}

1. **PART I**

| **1. Personal background** |
| --- |
| Below is a table in which you must complete the requested information. |

| Student name | **Benjamin Urrutia Iturra** |
| --- | --- |
| Ruth | **20.792.613-2** |
| Career | **Computer engineering** |
| Headquarters | **High Bridge** |

| Student name | **Nicolas Varas Figueroa** |
| --- | --- |
| Ruth | **21.286.693-8** |
| Career | **Computer engineering** |
| Headquarters | **High Bridge** |

| Student name | **Patricio Fernandez Rivera.** |
| --- | --- |
| Ruth | **20.704.119-K** |
| Career | **Computer engineering** |
| Headquarters | **High Bridge** |

| **2. APT Project Description** |
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| In the description you must briefly indicate the name of your APT project and the competencies of the graduation profile that you are going to put into practice. If performance areas are defined in your career, also mention which performance areas the project is linked to. |

| Project Name | **Lucky Pets** |
| --- | --- |
| Performance Area(s) | Software Development.  Database Programming. |
| Competencies | Software Architecture.  Analysis and planning of computer requirements.  Computer Project Management.  Software programming. |

| **3. APT Project Foundation** |
| --- |
| Below are different fields that you must complete with the requested information. This section seeks for you to describe your project in detail and justify its relevance and relevance. |

| Relevance of the APT project | *We selected this topic due to the fact that in Chile it is not common to travel with pets on public transport, both for emergencies and for emergencies such as common trips, therefore the relevance of this project is given by the importance of having a comfortable and intuitive that allows users to access a vehicle that allows them to travel with their pet(s) comfortably and without prejudice.*  *The mobile application will first be addressed in the capital of Chile, the Metropolitan region, with the possibility of expanding nationwide depending on the performance, popularity and demand of the developed application. The Metropolitan region is established as the main location as it is the city with the most transportation in the country and with the most inhabitants. Having more possibilities of increasing clientele and improving the image of the company.*  *The application is designed for adults who do not have their own vehicles with experience using transportation applications such as Uber, Cabify, Rappi, etc.*  *The developed system will allow and positively contribute to users who have little time and/or have emergencies, allowing them to access a quality vehicle, providing visibility and support to both pet clinics and hotels.* |
| --- | --- |
| APT Project Description | *The main objective of this project is to develop a comprehensive system that provides a high quality service both for clients, which in this case are pets and their owners, and for veterinary clinics that require efficient IT support.*  *For pets and their owners, the project seeks to offer a friendly and accessible platform that facilitates the management of appointments, monitoring of medical records and access to relevant information about pet health. This includes implementing tools that allow owners to schedule visits, receive reminders, and obtain detailed reports on the health status of their animals.*  *On the other hand, for veterinary clinics, the system will be designed with the objective of optimizing internal management, improving operational efficiency and providing adequate technical support. This covers the integration of functionalities for clinical record management, inventory management, billing and appointment control. In addition, features will be implemented that facilitate data analysis and reporting for better decision making.*  *The success of this project will be measured by the satisfaction of users, both pets and their owners and veterinary professionals, thus guaranteeing an improvement in the quality of the service provided and an optimization in the operational processes of the clinics.* |
| Relevance of the project with the graduation profile | *The project described is related to the design, development, implementation and deployment of computer solutions, having a direct relationship with the evaluation and management of computer projects.*  *In their entirety, they are necessary to carry out a computer project in the best possible way, since without good management and evaluation of the project, the development and its complements would be affected both in performance and in the quality of the final product.* |
| Relationship with professional interests | *As a team we are interested in developing professionally in different ways, but we agree that we all want to be able to manage, evaluate, develop and implement IT projects correctly, so this project is a great opportunity to carry out all the knowledge we have received. during the course of the race. The effect it will have on us is positive as we will each develop their own strengths now, during and after the development of the APT project.* |
| Feasibility of development of the APT Project | *The semester lasts approximately 5 months which is*  *an adequate time to carry out this project*  *We will assign 3 hours a day to this project, which would be 15 hours a week to carry out this project.*  *A computer and internet are required*  *The great lack of a computer solution for veterinary clinics could help to have a list of needs which would facilitate having requirements for development.*  *Some factor that could hinder development would be the time the team members need to carry out professional practice.*  *The project to be developed will use programming languages ​​​​learned during the Computer Engineering degree, so the team members are familiar with the implementation of this type of projects.* |

