**PROJECT NAME: VitalBand**

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

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| TASK # | PROJECT TASKS WHICH REQUIRE SOFTWARE TOOL SUPPORT |
| 1 | Application interface. |
| 2 | Data analysis and visualizing collected data. |
| 3 | Storing and managing user data. |

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| SOFTWARE TOOLS FOR TASK 1: |
| Tool Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | Marvel | InVision | Adobe XD | Figma | | Cost | 48$ | 99$ | 89$ | 75$ | | Training Days | 5 | 15 | 12 | 10 | | Functionality | 25 | 70 | 50 | 45 |   Normalized Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | Marvel | InVision | Adobe XD | Figma | | Cost | 48 | 100 | 89 | 75 | | Training Days | 33 | 100 | 80 | 66 | | Functionality | 36 | 100 | **72** | 65 |   Normalized Tool Graph |
| Which tool has been selected? Why?  When developing a VitalBand-like health band, we chose Figma for its streamlined design process, collaboration features and cost effectiveness. Figma's user-friendly interface and compatibility with external software for real sensor data integration were important factors in our decision. In addition, Figma's support for React Native development made our prototyping and development efforts even easier. We used JavaScript as the programming language and took advantage of its flexibility and extensive ecosystem for efficient development. |

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| SOFTWARE TOOLS FOR TASK 2: |
| Tool Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | Rapid Miner | Tableau | DiscoverText | Minitab | | Cost | 10$ | 75$ | 99$ | 154$ | | Training Days | 10 | 8 | 15 | 20 | | Functionality | 25 | 40 | 55 | 80 |   Normalized Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | Rapid Miner | Taleau | DiscoverText | Minitab | | Cost | 6 | 48 | **64** | 100 | | Training Days | 50 | 40 | **75** | 100 | | Functionality | 31 | 50 | 68 | 100 |   Normalized Tool Graph |
| Which tool has been selected? Why?  Tableau is preferred for data analysis and visualization projects due to its user-friendly interface and powerful visualization capabilities. It allows users to easily explore data, create interactive dashboards, and make informed decisions based on real-time analysis. |

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| SOFTWARE TOOLS FOR TASK 3: |
| Tool Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | MySQL | Amazon RDS | Oracle | Firebase | | Cost | 8190$ | 18220$ | 17400$ | 99800$ | | Training Days | 3 | 16 | 10 | 25 | | Functionality | 18 | 50 | 45 | 90 |   Normalized Cost/Training/Functionality Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Tool | MySQL | Amazon RDS | Oracle | Firebase | | Cost | 8 | 18 | **17** | 100 | | Training Days | 12 | 64 | **40** | 100 | | Functionality | 20 | 55 | **50** | 100 |   Normalized Tool Graph |
| Which tool has been selected? Why?  Choosing Oracle database for this project is an ideal option to manage the complexity of data from the VitalBand and store user health data securely. Combined with its reliability and performance in database management, it can be used together with data analysis and prediction algorithms to process and evaluate user health data. In this way, critical information can be obtained to monitor the health status of users and intervene when necessary. |