SOFTWARE DESIGN ENGINEER

Job Title: Software Design Engineer   Reports To: Engineering Manager
Department: Engineering   FLSA Status: Salaried (Exempt)

Position Summary:
The Software Design Engineer plays a significant role during the design and implementation of the technological solution for our clients.

General Duties and Responsibilities:
The following list of duties and responsibilities is not all inclusive and may be modified to include other duties and responsibilities as management may deem necessary for the benefit of the business.

- A Software Designer must have experience or training in one or more of the following: systems integration and development, package implementation, knowledge of multiple technologies and relational databases, user-centered analysis and evaluation techniques, and interactive design.

- A Software Designer is involved in ensuring a quality technical design that satisfies the business requirements of the client. To do this, a Software Designer must have creativity and innovation and the ability to abstract detail into larger patterns. It is also important for a Software Designer to understand how the disciplines work together to provide a complete solution for our clients.

- A Software Designer is often involved in package evaluations and recommendations, communicating the technological details of the project to the business users and workshops with the clients. Software Designer also participates in gathering business requirements and assessing existing architectures and resources.

- Plugins developed will include physical device controls, data services, process areas, plan generators, data storage and presentation entities with XAML UI, XAML UI components, and more.

- Eventually, a Software Designer will provide leadership to the team by taking responsibility for a specific component or track of the project architecture. By taking on this level of responsibility, a Software Designer spends more time overseeing the tasks required to implement a solution rather than performing the tasks directly. This includes planning, estimation, resource management, issue resolution and quality assurance. A Software Designer is also responsible for coordinating and communicating with the other tracks and disciplines involved in the project.

- Initial training period would involve several months working in QA to evaluate, test, and learn the Repete FLX product, how it works and how it is to be implemented. This experience allows our engineers to move into engineering with a great understanding of what our product does, and how and why it is supposed to work.

General Skills and Abilities:

- Understands the abilities and can perform the task of any team member
- A general technical aptitude with the willingness and ability to learn and be self-sufficient with the customer skillset, standards, requirements, and product.

Design Skills:

- Take specification for a plugin and implement a fully functional plugin with automated tests to verify the plugin's functionality.
- Translates a higher-level specification into a more detailed specification that reflects the actual implementation detail.
- Challenges plugin definition when it seems deficient, dysfunctional, or counter to the customer standards.
- Able to think critically about the design of a plugin to seek out, create tests for, and remedy deficiencies.
- Utilizes their understanding of OO design principles in creating custom software solutions or modifying package solutions
- Applies their understanding of the limits of the tools being used and discusses the tradeoffs in the design phase vs. implementation
- Owns the design of a module
- Manages dependencies across other modules

Business Acumen

- Translates the client's business requirements into plugin/systems design.
- Challenges business design when appropriate. Offers creative alternatives regarding business design

Development Skills

- Follows code standards and styles.
- Comments code well.
- Favors shorter simpler lines of code over longer lines of code.
- Writes high quality code
- Strives for a deep understanding and expertise with the tools being used
- Effectively debugs code
- Sets standards for the team
- Identifies problem areas in their module and actively works to fix them

Lifecycle Experience

- Leverages their knowledge of the different stages of the software life cycle
- Utilizes the deliverables from other disciplines and phases

Project Processes

- Understands and promotes the value of project processes
- Establishes processes on a new project
- Understands, defines and assesses completeness of work

Language Skills

- Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, governmental regulations, and electronic correspondence.
- Ability to effectively present information and respond to questions, both written and verbal, from groups of managers, customers, vendors, and the general public.
- Able to understand automation terminology and language.
- Particular skill in English on the areas of understanding, questioning, and explaining the concepts of plugins and their components.
- Communicates difficult scenarios to the client
- Facilitates with team and client meetings

Physical Demands / Work Environment

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee is regularly required to sit; use hands to finger, handle, or touch objects, tools, or controls; and talk or hear.
- The employee is frequently required to stand, walk, stoop, bend, and reach above shoulders.
- The employee must occasionally lift and/or move up to 50 pounds of computer equipment and cable.
- The employee is expected to work 45 hours per week, Monday through Friday, unless other arrangements are made with management.
- The employee may be required to work after/before hours and/or weekend/holiday hours if demanded by the nature of the work.
- The employee may be occasionally required to be "on call" during non-work hours for an extended period of time.
- The employee may rarely be required to perform work-related travel, possibly including overnight. During the initial training period, more travel may be required.