

| **1. Resumen avance Proyecto APT** |
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| A continuación, encontrarás distintos campos que deberás completar con la información solicitada. |

| Resumen de avance proyecto APT | *To date, we have made significant progress in the following areas of the PsyWell project:*   1. **Mobile Application Layout:**    * The structure and design of all the main screens are now complete. We have laid out the key functionalities, such as emotional state logging, user profile, and the initial connection with IoT devices.    * **Objective achieved:**: Completing the visual and logical structure of the mobile application, allowing smooth navigation between different sections. 2. **Website Layout:**    * The website designed for psychologists is fully laid out. The main sections, such as report visualization, data analysis, and patient management, are ready at the design level.    * **Objective achieved:** Having a functional interface for mental health professionals, allowing them to visualize their patients' data and perform analyses effectively. 3. **Database in Development**    * We are currently in the database structuring phase. The main tables managing both patients' emotional data and physiological data from IoT devices have already been defined.    * **Objective in progress:** Creating a robust database that supports PsyWell's complex data, ensuring it is scalable and secure. 4. **User Stories and Epics:**    * The user stories have been fully drafted. The main epics of the project have been identified, including daily monitoring, IoT integration, and generating personalized reports for psychologists.    * **Objective achieved:** Having the user stories completed allows us to maintain an agile focus based on the needs of the end user. |
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| Objetivos | Since there have been no changes to the proposed objectives during Phase 1, we will reiterate them to ensure greater clarity and understanding in this Phase 2 of the project. These objectives remain aligned with PsyWell’s overall mission and the goals set at the start of development, ensuring a consistent focus on the proposed solution.  General Objective:   * Develop a mobile application and a desktop version that facilitate psychologists' work by continuously monitoring patients’ mental health, integrating IoT technologies to provide accurate and up-to-date data, thereby improving the effectiveness of treatments.   Specific Objectives:   1. Create an intuitive and accessible platform that allows patients to easily and continuously log their emotional state and relevant data. 2. Integrate IoT devices for real-time collection of physiological data, complementing patients’ subjective records and providing a more comprehensive view of mental well-being. 3. Implement robust security measures to protect patients’ sensitive information and ensure compliance with privacy and confidentiality standards. 4. Develop an interface for psychologists that allows for the visualization and analysis of collected data, facilitating decision-making and the personalization of therapeutic interventions. 5. Conduct functionality and usability testing to ensure that the platform operates efficiently and meets the expectations of both users and mental health professionals. 6. Establish a feedback system to gather input from users and psychologists, enabling continuous improvements to the application and adjusting its features to better meet the needs of the clinical field. |
| Metodología | Regarding the methodology, no significant adjustments have been made since Phase 1, so we will maintain the previously defined agile approach. Below, we reiterate our Scrum-based methodology, which remains central to ensuring iterative development and quick adaptation to changes or feedback.  **Scrum Methodology**  Scrum is the primary methodology chosen for the project’s development, as it allows for greater flexibility and adaptability throughout the development cycle. This methodology ensures continuous value delivery through short iterations, known as "sprints," lasting 2 to 4 weeks.  **Scrum Process Stages:**  **Sprint Planning:**   * Define the specific tasks and objectives for the current sprint. * Prioritize product backlog features. * Assign tasks to team members, ensuring a clear distribution of responsibilities.   **Sprint Execution:**   * Develop the features defined for the current sprint. * Hold daily meetings (Daily Standups) to review progress, resolve impediments, and adjust priorities if necessary.   **Sprint Review:**   * At the end of each sprint, present the progress to the team and stakeholders. * Receive immediate feedback and evaluate whether the objectives were met. * Adjust the product backlog based on the feedback received.   **Sprint Retrospective:**   * Reflect on the sprint’s outcomes and the development process. * Identify improvements for future sprints and adjust the methodology if needed |
| Evidencias de avance | **PsyWell Project Progress Evidence**  To date, the PsyWell project has reached the following key milestones, which demonstrate the continuous and organized development of the project:   1. **Project Charter:**The project was formally initiated with the signing of the project charter. This document defined the general objectives, timeline, allocated resources, and the roles of each team member. 2. **Requirements Gathering:**Through interviews and workshops with psychologists and patients, the functional and non-functional requirements were fully collected. This document is essential to ensure that the application meets the expectations and needs of the end users. 3. **User Interface (UI) Design:**The design of the main screens for both mobile devices and the web version has been completed. This design focused on usability, ensuring that the application is intuitive and easy to navigate. 4. **Database Structuring:**The database structure has been defined and created, allowing for efficient storage and organization of information. While the database is not yet fully populated, its structure enables progress in integrating users' physiological and emotional data. |
| **2. Monitoreo del Plan de Trabajo** |

