2.2 Operating Environment

The operating environment of Trabaho PWeDe is what hardware, software, and connectivity requirements it would need to operate best. It basically outlines what is required at the development stage and the implementation stage itself to make the system work as efficient as possible, offering access and delivering the easiest user experience.

2.2.1 Hardware Requirements

The hardware parts of the Trabaho PWeDe platform play a large role in deciding upon the functionalities and performance aspects of the application. In the development stages, hardware should be more advanced so that the platform can be developed appropriately. In the implementation stage, the platform can function on less complex hardware and thus permit greater accessibility.

**Table 2: Hardware Recommendations**

| **Function Component** | **Development** | **Implementation** |
| --- | --- | --- |
| **Processor** | Intel Core i5 / AMD Ryzen 5 | Intel Core i3 / AMD Ryzen 3 or later |
| **RAM** | 16GB DDR4 | 8GB DDR4 |
| **Storage** | 256GB SSD | 128GB SSD |
| **Graphics** | Integrated Graphics | Integrated Graphics |
| **Screen Size** | 1920 x 1080 resolution or higher | 1920 x 1080 resolution or higher |

The development environment would be recommended for a higher hardware specification, which enables faster processing time and the ability to multisession with utmost efficaciousness while simultaneously running IDEs and testing real-time. The implementation environment provides more accessible specifications for the target users such as the PWDs. Such that the system will run efficiently in any of the devices.

2.2.2 Software Requirements

Software Requirements: The software for Trabaho PWeDe requirements must include all the tools needed to develop, deploy and maintain the application. This section reports on the options the development team decided to include the accessibility and usability needs for PWDs.

**Table 3: Software Recommendations**

| **Component** | **Software Tool** |
| --- | --- |
| **Code Editor** | Visual Studio Code, Sublime Text |
| **Operating System** | Windows 10, Windows 11 |
| **Programming Language** | PHP, MySQL, JavaScript, HTML, CSS |
| **Frameworks and Libraries** | jQuery, Bootstrap |
| **Server and Repository** | XAMPP, GitHub |
| **Communication Platform** | Discord, Microsoft Teams, Messenger |

Communication Platform:Discord, Microsoft Teams, Messenger The platform is developed with Windows operating systems because of its vast flexibility and compatibility with varied development tools. The coding IDE is Visual Studio Code as it allows multi-language and multi-framework development. For back-end development, the team has chosen PHP and MySQL because of their reliability and scalability. In this regard, Bootstrap and jQuery make the platform responsive and accessible across different mediums. XAMPP will take care of all the local servers, while GitHub will allow the code to upload and then be versioned from this shared space.

2.2.3 Connectivity Requirements

Stable, robust internet connectivity is the backbone in developing and implementing the Trabaho PWeDe. Furthermore, it is compatible with the most popularly used web browsers, thus making it easy and accessible for every able and disabled user to access and move around the platform with no obstacles.

**Table 4: Connectivity Recommendations**

| **Component** | **Specification** |
| --- | --- |
| **Internet Connection** | At least 5 MBps bandwidth |
| **Browsers** | Google Chrome, Mozilla Firefox, Microsoft Edge |

The platform requires the availability of high-speed Internet connectivity to permit users to browse online job boards, interact with fellow users, or engage in any kind of skill development workshop. Compatibility with the latest versions of Google Chrome, Mozilla Firefox, and Microsoft Edge is also required for the platform's successful run because these browsers offer better accessibility features such as screen readers and magnifiers that add benefits to the users with disabilities.