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**Guide 1. Definition APT Project**

**Capstone Course**

1. **PART I**

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| **1. Personal Background** |
| Below is a table in which you must fill in the requested information. |

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| Student Name | **Brayan Navarro** |
| Rut | **020667781-3** |
| Major | **Ing. en informática** |
| Campus | **Pte. Alto** |

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| Student Name | **Carlos Leebsey** |
| Rut | **19310247-6** |
| Major | **Ing. en informática** |
| Campus | **Pte. alto** |

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| Student Name | **Juan Pablo Muñoz** |
| Rut | **21208195-7** |
| Major | **Ing. en informática** |
| Campus | **Pte. alto** |

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| Student Name | **Joshua Thomas** |
| Rut | **19830733-5** |
| Major | **Ing. en informática** |
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| **2. APT Project Description** |
| The “DamiSpa WEB” Project, part of our Computer Engineering Degree Portfolio, seeks to meet the needs of the company “DamiSpa” through a web platform that facilitates the management of reservations, online payments, promotions, and reports. In its development, we will apply graduate profile skill such as software analysis and design, database administration, information security and project management, as well as teamwork and communication with a real client. This project is linked to the areas of Software Development, Project Management, Database and Security, and Technological Infrastructure, providing a practical opportunity to demonstrate our professional skills and contribute to the growth of a local business. |

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| Project Name | *DamiSpa WEB* |
| Area(s) of Perfomance | *Service offering and business model update* |
| Competencies | *-Offer IT Solution proposals by comprehensively analyzing processes according to the organization’s requirement.*  *-Build Data models to support the organization’s requirements according to a defined and scalable design over time.*  *-Manage IT projects, offering alternatives for decision-making according to the organization’s requirements.* |

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| **3. Rationale for the APT project** |
| Below are several fields that you must complete with the requested information. This section asks you to describe your project in detail and justify its revelance and significance. |

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| Relevance of the APT project | *The “DamiSpa WEB” Project arose in response to the problems faced by DamiSpa, a company offering home massage services in Chile’s Metropolitan Region, which currently manages its bookings, payments, and promotions through informal channels such as WhatsApp and Instagram. This situation creates inefficiencies, limits business growth, and affects customer experience, as customers demand more agile, secure, and reliable digital solutions. We chose this topic because it represents a real challenge in the field of software development and the digital transformation of small and medium-sized enterprises, a field in high demand in the computer engineering profession. Its resolution will not only allow DamiSpa to optimize internal processes and strengthen its competitiveness in the wellness and health market but also constitute an opportunity for social impact by improving the quality of care and accessibility for end users. The value of this project, both for the organization and for our career field, lies in the application of professional skills in analysis, systems development, project management, security and databases, showing how computer science can be a driver of innovation and growth for local businesses.* |
| Description of the APT project | ***DamiSpa WEB*** *allows customers to easily book and pay online, while massage therapists have a mobile app to manage their work in real time. A practical, modern, and secure solution that digitizes and grows the business.* |
| Revelance of the Project to the graduate profile | *The “DamiSpa WEB” Project is directly linked to the Computer Engineering graduate profile, integrating key skills such as requirements analysis and gathering, secure and scalable software design and development, and database management. It also promotes skills in planning and executing technology projects, teamwork, and applying best practices for quality. Thus, the initiative provides a real-world setting for applying and strengthening the professional skills needed in the field of computer science.* |
| Relationship to professional interests | *My professional interest focuses on technology project management and software development, areas that I consider essential to performing successfully in the field of computer science. The APT “DamiSpa WEB” project directly reflects these interests, as it involves planning, coordinating, and executing a real project, applying management methodologies and ensuring that the development of the web application meets quality, security, and scalability standards. Carrying out this project will contribute to my professional development by allowing me to gain practical experience in team and task management, strengthen my software design and programming skills, and face real situations that simulate challenges in the workplace, preparing a comprehensive and competitive profile for the market.* |
| Feasibility of developing the APT project | *The APT “DamiSpa WEB” Project is feasible to develop during the semester, considering the hours allocated and the resources available, such as web development environments, databases, and internet access. Factors that facilitate its progress include specialized bibliography and teacher feedback, while potential difficulties, such as connectivity issues or delays in reviews , will be mitigated with advance planning, periodic backups, and constant communication.* |

