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| Project Proposal | CPSC 471 – Group 2   |  |  | | --- | --- | | Project title: | A Database System for an industrial and hazardous location outdoor LED lighting solutions company | | Project Time-frame: | January 8, 2018 – April 15, 2018 | | Prepared by: | Jason De Boer  Vishaal Bakshi  Hassan Chaudhry  Sladana Kovacevic |   Introduction   |  |  | | --- | --- | | Definitions | Company – A company designing and manufacturing industrial and hazardous location outdoor LED lightning solutions  Customers – Company’s clients  Vendors – Suppliers from whom the Company orders necessary parts and inventory needed for the new products  Project & Engineering Department – Company Department responsible for project management, design and manufacturing  Risk Management Department (RMD) – Company Department responsible for xxxxxxxxxxx | | Detected problem | The Company requires efficient Inventory management system and Project management system. Potential additional request is the Employee payroll system. | | Proposed solution | Building a Database System that will ensure effective and operative inventory management system, prompt customer order request handling (including issuing of quotes, followed by the final invoicing) and project management system that will respond to Customer’s requests in timely and efficient manner.  Possible additional features:   * Employee Payroll system |   Problem Definition   |  | | --- | | The Company necessitates the efficient and effective inventory management system. Maintaining excessive inventory is costly and not desirable for the Company, as well as encountering product deficit at the time of the Customer’s order placement. With that said, efficient inventory management is one of the crucial features of a successful business process.  We found this problem interesting as creating a database system that will support maintenance of Company’s diverse products, efficient quote handling that includes Project & Engineering department involvement is a complex task as it requires employees from various departments to coordinate their project inventory needs efficiently with Vendors. At the same time Customer needs must be met in a timely manner or the company risks losing business. Vendors must be provided with orders so that the inventory is never depleted.  Currently, Data systems exist where employees and suppliers use relational models to manage inventory according to their project and customer needs. The smaller improvements to the current solution would not bring a substantial added value to the Company. Therefore, the Company is looking forward to a new, functionally improved, user friendly system that will connect all the business process parties and ensure the smooth process flow. |   Proposed Solution   |  | | --- | | The project shall produce a Database System that enables the Company to manage inventory efficiently. The Company will have a working database system and software that ensures cost effective inventory management.  Collaboration with Vendors will be supported by managing timely order placements to Vendors, which will ensure having available inventory for Customers, as well as for the Project and Engineering department when building the new solutions for Customers.  In addition, as the large part of the company’s business is to come up with the innovative solutions for the new or existing Customers, involvement of the Project and Engineering Department, and potentially RMD department in the inventory management process will be necessary.  In addition, the project will create the Company’s website that will ensure unique experience for its Customers. The focus will be on the user-friendly, easy navigating solution, that will facilitate Customer’s needs in a timely and efficient manner.  The product catalog will ensure well organized and appropriately presented products which features could easily be understood by the Customers. This will enable finding the best possible solution for the Customer requirements. |   Motivation   |  | | --- | | A Database System we are planning to develop and implement will solve a complex problem for a given industry. This Database System will not cover the standard customer order processing and supplies procurement in everyday fashion, but will be unique in having the Project and Engineering department as well as RMD department involvement in the Customer order processing and generating of Quotes and price estimates.  The solution can potentially afterwards be offered and implemented in other similar industry companies. |   Conclusion   |  | | --- | | As the Company requires efficient Inventory and Project management system, we are committed to developing the Database System that will enable and ensure the cost-effective inventory management.  Co-operation with Vendors is one of the important features that will ensure maintaining sufficient inventory.  Involvement of the Project and Engineering team in order processing and quote generating, which is affecting the inventory management at the same time, is the unique feature that we are planning to incorporate.  If effectively implemented, the solution can be later tailored to and adopted by the comparable industry companies.   * *Provide an estimated timeline of project deliverables and important dates.* | |