1. **PART II**

| **4. Objectives** |
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| In this section you must define general and specific objectives of the APT Project. It is important to clarify that the objectives must be stated clearly, concisely and without giving further explanations, that is, they must be understood on their own. It is suggested to write them using an infinitive verb, as this requires specifying specific actions. |

| General objective | *The aim is to develop a mobile application as the main focus where users can make trips to both pet clinics and hotels, allowing users to access vehicles quickly and making the journey to the destination comfortable.* |
| --- | --- |
| Specific objectives | *The APT project contains different specific objectives such as:*  *Web Page Development.*   * + *It must be responsive and intuitive*   + *Have external payment API*   + *Administration*   *Mobile Application Development.*   * + *Creation of users (Customers and Drivers)*   + *Planning and carrying out trips.*   + *Register pet*   + *Attach pet file*   *Desktop Application Development.*   * + *Report creation*   + *Changes in attention status* |

| **5. Methodology** |
| --- |
| In the next section you must describe the methodology, specific to your discipline, that you will use to solve the APT project described above, including the stages and work methods. |

| Description of the Methodology |
| --- |
| *For the APT project, we will use the waterfall methodology, allowing the team to complete each phase in the assigned times. Once one phase is completed, another begins, in this way clarity will be seen in the deliverables and the different phases, documenting each process carried out.*  *For this APT project, different functions have been established for each member of the team, among them we will find:*   * *Project Manager - Benjamin Urrutia, his main responsibility will be to ensure that the project is being developed correctly and that the phases are met.* * *Programmer Analyst - Nicolas Varas, his main responsibility will be to develop code, analyze the requirements and generate the necessary documentation.* * *BD Developer - Patricio Fernández, his main responsibility will be to design, optimize and maintain the database, in addition to integrating with the applications.* * *Quality and Testing - Nicolas Varas, his main responsibility will be to perform software tests, identify errors and validate the quality of the product.* * *Designer - Patricio Fernández, his main responsibility will be to design the interfaces, prototype and collaborate with the development of the applications.* |

| **6. Evidence** |
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| Next, describe what evidence will be evaluated in the progress report and final report of your APT project. This evidence must be agreed upon with your teacher. Evidence will be understood as the products that are developed during the project and whose purpose is to make visible or document how the work has been implemented. |

