration between stakeholders, leading to stronger partnerships and smoother project execution.  -Scrum fosters a culture of continuous improvement by regularly reflecting on processes and outcomes, leading to increased efficiency and effectiveness over time. |