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1. **PART I**

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

| Student name | **Jocelyn Navarro Ojeda.**  **Cesar Negrete Escobar.** |
| --- | --- |
| Ruth | **19.882.678-2**  **20.817.538-6** |
| Career | **Computer engineering.** |
| Headquarters | **Maipu** |

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

| Project name | *Marketplace for small businesses* |
| --- | --- |
| Area(s) of performance(s) | *Mobile app development, database management, website development, backend, API consumption* |
| Competencies | * Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives. * Build data models to support the organization's requirements according to a defined and scalable design over time. * Knowledge of web and mobile development. |

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

| Relevance of the APT project | *The problem that our project seeks to solve is the lack of digitalization that micro entrepreneurs have, either due to a lack of knowledge or due to the difficult access to creating a website, the lack of reach of entrepreneurs who have great potential.*  *This topic is relevant to our career because thanks to the use of information technology, software solutions can be created to facilitate and improve the reach of micro-enterprises.*  *The situation to be addressed is at the country level. The idea is to create software that can help all micro-entrepreneurs in the country to have a greater reach with their products, since many of them do not know how to use social networks well to grow their business. The idea is to create software that is intuitive and easy to use, both for young people and for older people.*  *The situation to be addressed directly impacts the country's micro-entrepreneurs, since thanks to this solution they will be able to promote their products, increasing their visibility.*  *The contribution that the creation of this software would make is to be able to help micro-entrepreneurs, who in many cases do not use social networks to boost their visibility, because it is difficult for them to understand social networks, many of them only have neighbors in the area as clients, our idea is to make them more visible, to boost their visibility and with this their sales.* |
| --- | --- |
| APT Project Description | *The aim of the project is to help micro-enterprises to emerge more quickly and optimally by helping to improve their visibility, using software in which they can publish their products, their location, and also customers can contact them immediately either through the application or through WhatsApp.* |
| Relevance of the project to the graduate profile | ***Design and Development*** *: This competency allows you to create a solution that is functional and easy to use, which is key to helping micro-entrepreneurs who have no previous experience in digitalization.*  ***Technology Assessment*** *: Evaluating and applying appropriate technologies ensures that the software is efficient and tailored to the specific needs of users.*  ***Innovation and Collaboration*** *: Thanks to the capacity for innovation and collaboration with other professionals, we can create a tool that not only solves the current problem, but also adapts to future needs.*  ***Critical Thinking*** *: Critical thinking is necessary to identify the specific problems that microentrepreneurs face and design a solution that effectively addresses the problem.*  ***Ethics and Learning*** *: Thanks to ethics we will ensure that the software respects the ethical principles that we have learned during our student process. On the other hand, thanks to continuous learning we can improve the software as technologies evolve.* |
| Relationship with professional interests | *Our professional interests are to learn more about software development together, since as a group we really like that area, and we also seek to help others through the use of technologies.*  *Thanks to this project we will be able to develop skills that interest us, which would be the creation of applications and websites. In addition, we will learn about a new framework to be able to develop this software.* |
| Feasibility of APT Project Development | *We believe that the project is feasible to develop in the semester, we know that our capabilities are sufficient to achieve it, and we already know what tools we are going to use to develop it, so we have everything planned. As for external factors that facilitate development, we know some frameworks that can help us develop our software more efficiently and effectively. As for external factors that hinder development, we have possible power outages that could affect us since we mostly work with computers for development. The way to solve this would be to save all progress we have at all times, since due to a sudden power outage, if we do not save we can lose all the information.* |

1. **PART II**

| **4. Objectives** |
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| In this section you must define the 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 by themselves. It is suggested to write them using a verb in the infinitive, since this requires specifying specific actions. |

| General objective | *The general objectives of the project are:*   * *Being able to create software to help micro-businesses.* * *That the software is intuitive, easy to use for any user.* * *Make the interface eye-catching.* |
| --- | --- |
| Specific objectives | *The specific objectives would be:*  *Create tags to better filter categories and products.*  *Add a contact method so that the customer can contact the seller.*  *That the software has the necessary security.*  *Each type of company will be classified differently, to maintain order within the software and make it easier for customers to find what type of company they need to obtain their products.* |

| **5. Methodology** |
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| In the following 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 |
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| *We will use the agile Kanban methodology by creating a Kanban Board to show all the tasks we need to perform, within the development of the ATP project. The Trello tool will be key to documenting our work methodology:*  ***Agile Kanban methodology:*** *for the efficient management of the development of our marketplace. We will use a Kanban board to visualize and manage all the tasks required during the project lifecycle. This methodology will allow high flexibility and visibility in the progress of the work.*  *To document and manage the workflow, we will use Trello as a key tool. Trello will allow us to create and maintain an interactive Kanban board, making it easier to plan, track and update tasks. In addition, Trello will provide a collaborative platform where all team members can access documentation and task status in real time.*  *This agile methodology and the selected tools will ensure effective project management, allowing rapid adaptation to changes and fluid communication between team members.* |