| **Type of evidence**  **(advance or end)** | **Evidence name** | **Description​** | **Justification​** |
| --- | --- | --- | --- |
| **Advance** | **APT PHASE 1 Project Definition Document** | *Document justifying and describing the APT project (Objectives, scope and deliverables).* | **Initial framework of the project to guarantee its viability and clear objectives.** |
| **Advance** | **Weekly meeting minutes** | ***Document made to support the weekly meetings held by the work team (agreements and decisions)*** | **Ensures continuous monitoring of decisions and adjustments to the project.** |
| **Advance** | **Initial Project Presentation** | ***Document presenting the APT project to be developed (objectives, teams and deadlines)*** | **Facilitates the communication of key objectives and deadlines to the team and stakeholders.** |
| **Advance** | **Draft Constitution Act** | ***Document that details the roles, objectives and that authorizes the start of the project*** | **Formalizes the start of the project, ensuring commitment and clarity in roles.** |
| **Advance** | **Requirements Form** | ***Detailed list of functional and non-functional system requirements.*** | **It is essential to define the needs that the system must meet.** |
| **Advance** | **EDT Worksheet** | ***Work Breakdown Structure of project tasks*** | **It allows detailed planning and control of each project task.** |
| **Advance** | **Gantt chart** | ***Visual timeline showing project tasks and times.*** | **Provides an accurate view of the schedule and dependencies between tasks.** |
| **Advance** | **ERS Document** | ***Specification of software requirements and technical details.*** | **Justify the technical and functional basis that the software must meet.** |
| **Advance** | **Extended Use Case Document** | ***Detailed description of user-system interactions.*** | **How users interact with the system, validating requirements.** |
| **Advance** | **Full system mockups** | ***Visual prototypes of the system interface design.*** | **Adjusting interfaces to user requirements.** |
| **Advance** | **Architecture Document (DAS)** | ***You define the technical architecture of the system*** | **Technical structure to ensure correct and efficient development.** |
| **Advance** | **Raci Matrix** | ***Assign project responsibilities using the RACI model*** | **Clarifies responsibilities, avoiding confusion in execution.** |
| **Advance** | **Risk Matrix** | ***Identify and evaluate project risks and their impact.*** | **Prevent future problems by identifying and mitigating risks.** |
| **Advance** | **Business process document (TO-BE)** | ***Describe what the processes will be like after implementing the system.*** | **Justify how the system will improve with current processes.** |
| **Advance** | **Data Dictionary** | ***Contains the definition of the system data elements.*** | **Justify the types of data used to create the system database and its correct management.** |
| **Advance** | **Meeting minutes** | ***Summary of discussions and decisions at meetings.*** | **Supports decisions made, for traceability.** |
| **Advance** | **Change Control Matrix** | ***Control and manage project modifications.*** | **Manage changes in a controlled manner.** |
| **Advance** | **APT Phase 2 Project Definition Document** | ***Details the objectives and scope of phase 2 of the project.*** | **Justifies the second phase of the project and its new objectives.** |
| **Advance** | **Final Report Document APT Project Phase 2** | ***Evaluation and summary of results of phase 2.*** | **Verify compliance with the objectives of phase 2.** |
| **Advance** | **100% system development** | ***Complete code of the developed system.*** | **Justifies the complete termination of the system.** |
| **Advance** | **Database script** | ***SQL instructions for creating and managing the database.*** | **Allows you to deploy the database.** |
| **Advance** | **Change control matrix** | ***Record of approved or rejected changes.*** | **Ensures development consistency, preventing unauthorized modifications.** |
| **Advance** | **Meeting minutes** | ***Record of agreements and topics discussed in meetings.*** | **It is the record of agreements, ensuring effective communication.** |
| **Advance** | **Test plan** | ***Testing strategy and schedule to validate the system.*** | **Ensure system quality through a test plan strategy.** |
| **Advance** | **Database Test Matrix** | ***Details of specific tests for the database.*** | **Justifies the integrity and operation of the database.** |
| **Advance** | **Defect Registration Form** | ***Record of errors found and their follow-up.*** | **Ensures adequate error control.** |
| **Advance** | **Scope verification** | ***Process to validate compliance with project objectives.*** | **Confirmation of the project objectives achieved.** |
| **Advance** | **Training plan** | ***Plan to train end users of the system.*** | **Plan to prepare end users for effective use of the end system.** |
| **Advance** | **User manual** | ***Guide for the use of the system by end users.*** | **Manual for use by end users.** |
| **Advance** | **Project closure report** | ***Final summary of project achievements, milestones and results.*** | **Project success summary and results.** |
| **Advance** | **APT Project Presentation Document Phase 3** | ***Introduction and details of phase 3 of the project.*** | **Need and focus of the final phase of the project.** |
| **Advance** | **Total system development 100%** | ***Completion and total delivery of the system in its last phase.*** | **Final delivery of the system as planned.** |

| **7. Work Plan** |
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| In the following table, define the planning of your APT Project according to what is required. |

