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1. **Part I**

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| **1. Personal Background** |
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| Student Name | **Alex Pavez, Alan Moreno, Alex Oliva** |
| Rut | **21460602-K, 21621035-2,** **21498000-2** |
| Degree Program | **Computer Engineering** |
| SCampusede | **DuocUC Puente Alto** |

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| Student Name | **Alex Oliva** |
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| Degree Program | **Computer Engineering** |
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| Student Name | **Alan Moreno** |
| Rut | **–** |
| Degree Program | **Computer Engineering** |
| SCampusede | **DuocUC Puente Alto** |

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| **2. APT Project Description** |
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| Project Name | Integrated Public Health Information System |
| Performance Area(s) | **Software Development, IT Project Management, Information Systems** |
| Competencies | * Requirements analysis * Software design * Database management * Web application development * Information security |

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| **3. Project Justification APT** |
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| Project Relevance | The project aims to solve the dispersion of health service information in Chile by centralizing pharmacy shifts, medication availability, and medical center data into a single platform. This benefits citizens by improving access to healthcare services and reducing search times during critical situations. Its relevance lies in applying information technologies to optimize public services. |
| Project Description | The project consists of developing a web platform that integrates, in real time, the location of on-duty pharmacies, medication stock, schedules of healthcare centers, and in later stages, medical appointment booking and a virtual assistance chatbot. |
| Relevance to the Graduate Profile | The project requires competencies in software development, database management, information security, and user experience — all aligned with the graduate profile of the program. |
| Relation to Professional Interests | This project reflects my interest in developing technological solutions with social impact, particularly in the field of digital health, contributing to my professional growth in the IT sector. |
| Feasibility of the Project | * The project is feasible because of: * Duration: fits within the semester (18 weeks) * Resources: accessible tools (open web technologies, public APIs) * Facilitating factors: technical documentation and prior development experience * Potential challenges: integration with external systems, mitigated through iterative prototypes and testing plans |

1. **PARTE II**

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| **4. Objectives** |
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| Objetivo general | To develop a centralized web platform that facilitates real-time access to integrated information on healthcare services in Chile. |
| Objetivos específicos | * To design an intuitive and responsive user interface. * To implement a geolocation system for pharmacies and healthcare centers. * To integrate a medication search function with stock and price information. * To develop an administration module for data management. * To implement secure authentication and user role management. |

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| **5. Methodology** |
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| Descripción de la Metodología |
| A waterfall methodology will be applied, since the project requirements are clearly defined. The stages are as follows:   1. Requirements analysis 2. System and database design 3. Module development 4. Functional and security testing 5. Implementation and documentation |

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| **6. Evidence** |
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| **Type of Evidence** | **Evidence Name** | **Description** | **Justification** |
| Progress | Requirements Document | Detailed specification of functional and non-functional requirements | Serves as the foundation for development |
| Progress | Interface Prototype | Navigable mock-up of the platform | Validates usability |
| Final | Functional System | Fully operational web platform | Final product of the project |
| Final | Technical and User Manual | System documentation | Provides support for implementation |

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| **7. Work Plan** |
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| **Plan de Trabajo Proyecto APT** | | | | | | |
| Competency or Units of Competency | Activity/Task Name | Description of Activities/Tasks | Resources | Duration | Responsable[[1]](#footnote-1) | Observaciones |
| Analysis | Define requirements | Detail functional and non-functional requirements | Project documentation | 2 weeks | Alex Pavez | - |
| Design | Database and interface design | Model database and UI | Design tools | 2 weeks | Alex Oliva | - |
| Development | Module implementation | Code functionalities | IDE, web programming languages | 6 weeks | Alan Moreno | - |
| Testing | Functional testing | Validate each module | Test cases | 2 weeks | Alex Pavez | - |
| Implementation | Deployment and documentation | Publish and document the system | Server, manuals | 2 weeks | Alex Oliva | - |

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| **8. Gantt Chart** |
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| **Activity** | **Phase 1** | | | | **Phase 2** | | | | | | | | | | | | **Phase 3** | | | |
| **w 1** | **w 2** | **w 3** | **w 4** | **w 5** | **w 6** | **w 7** | **w 8** | **w 9** | **w 10** | **w 11** | **w 12** | **w 13** | **w 14** | **w 15** | **w 16** | | **w 17** | **w 18** |
| Analysis | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| Design |  |  | **x** | **x** |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| Development |  |  |  |  | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |  | |  |  |
| Testing |  |  |  |  |  |  |  |  |  |  | **x** | **x** |  |  |  |  | |  |  |
| Implementation |  |  |  |  |  |  |  |  |  |  |  |  | **x** | **x** |  |  | |  |  |

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-1)