LinkedUD is a program designed for individuals seeking to find employment quickly and efficiently, through a scalable program with multiple functionalities that aid in visualizing potential jobs in a simple manner. Through LinkedUD, users can create either candidate or employer profiles, apply to various jobs, create job listings, and accept or reject different applicants who apply to those listings.

Our application is developed in response to the increasing unemployment rates in the country and the challenges users face in finding suitable job opportunities in terms of salary, contract type, and work hours. With this application, we aim to mitigate the effects of this phenomenon by creating a platform where all available job vacancies are stored according to your professional field and geographic location. This allows our users to filter job offers more quickly compared to traditional, physical methods of job searching. LinkedUD offers a different way to apply to jobs you are interested in, providing the opportunity to create a resume that can attract employers in your professional field or similar fields.

To fulfill the program's purpose, our application is divided into various interfaces that allow users to navigate through the program's functionalities. The main objective in developing user interfaces is to make them intuitive and easy to understand for users. We will develop various aids to help users understand our application and the purpose of each graphical section in the application. Additionally, depending on the graphical interface the user is in, they can access different functions that the program offers, such as modifying profile information, applying to job listings, viewing different job offers, and receiving notifications about the status of job applications.

The application development involves various programming methods, starting with system analysis and design, where user stories and project requirements were outlined, as well as possible interfaces with which the user will interact with the program. After this, the entire project was diagrammed to accurately define the classes, objects, and methods that will contribute to achieving the project's purpose. Additionally, with the project's schematization, we can identify the expected results of the methods, add project business rules, and monitor the object's status as the program progresses. After this process, development of the backend and frontend of the project will begin, which correspond to the business logic and graphical

interfaces, respectively. These two branches are fundamental parts of our system, along with a small database schema where relevant information about the classes and objects is stored. With these three aspects and with existing information in the database, we can perform unit tests that will help visualize the results of each method and compare them with the expected results outlined at the beginning of the project and in its diagramming. For this, we will rely on software programs like Python and its "faker" library, which allows us to create fake information for the objects that we pass as parameters. After our program successfully passes unit tests, we can launch our project for end users to use and take advantage of the functionalities it offers, without neglecting the support and maintenance that will be provided to the application to address any errors encountered by the user.

In conclusion, this application seeks to meet the needs of a large group of potential users who are those seeking to apply for a new job or change their current employment. Therefore, a problem that may arise is related to the scalability of the project and the flow of people who are active simultaneously in our system. It is important to use graphical schemes to understand the limits of our program, as well as to help us choose the most appropriate tools for frontend, backend, and database management system development, and to help us prevent the mentioned problems with concurrent user access that may lead to data integrity, atomicity, and concurrency issues