| **APT Project Work Plan** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Competency or units of competencies | Name of Activities/Tasks | Description Activities/Tasks | Resources | Duration of the activity | Responsible[[1]](#footnote-0) | Observations |
| *APT Project* | **APT Project Definition Document PHASE 1** | *Document that justifies and describes the APT project (objectives, scope and deliverables).* | *Computer and Documentation .* | *12-08-2024*  *to the*  *19-08-2024* | *The whole team* | **The project phases are established along with requirements** |
| *Project management.* | **Minutes of weekly meetings** | ***Document created to support the weekly meetings held by the work team (agreements and decisions)*** | *Computer and Documentation .* | *12-08-2024*  *to the*  *19-08-2024* | *The whole team* | *Weekly team work and feedback meetings are established* |
| *Project management.* | **Initial Project Presentation** | ***Document presenting the APT project to be developed (objectives, teams and deadlines)*** | *Computer and Documentation .* | *19-08-2024*  *to the*  *26-08-2024* | *The whole team* | *Objectives and goals are established with the project* |
| *Project management.* | **Project constitution minutes** | ***Document detailing the roles, objectives and authorizing the start of the project*** | *Computer and Documentation .* | *19-08-2024*  *to the*  *26-08-2024* | *The whole team* | *All project components are documented along with their details.* |
| *Project management.* | **Requirements Sheet** | ***Detailed list of functional and non-functional requirements of the system.*** | *Computer and Documentation .* | *26-08-2024*  *to the*  *02-09-2024* | *The whole team* | *The functional and non-functional requirements of the system are established.* |
| *Project management.* | **EDT spreadsheet** | ***Work Breakdown Structure of Project Tasks*** | *Computer and Documentation .* | *29-08-2024*  *to the*  *02-09-2024* | *The whole team* | *All work carried out on the project is documented along with tasks* |
| *Project management.* | **Gantt chart** | ***Visual timeline showing project tasks and times.*** | *Computer and Documentation .* | *29-08-2024*  *to the*  *02-09-2024* | *The whole team* | *The entire schedule is documented in times, days and weeks.* |
| *Project management.* | **ERS Document** | ***Software requirements specification and technical details.*** | *Computer and Documentation .* | *02-09-2024*  *to the*  *12-09-2024* | *The whole team* | *The project requirements are established* |
| *Project management.* | **Extended Use Case Document** | ***Detailed description of user-system interactions.*** | *Computer and Documentation .* | *09-09-2024*  *to the*  *11-09-2024* | *The whole team* | *All user interactions with the system are detailed.* |
| *Prototypes.* | **Full system mockups** | ***Visual prototypes of system interface design.*** | *Computer and Documentation .* | *09-09-2024*  *to the*  *11-09-2024* | *The whole team* | *System prototypes are idealized in terms of functions and how it works.* |
| *Architecture* | **Architecture Document (DAS)** | ***Defines the technical architecture of the system*** | *Computer and Documentation .* | *11-09-2024*  *to the*  *16-09-2024* | *The whole team* | *The entire system and how it is composed is documented* |
| *Project management.* | **Raci Matrix** | ***Assign project responsibilities using the RACI model*** | *Computer and Documentation .* | *11-09-2024*  *to the*  *16-09-2024* | *The whole team* | *All types of actions in the project are documented* |
| *Risk management.* | **Risk Matrix** | ***Identify and assess project risks and their impact.*** | *Computer and Documentation .* | *11-09-2024*  *to the*  *16-09-2024* | *The whole team* | *All types of risks and their severity towards the system and project in general are documented.* |
| *Business* | **Business process document (TO-BE)** | ***Describe what the processes will be like after implementing the system.*** | *Computer, bizagi and documentation .* | *16-09-2024*  *to the*  *23-09-2024* | *The whole team* | *All types of processes are documented in the system* |
| *Database.* | **Data Dictionary** | ***Contains the definition of the system data elements.*** | *Computer, SQL Server and Documentation .* | *16-09-2024*  *to the*  *23-09-2024* | *The whole team* | *The key elements of the system are documented in a dictionary system.* |
| *Project management.* | **Minutes of meetings** | ***Summary of discussions and decisions at meetings.*** | *Computer and Documentation .* | *16-09-2024*  *to the*  *23-09-2024* | *The whole team* | *Team work meetings and feedback are established* |
| *Project management.* | **Change Control Matrix** | ***Control and manage project modifications.*** | *Computer and Documentation .* | *23-09-2024*  *to the*  *09-30-2024* | *The whole team* | *All types of changes in the project and the system are documented* |
| *APT Project.* | **APT Project Definition Document Phase 2** | ***Details the objectives and scope of phase 2 of the project.*** | *Computer and Documentation .* | *23-09-2024*  *to the*  *09-30-2024* | *The whole team* | *Objectives are established along with the scope of the project only in phase 2.* |
| *APT Project.* | **Final Report Document APT Project Phase 2** | ***Phase 2 evaluation and results summary.*** | *Computer and Documentation .* | *09-30-2024*  *to the*  *10-14-2024* | *The whole team* | *The project phases are established along with requirements* |
| *Programming.* | **100% system development** | ***Complete code of the developed system.*** | *Computer, Visual Studio, Visual Studio Code, Django, Ionic Angular, C#, WPF, Bootstrap 5, SweetAlert* | *09-30-2024*  *to the*  *18-11-2024* | *The whole team* | *The entire system is developed from 0% to 100%* |
| *Database.* | **Database script** | ***SQL instructions for creating and managing the database.*** | *Oracle, SQL Server, Firebase* | *09-30-2024*  *to the*  *11-11-2024* | *The whole team* | *The database script is detailed including relationships, tables, and attributes* |
| *Project management.* | **Change control matrix** | ***Record of approved or rejected changes.*** | *Computer and Documentation .* | *18-11-2024*  *to the*  *02-12-2024* | *The whole team* | *All types of changes in the project and the system are documented* |
| *Project management.* | **Minutes of meetings** | ***Record of agreements and topics discussed in meetings.*** | *Computer and Documentation .* | *18-11-2024*  *to the*  *02-12-2024* | *The whole team* | *Team work meetings and feedback are established* |
| *Quality.* | **Test plan** | ***Testing strategy and schedule to validate the system.*** | *Computer and Documentation .* | *18-11-2024*  *to the*  *02-12-2024* | *The whole team* | *The tests performed are documented in schedule format* |
| *Quality.* | **Database Testing Matrix** | ***Details of specific tests for the database.*** | *Computer and Documentation .* | *18-11-2024*  *to the*  *02-12-2024* | *The whole team* | *The tests performed are documented in the database* |
| *Quality.* | **Defects Registration Form** | ***Logging and tracking errors encountered.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *All errors found in the system are documented* |
| *Quality.* | **Scope verification** | ***Process to validate compliance with project objectives.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *The scope is documented in the verification format of these with compliance feedback.* |
| *Project management.* | **Training plan** | ***Plan to train end users of the system.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *It documents how users should use the system* |
| *Project management.* | **User manual** | ***Guide for the use of the system by end users.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *It documents how the user can integrate with the system* |
| *Project management.* | **Project closure report** | ***Final summary of project achievements, milestones and results.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *All project achievements and results are successfully documented* |
| *APT Project.* | **Presentation Document APT Project Phase 3** | ***Introduction and details of phase 3 of the project.*** | *Computer and Documentation .* | *25-11-2024*  *to the*  *02-12-2024* | *The whole team* | *All details are documented for the new phase of the project* |
| *APT Project.* | **Total system development 100%** | ***Completion and full delivery of the system in its final phase.*** | *Computer* | *02-12-2024*  *to the*  *10-12-2024* | *The whole team* | *Development is completed on both the system and the project* |