1. **PART II**

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| **4. Objetives** |
| In this section, you must define the general and specific objectives that must be stated clearly and concisely, without further explanation; in other words, they must be self-explanatory. It is recommended that you write them using and infinitive verb, as this requires you to specify concrete actions. |

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| General objective | *Develop a web application for the company DamiSpa that allows it to automatically manage its processes and documentation, facilitating its entry into the online sphere and improving operational efficiency.* |
| Specific objectives | *Develop a web platform that optimizes customer, appointment, and spa service management, automating administrative processes and reducing manual workload.*  *Desing a mobile app that facilitates communication between customers and massage therapists, improving the user experience and accessibility to services.*  *Implement automatic notifications to keep users informed about appointments, promotions, and changes to services.*  *Create an intuitive and user-friendly interface, ensuring that both customers and spa staff can use the platform and app efficiently.*  *Guarantee a secure and reliable database, safeguarding customers, appointment, and service information, ensuring that integrity and availability of the system.* |

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| **5. Methodology** |
| In the following section, you should describe the methodology specific to your discipline that you will use to complete the APT project described above, including the stages and working methods. |

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| Description of the Methodology |
| *For the development of the DamiSpa Project, an agile methodology based on Scrum will be adopted in order to ensure flexibility, constant iteration, and continuous improvement throughout the software development life cycle. The division into sprints wil allow for a more efficient distribution of work among all members participating in the project.*  *To this end, the most relevant phases are:*  *- Requirements Gathering*  *- Analysis and Desing*  *- Web Platform and Mobile Application Development*  *- Testing and Quality Control*  *- Implementation and Deployment*  *Although all members Will be involved in all phases, the divisions of the tasks will be more focused on development of Carlos Leebsey, Juan Sepulveda, and Joshua Thomas, while Brayan Navarro and Juan Pablo Sepulveda will have a more management and documentation-related focus.* |

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| **6. Evidence** |
| Next, describe what evidence will be evaluated in the progress report and final report for your APT Project. This evidence must be agreed upon with your teacher. Evidence shall be understood to mean the products developed during the Project whose purpose is to highlight or document how to work has been implemented. |