| **6. Evidence** |
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| Next, describe what evidence will be assessed in the progress report and the final report of your APT project. This evidence must be agreed upon with your teacher. Evidence will be understood as the products 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)** | **Name of the evidence** | **Description** | **Justification** |
| --- | --- | --- | --- |
|  |  |  |  |
| Phase 1 | APT project definition. | Project definition. | To have a good basis for the further development of the project. |
| Phase 2 | Mockup Development. | At this point we will develop the mockups that we will use as a base to begin developing the project. | Mockups will be made to provide a visual order of what we will do. |
| Phase 2 | Prototype development. | This point will be the development of the prototype, a basic software in which some of its functions will be seen. | Development will begin, starting to develop the software prototype. |
| Phase 2 | Web part development | At this point the development of the website part of the project will take place. | Part of the project's website. |
| Phase 2 | Separation between customer and seller. | In this part, after creating the basics of the website, we will separate the permissions between common user and seller. | Because both will have different permissions and functionalities within the page. |
| Phase 2 | Mobile app development part. | At this point, the development of the mobile app part of the project will take place. | Mobile app part of the project. |
| Phase 2 | Separation between customer and seller. | In this part, after creating the basics of the mobile app, we will separate the permissions between the common user and the seller. | Because both will have different permissions and functionalities within the app. |
| Phase 2 | Web settings. | Basic settings, such as changing colors, themes, etc. | For visual reasons. |
| Phase 2 | App Settings. | Basic settings, such as changing colors, themes, etc. | For visual reasons. |
| Phase 2 | Development documentation. | Progress within the project is documented including code screenshots and technical explanations to help team members work. | Facilitates continuous assessment and identification of technical challenges. |
| Phase 2 | Functionality testing. | Results of tests performed on the software, including error identification and resolution. | Ensure that the final product is functional and meets established requirements. |
| Phase 3 | Final presentation of the project | Final presentation of the project | The final finished project will be presented here |
| Phase 3 | Final project report | Final document summarizing all the work carried out, including the analysis of the results and conclusions. | It provides a global vision of the project and evidences its impact and viability. |

| **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 |
|  |  | *.* |  |  |  |  |
| *Analyze the requirements that our project needs* | *Requirements analysis and software design* | *Move forward on project requirements to build a good foundation* | *Word or drive to advance in the report* | *2 weeks* | *Both* | *One of the facilitators of this process is the so de drive, to move forward together* |
| *Develop the website part of the software* | *Web system development* | *In this activity the web part of the project will be developed, we will have to choose the framework that we will use.* | *Multi-platform development tools flutter and dart to develop both mobile and web* | *1 week* | *Jocelyn Navarro* | *There are different frameworks that can make creating a website easier.* |
| *Develop the software as a mobile application* | *Mobile application development* | *In this activity we will develop the mobile app part of the project, we will have to choose the framework that we will use.* | *Mobile development tools such as Flutter and dart or React Native.* | *2 weeks* | *Cesar Negrete* | *There are different frameworks that can make it easier to create your mobile app.* |
| *Perform different tests to avoid errors* | *Testing and validation* | *In this part, the different tests will be done both on PC for the web part and on cell phone for the mobile application part.* | *PC and mobile devices for testing* | *1 week* | *Jocelyn Navarro* | *One of the difficulties that can be found at this point are bugs and problems with the code.* |
| *Completion and implementation* | *Implementation* | *Project implementation* | *Hosting servers for implementation.* | *1 week* | *Cesar Negrete* |  |

| **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. | **A** | **A** | **A** | **A** |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| Mockup Development. |  |  |  |  | **J** |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| Prototype development. |  |  |  |  | **C** |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| Web part development |  |  |  |  |  | **J** | **J** |  |  |  |  |  |  |  |  |  | |  |  |
| Separation between customer and seller. |  |  |  |  |  |  |  | **J** |  |  |  |  |  |  |  |  | |  |  |
| Mobile app development part. |  |  |  |  |  |  |  |  | **C** | **C** |  |  |  |  |  |  | |  |  |
| Separation between customer and seller. |  |  |  |  |  |  |  |  |  |  | **C** |  |  |  |  |  | |  |  |
| Web settings. |  |  |  |  |  |  |  |  |  |  |  | **C** |  |  |  |  | |  |  |
| App Settings. |  |  |  |  |  |  |  |  |  |  |  |  | **A** |  |  |  | |  |  |
| Development documentation. |  |  |  |  |  |  |  |  |  |  |  |  |  | **A** |  |  | |  |  |
| Functionality testing. |  |  |  |  |  |  |  |  |  |  |  |  |  | **A** |  |  | |  |  |
| Final presentation of the project |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **A** | |  |  |
| Final project report |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **A** | |  |  |

A=Both

J= Jocelyn

C= Cesar

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)