| **8. Gantt chart** |
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| Find a Gantt Chart format that suits you and organize the activities planned in the previous point in it, considering the period assigned for the development of your APT Project. You must maintain the temporality of the academic period in the development of the three phases contemplated by the Degree Portfolio Subject. |

| **Activity** | **Phase 1** | | | | **Phase 2** | | | | | | | | | | | | **Phase 3** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S 1** | **S 2** | **S 3** | **S 4** | **S 5** | **S 6** | **S 7** | **S 8** | **S 9** | **S 10** | **S 11** | **S 12** | **S 13** | **S 14** | **S 15** | **S 16** | | **S 17** | **S 18** |
| **APT Project Definition Document PHASE 1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Minutes of weekly meetings** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Initial Project Presentation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Project constitution minutes** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Requirements Sheet** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **EDT spreadsheet** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Gantt chart** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **ERS Document** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Extended Use Case Document** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Full system mockups** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Architecture Document (DAS)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Raci Matrix** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Risk Matrix** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Business process document (TO-BE)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Data Dictionary** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Minutes of meetings** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Change Control Matrix** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **APT Project Definition Document Phase 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Final Report Document APT Project Phase 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **100% system development** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Database script** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Change control matrix** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Minutes of meetings** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Test plan** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Database Testing Matrix** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Defects Registration Form** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Scope verification** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Training plan** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **User manual** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Project closure report** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Presentation Document APT Project Phase 3** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| **Total system development 100%** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |

1. If the APT Project is a group project, the names of those responsible for each task or activity must be indicated in this column. This will later allow for differentiating the evaluation for each member. [↑](#footnote-ref-0)