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1. **PARTE I**

| **1. Personal Information** |
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| A continuación, se presenta una tabla en la que debes completar la información solicitada. |

| Student Name | **Moises Rubio , Carlos Álvarez , Bastián pino , Cristóbal Mora** |
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| ID Number | **18.468.801-8 / 17.948.276-2 / 20.380.185-8 / 17.678.371-0,** |
| Degree | **Computer Engineering** |
| Campus | **Puente Alto** |

| **2. APT Project Description** |
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| Nombre del proyecto | **SISAME – Integrated School Mental Health System** |
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| Área (s) de desempeño(s) | Software engineering, systems analysis, IT project management, databases. |
| Competencias | * *Analyze requirements and design IT solutions.* * *Develop secure and responsive web applications.* * *Manage databases and ensure data integrity.* * *Work as part of a team applying development methodologies.* |

| **3. APT Project Justification** |
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| Relevance of the APT Project | The project is relevant because it addresses a real issue in Chilean schools: the fragmented management of students’ psychological information. This causes loss of time, duplication of efforts, and risks in timely care. A centralized system such as SISAME improves the efficiency of psychologists, strengthens communication with teachers and guardians, and above all ensures a faster response in situations of risk for students. |
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| Description of the APT Project | **SISAME (Integrated School Mental Health System)** is a web application developed in Django, Bootstrap, and PostgreSQL that will allow school psychologists to register and manage student records, consultations, work plans, referrals, and reports. The system will include automatic notifications to teachers and guardians, case tracking tools, and report export, all within a unified and user-friendly platform. |
| Relevance of the Project to the Graduate Profile | The project aligns with the Computer Engineering graduate profile, as it incorporates key competencies such as:   * Gathering and analyzing requirements. * Designing and implementing software solutions. * Managing databases and ensuring information security. * Collaborative work on real projects with social impact. |
| Relation to Professional Interests | The team is interested in developing technological solutions that provide social value, especially in the educational and mental health fields. The project allows applying technical knowledge in a real-world context, reinforcing the vocation to create software that improves quality of life and institutional processes. |
| Feasibility of Developing the APT Project | The project is feasible because:   * It will be developed within one academic semester (August–December). * The team has previous experience in Django and web development. * Open-source software tools will be used (Django, Bootstrap, PostgreSQL). * The planning is supported by a schedule and a Gantt chart. * The available resources (notebooks, testing server, internet) are sufficient. |

1. **PARTE II**

| **4. Objectives** |
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| General Objective | Develop a comprehensive web system that centralizes the management of student psychological records and consultations in schools, with the aim of improving the efficiency of psychologists’ work, strengthening communication with teachers and guardians, and ensuring students’ safety and well-being. |
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| Specific Objectives | 1. Gather and document the system’s functional and non-functional requirements. 2. Design use cases, mockups, and the architectural model of the solution. 3. Implement in Django the main modules: student records, consultations, follow-up, and reports. 4. Develop user management modules, catalogs, and audit tools for access control and traceability. 5. Incorporate functionalities for notifications, appointments, and immediate risk alerts. 6. Perform unit, integration, and user acceptance testing to validate the system. 7. Prepare technical documentation and a user manual, in addition to delivering the final project presentation. |

| **5. Methodology** |
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| Description of the Methodology |
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| 1. Planning Phase   * *Preparation of the project charter, requirements gathering, and definition of use cases.* * *Creation of the Gantt chart and assignment of work roles.*   2. Analysis and Design Phase   * *Development of the ERS document (Software Requirements Specification).* * *Design of the system architecture (C4 model: context, container, components).* * *Preparation of mockups for the main screens.*   3. Development Phase   * *Implementation in Django and Bootstrap of the prioritized modules (student records, consultations, maintenance modules, reports).* * *Use of PostgreSQL as the database manager.* * *Incremental development through biweekly iterations with periodic reviews.*   4. Testing and QA Phase   * *Unit testing and module integration.* * *Execution of user acceptance testing (UAT).* * *Correction of detected errors and performance optimization.*   5. Implementation and Closure Phase   * *Migration of the system to a testing environment.* * *Basic training for end users and delivery of the user manual.* * *Final project presentation and delivery of the closure report.* |

| **6. Evidencias** |
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| **Type of Evidence (progress or final)** | **Name of the Evidence** | **Description** | **Justification** |
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| Progress | Project Charter | Initial document that defines objectives, scope, roles, and project planning. | Formalize the start and direction of the project. |
| Progress | ERS Document | Specification of functional and non-functional requirements. | Basis for design, development, and validation. |
| Progress | Interface Mockups | Visual prototypes of main screens in Figma/Bootstrap. | Visualize the system’s design before coding. |
| Progress | Extended Use Cases | Detail of CU01–CU26 with normal and alternative scenarios. | Ensure traceability of requirements and functional design. |
| Final | Implemented System (SISAME) | Web application developed in Django, Bootstrap, and PostgreSQL with the main modules. | Central product of the project, validated through testing. |
| Final | Final Project Report | Document that compiles results, tests, and conclusions. | Formal evidence of academic and technical closure. |
| Final | Final Presentation | Group presentation with results, system demonstration, and lessons learned. | Demonstrate achievement of competencies and communicate progress. |
| Final | User Manual | Supporting document for the use of the system by psychologists and teachers. | Ensure the adoption of the system in a real-world context. |

| **7. Work Plan** |
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| **APT Project Work Plan** | | | | | | |
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| **Competence or Unit of Competence** | **Activity/Task Name** | **Activity/Task Description** | **Resources** | **Duration of the Activity** | **Responsible** | **Observations** |
| Analyze and document software requirements. | Project Charter and ERS. | Draft the project charter and gather functional and non-functional requirements. | Word, teacher guidelines, team meetings. | 2 weeks | Moisés Rubio | Must be validated with the supervising teacher before moving to the design phase. |
| Design systems and model processes. | Use Cases and Mockups. | Model CU01–CU26 and design visual prototypes of main screens. | Draw.io, Figma. | 3 weeks | Bastián Pino | Validate designs with team and teacher. |
| Define software architectures. | Architecture Document. | Develop the system’s architectural model (context, container, components, DB). | Word, C4 diagrams. | 2 weeks | Cristóbal Mora | Document will serve as the basis for the development phase. |
| Develop secure and efficient web applications. | Django Implementation. | Coding of main modules: student records, consultations, users, and reports. | Django, PostgreSQL. | 6 weeks | Carlos Álvarez (Team Leader) | Work will be carried out in iterations with version control and unit testing. |
| Perform testing and ensure software quality. | Testing and Validation. | Design and execute test cases (unit, integration, acceptance). | Postman, Selenium, checklists. | 2 weeks | Moisés Rubio | Include teacher feedback and adjustments according to findings. |
| Effective communication and teamwork. | Final Report and Presentation. | Write the final project closure report and prepare the final presentation. | Word, PowerPoint. | 2 weeks | Carlos Álvarez | Presentation must summarize achieved objectives, results, and team learnings. |

| **8. Gantt Chart** |
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[Gantt Chart](https://docs.google.com/spreadsheets/d/1-1CqArCVpPLy3Ur7KPQrcJyHpHsMnDHj/edit?usp=sharing&ouid=112805162468373038457&rtpof=true&sd=true)