**InterElectron User Manual:**

**Introduction**

The InterElectron project solution that provides a structured framework for building and managing a .NET application. The application is running Version 1.0.2 of a user-specific setup, with a specific code commit (fee1edb8d6d72a0ddff41e5f71a671c23ed924b9) made on August 14, 2024. The software is running on a 64-bit Windows OS with build 10.0.22635.

**How to Set Up the Project**

* Step 1: Install Visual Studio

Ensure you have Visual Studio 2019 or higher installed. During installation, select the ".NET desktop development" workload.

* Step 2: Open the Solution

Open Visual Studio.

Go to File > Open > Project/Solution.

Browse to the folder containing the InterElectron\_Project.sln file and select it.

* Step 3: Configure the Build

By default, the solution is configured to build for Any CPU (32-bit or 64-bit systems).

You can select the desired configuration (Debug or Release) from the toolbar:

Debug: For development and debugging purposes.

Release: For optimized performance during deployment.

* Step 4: Build the Solution

Once the solution is loaded, build the solution by selecting Build > Build Solution from the menu or pressing Ctrl+Shift+B.

Check the Output Window to confirm that the build succeeded. Any errors or warnings will be displayed here.

**Running the Application**

**Debug Mode**

Set the solution configuration to Debug.

Click the Start Debugging button or press F5.

The application will launch, and you can interact with it while viewing debugging information in Visual Studio.

**Release Mode**

Set the solution configuration to Release.

Build the solution again to ensure all optimizations are applied.

The output can be deployed or packaged as necessary for production environments.

**Troubleshooting**

Common Build Issues

Missing .NET SDK: Ensure that you have the appropriate version of the .NET SDK installed.

Version Mismatch: If Visual Studio gives a version error, ensure you're using Visual Studio 2019 (Version 17.9) or later.

Permissions: Ensure you have the correct permissions to access all the project files, especially in corporate or restricted environments.

**Application layout and features description:**

1. File:

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| Login | Username – provide name  Password – provide a password  Login button – this button validates the input of the username and password and give the user access to the rest of the application or deny access to the application |
| Exit | The Exit button allows users to close the application safely. |

1. Maintenance:

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| Categories | This feature allows users to manage categories by providing functionality to search, add, edit, and display items within those categories. It uses a dictionary-based data structure and offers a simple command-line interface for user interaction. |
| Subcategory | This feature allows users to manage subcategories by providing functionality to search, add, edit, and display items within those subcategories. It uses a dictionary-based data structure and offers a simple command-line interface for user interaction. |
| Stock | This feature allows users to manage stock by providing functionality to search, add, edit, and display items. It uses a dictionary-based data structure and offers a simple command-line interface for user interaction. |
| Equipment | This feature allows users to manage equipment needed for call outs by providing functionality to search, add, edit, and display items. It uses a dictionary-based data structure and offers a simple command-line interface for user interaction. |

1. Administrator:

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| Sales | This feature allows users to efficiently manage client relationships and sales data. Users can search for specific clients by name to quickly access their information, including past sales and outstanding balances. Once a client is selected, the system displays all relevant sales transactions associated with that client, providing a detailed overview of items or services purchased, dates of transactions, and amounts paid. Additionally, the feature includes a payment calculation tool that estimates the total cost for new jobs or services required by the client. This ensures that users can easily manage client payments. |
| Jobs | This feature allows users to manage jobs effectively by providing comprehensive tools for handling job data. Users can search for specific jobs using various criteria such as job ID. The system displays detailed information for each job, including the start date, end date, job type (e.g., upgrade, installation, repair). Additionally, users can add new jobs to the system by specifying the necessary details, such as job type, start and end dates, and associated client. The feature also allows users to edit existing jobs, making it easy to update job details as needed, ensuring that the job information is always accurate and up to date. |

1. Administrator

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| Employees | This feature enables users to effectively manage employee records by tracking essential information. Users can maintain detailed employee profiles that include personal information such as name, contact details, start date, and employment status (active or inactive). The system allows users to easily add new employees by entering all relevant details, ensuring that the database is up to date from the start. Additionally, users can edit existing employee records, making it simple to update personal information or change the employment status, providing an accurate and current overview of all employees within the organization. |
| Clients | This feature enables users to effectively manage client records by tracking essential information. Users can maintain detailed client profiles that include information such as business name, contact details, address, and client status (active or inactive). The system allows users to easily add new clients by entering all relevant details, ensuring that the database is up to date from the start. Additionally, users can edit existing client records, making it simple to update information or change the client status, providing an accurate and current overview of all clients. |
| Reports | This feature empowers users to generate comprehensive reports on various aspects of the business, including clients, stock, employees, sales, jobs, and equipment. Users can select the specific area they want the report to focus on, such as a detailed sales report or an inventory overview. Within each selected area, the user can search for specific data and apply sorting criteria, like sorting sales by date, clients by name, or jobs by status. Once the desired parameters are set, the user can generate the report with a single click. The report is then displayed, providing a clear and organized view of the selected data, which can be used for analysis, decision-making, or record-keeping. |

1. Help:

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| About | This indicates that the application is running Version 1.0.2 of a user-specific setup, with a specific code commit (fee1edb8d6d72a0ddff41e5f71a671c23ed924b9) made on August 14, 2024. The software is running on a 64-bit Windows OS with build 10.0.22635. |
| Documentation | A link to the project's GitHub repository has been included in the application, providing access to all necessary information such as code, documentation, and updates. Users can visit the GitHub page for detailed instructions, issue tracking, and collaboration opportunities. |