# Project Proposal[1] : "*GotoGro" MRM System*

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## Solution Direction

*We are working with a grocery store to help them build their digitized members record system. To come up with a solution for this problem I would be working with the 3 tier Client-Server architecture. I also considered the MVC Architecture but that would be a better choice for an e-commerce website. Since our problem domain deals with a database-oriented management system with fixed number of client-side PCs are better off using the Client-Server Architecture.*

### Rationale for choosing Client-Server Architecture:

*Further analysis of the problem suggests that we have a limited number of clients (Management Team) that are going to check and modify the records. We are not working with an e-commerce website that allows the customers to place orders rather it allows the store management team to add/remove new customer members and check their previous purchases. Therefore, if we have a back-end relational database which will keep all the records required by the store and present them whenever they are requested by the client it would be the best solution.*
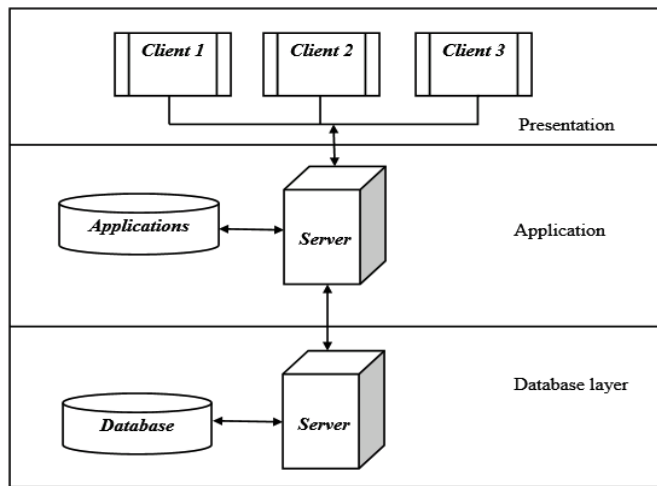
### KoST analysis

<u>*Knowledge*</u>*: We are working to build a database-oriented record management application that stores and displays the customer information records and their sales records.*

<u>*Skill*</u>*: I have the following skills that will aid the development of the application.*

- *Front-end development with HTML, CSS, VanillaJS*
- *Back-end development with PHP and JavaScript*
- *Database management with MySQL and MariaDB*
- *Nginx server management*

<u>*Technology*</u>*: Client-Server solutions are very popular because of their simplicity and ease of maintenance. It also provides possibility for real-time systems to be built. ATM machines are good example of Client-Server architecture which are also interactive.*

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[1] This document is by no means a "full project proposal". It has been simplified and customized for the purposes of SWE30010 teaching. The full project proposal includes many other sections which have not been discussed during the first few weeks of SWE30010 teaching.

*Design Overview for 3-Tier Client-Server Architecture*