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| Type of Evidence (Preliminary or Final) | Name of Evidence | Description | Justification |
| Preliminary | Project constitution document | Document formalizes the start of the project, indicating objectives, scope, responsible parties, and resources. | It allows the project to be officially established and expectations to be aligned between the team and the teacher. |
| Preliminary | Requirements Form | Detailed list of the functional and non-functional requirements of the application. | Ensures that all system requirements are identified and documented prior to development. |
| Preliminary | Gantt Chart / Roadmap | Visual schedule of project activities and deadlines. | Facilitate planning, monitoring, and control of project progress during the semester. |
| Preliminary | EDT – Costs | Work breakdown structure with cost estimates associated with each activity. | It allows you to manage financial and material resources efficiently and in a controlled manner. |
| Preliminary | ERS Document | Software Requirements Specification, detailing functionalities and restrictions. | It serves as a technical guide for system development and ensures that customer requirements are met. |
| Preliminary | Extended use cases document | Details of the scenarios for interaction between users and the system, with step-by-step descriptions. | Helps to understand how the system works and guide the design of the interface and business logic. |
| Preliminary | Sprint progress document | Record the progress of each sprint, including completed and pending tasks (if agile methodology is applied). | It allows you to evaluate progress periodically and adjust planning according to actual results. |
| Preliminary | Mockups of the complete system | Visual representations of the web and mobile application interfaces. | Facilitates design validation with the client and guides interface development. |
| Preliminary | Meeting minutes | Record of agreements, decisions, and tasks assigned at each team meeting or with the teacher. | Ensures follow-up on commitments, traceability of decisions, and effective communication among project members. |
| Preliminary | Architectural Model | Visual or structural representation of the system components and their interaction. |  |
| Preliminary | Architecture Document (DAS) | Document detailing the technical architecture of the system, including components, technologies, and key decisions. |  |
| Preliminary | Business Process Document (TO-BE) | Describe the expected future processes (desired state) following implementation of the system. |  |
| Preliminary | RACI Matrix | Table defining roles and responsibilities (Responsible, Approver, Consultant, Informed) in project activities. |  |
| Preliminary | Risk Matrix | Identification, analysis, and assessment of project risks, with their respective mitigation measures. |  |
| Preliminary | Data Dictionary | Details the data elements used in the system, their definitions, formats, and relationships. |  |
| Preliminary | Meeting minutes | Record of what was discussed in meetings, including agreements, tasks, and participants. |  |
| Preliminary | Change Control Matrix - Phase 2 | Tool for recording, evaluating, and tracking change requests in the project. |  |
| Preliminary | Web application | Software developed to run on web browsers, accessible from the internet or intranet. |  |
| Preliminary | Mobile application | Software designed for use on mobile devices such as smartphones and tablets. |  |
| Preliminary | Database script | SQL code that creates, modifies, or manages the structure and data of a database. |  |
| Preliminary | Change Control Matrix - Phase 3 | Recording and tracking of approved or rejected changes to the project |  |
| Preliminary | Meeting minutes - Phase 3 | Record of decisions and tasks assigned during meetings. |  |
| Preliminary | Test Plan | Document defining the approach, resources, and schedule for system testing. |  |
| Preliminary | Database Testing Matrix | Structured recording of specific test cases to validate the database. |  |
| Preliminary | Defects Registration Form | Sheet for recording, classifying, and tracking errors or faults found. |  |
| Preliminary | Scope Verification | Document that validates that the project deliverables meet the established requirements. |  |
| Preliminary | Training Plan | Document detailing the objectives, content, schedule, and persons responsible for user training. |  |
| Preliminary | User Manual | Guide explaining how to use the system from the end user's perspective. |  |
| Preliminary | Project Closure Report | Final document summarizing the achievement of objectives, deliverables, and lessons learned. |  |

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| **7. Work Plan** |
| In the following table, define the planning for your APT Project as required. |

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| **APT Project Work Plan** | | | | | | |
| Competence or units of competence | Name of Activities/Tasks | Description Activities/Tasks | Resources | Duration of the activity | Responsible[[1]](#footnote-1) | Comments |
| *Offer IT solution proposals by comprehensively analyzing processes in accordance with the organization's requirements.* | *-Startup and planning*  *-Requirements gathering and analysis* | *The relevant documentation for the start of the project is created, the client's requirements are taken into account, and proposals are created to meet them.* | *Computer* | *August 11–August 22, 2025* | *Brayan Navarro* |  |
| *Build data models to support the organization's requirements according to a defined and scalable design over time.* | *-System design*  *-Application development* | *Once the requirements have been obtained, we use them to create the initial sketches for the project. Once these have been approved, we proceed to start the project.* | *Computer* | *August 25–November 14, 2025* | *Brayan Navarro* |  |
| *Manage IT projects, offering alternatives for decision-making in accordance with the organization's requirements.* | *-Testing and quality assurance* | *Once the project is completed, it will be submitted for approval.* | *Computer and Cell Phone* | *November 17 – November 28, 2025* | *Brayan Navarro* |  |

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| **8. Gantt Chart** |
| Find a Gantt chart format that suits you and organize the activities planned in the previous point, taking into account the period assigned for the development of your APT Project. You must maintain the academic period's timeline in the development of the three phases covered by the Degree Portfolio Course. |

Una captura de pantalla de un celular

El contenido generado por IA puede ser incorrecto.

1. If the APT Project is a group project, the names of those responsible for each task or activity should be indicated in this column. This will subsequently allow for the evaluation of each member to be differentiated. [↑](#footnote-ref-1)