| Plan de Trabajo | | | | | | | |
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| Competencies or Units of Competencies | Activities | Resources | **Duration of the Activity** | Responsible[[1]](#footnote-0) | Observations | Progress Status | Adjustments |
| Software Solutions Development | ***Project Charter:*** *Formalization of the project’s initiation* | Documentation tools (Google Docs) | 1 week | *Isaac Rubilar* | *Possible delay if stakeholder approval is missing* | *Completed* | *No adjustments required* |
| Requirements Gathering | ***Requirements Gathering:*** *Interviews with psychologists and patients* | Interviews, forms | 2 weeks | *Williams Zapata* | *Coordination with stakeholders* | *Completed* | *No adjustments required* |
| User Interface Design (UX/UI) | ***User Interface Design:*** *Sketches of the main screens* | Design tools (Balsamiq, Canva) | 2 weeks | *Isaac Rubilar* | *Initial usability testing with users* | *Completed* | *No adjustments required* |
| Integration of Emerging Technologies | ***IoT Integration (Initial Tests):*** *Connection with IoT devices* | IoT devices, integration API | 3 weeks | *Javier Vergara* | *Compatibility with different device brands* | *In progress* | *Adjustment in IoT data synchronization* |
| Software Solutions Development | ***Mobile Application Development:*** *Implementation of functionalities* | Ionic, Angular | 4 weeks | *Isaac Rubilar* | *User testing before final deployment* | *In progress* | *Add data export functionality* |
| Data Security and Protection | ***Implementation of Security Measures:*** *Encryption and privacy* | Encryption libraries, PostgreSQL | 3 weeks | *Williams Zapata* | *Pending security audit* | *Not started* | *None for the moment* |

| **3. Ajustes a partir del monitoreo** |
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| **Factors that have facilitated development:**   * **Collaborative work and effective communication:** The team has maintained good coordination, using agile methodologies like Scrum, which has allowed for daily meetings and constant feedback, facilitating the quick identification and resolution of issues. * **Access to tools and technological resources:** Having access to tools like Google Drive, IoT devices, and development software has enabled technical activities to be carried out efficiently. * **Stakeholder support:** Psychologists and patients have actively collaborated during the requirements gathering phase, which has helped define key functionalities of the application.   **Factors that have hindered development:**   * **IoT integration issues:** The integration with IoT devices presented some technical challenges due to brand compatibility and synchronization problems. To address this, the team has decided to conduct more tests using simulators before proceeding with full integration. * **Time constraints:** The tight schedule for the semester has been a challenge for completing all tasks within the expected time frame. To mitigate this, we have prioritized critical functionalities and postponed some non-essential activities to the final weeks of the project. * **Data security:** Implementing security measures to comply with data protection regulations has required more time than anticipated. More resources will be allocated in the coming weeks to ensure compliance with security standards.   **Actions taken:**   * **Schedule adjustment:** The schedule has been adjusted to prioritize critical tasks, such as implementing the emotional state logging functionality and integrating IoT devices, while other tasks have been postponed to later phases. * **Simulator testing:** To address the IoT integration issue, the team has started using simulators to run tests without needing all devices on hand. * **Reinforcement of security resources:** More resources have been allocated to the implementation of security measures, including consultations with data protection experts. |
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| **During the execution of the project, several adjustments were made to the work plan to optimize the available time and resources:**  **Adjustment in IoT device integration:** Originally, the complete integration of IoT devices was planned for the first few weeks. However, due to technical difficulties, it was decided to postpone part of this integration to focus first on implementing data simulators. This adjustment allowed us to continue development without the technical issues halting the overall progress of the project.  **Removal of the automatic tips functionality:** It was decided to remove the functionality that would send automatic tips to users as a preventive measure to avoid potential legal risks related to self-management of mental health. This adjustment was discussed with the team, and it was agreed that this functionality could be introduced in future iterations of the product with a safer and more regulated approach.  **Adjustments to the user interface:** Minor changes were made to the user interface based on feedback received during usability testing. These adjustments improved the user experience, making it more intuitive and accessible, without significantly affecting the schedule.  The rationale behind these adjustments is to maximize efficiency and ensure that the final product meets the established quality and safety standards without compromising the critical functionality of the project. |
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| Currently, the following activities have experienced delays in their execution:  Database Population:  Although the database structure is complete, data loading has not yet been performed, as it has been postponed due to issues with data collection and preparation.  IoT Device Integration: The implementation and testing of the IoT device integration, necessary for the real-time collection of physiological data, have not started due to the lack of physical devices for testing and the technical complexities of the integration.  JWT (JSON Web Token) Integration: The implementation of the authentication system using JWT, which will ensure the security and protection of user data, is delayed due to technical difficulties in server configuration and user validation.  Strategies to move forward:  Database Population:   * Allocation of additional resources: The development team has been reassigned to dedicate more time to data loading. * Use of simulated data: While the issues with real data are resolved, simulated data will be used to avoid further delays in integration with the application.   IoT Device Integration:   * IoT data simulators: Until the physical devices are obtained, data simulators will be used to advance the integration tests. * Device acquisition: Efforts are being made to acquire the necessary IoT devices for testing.   JWT Integration:   * Backend development acceleration: The team's workload has been adjusted to focus more resources on JWT integration, ensuring that this critical security feature is ready for testing in the coming weeks. * Phased implementation: JWT will be implemented in stages, starting with basic authentication functions to ensure operational readiness as soon as possible, followed by the addition of advanced functionalities. |
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1. En caso de que el Proyecto APT sea grupal, en esta columna deben indicar el nombre de los responsables de cada tarea o actividad. Esto posteriormente permitirá diferenciar la evaluación por cada integrante. [↑](#footnote-ref-0)