**Warehouse Stock Control System** **Concept Design**

**Five Sub-Systems:**  
**Receivals**, scan barcode, add items to current stock  
**Stock-take**, rolling stocktake, every X week print X amount of bays to be checked by stock controller and report the actual amounts. If actual amount differs from expected amount further reports are printed regarding the specific stock  
**Despatch**, when invoice printed items removed from stock  
**Purchasing**, when stock goes below X amount print purchasing request to be viewed by a purchasing manager  
**Database:** Stock would all be stored within a database, also more details required such as suppliers and potentially customers depending the scope of the project.

**Type of systems:**Control(Controls stock and generates reports as required) and Prediction(Predicting amount of stock needed)

**Where to implement AI/ML:**Predictions of stock would require a machine to understand the amounts sold of different stock and such  
A system to help with organising stock storage, provide the system with a warehouse map, such as X amount of bays with Y dimensions, then each stock needs H/L/W and weight.

**Potential scope broadening:**Has further implementation or ability to broaden scope by bringing in receivals/despatch or to create a more intense AI stock-system by having some kind of image recognition for stock in the bays.  
System also has the potential to generate reports for CEO’s and such to see what stock isn’t moving or is moving etc. Further has the potential to link clients to products to generate reports that analyse the type of stock a specific client is buying and find potential items they could want.

**Notes:**System needs a way to bypass the cycling count and manually print if required  
  
Needs a way to override purchasing orders and manually create the own if required, maybe restrict to have a reasoning PO  
  
Ability to add new items  
  
Ability to clean up old items  
  
The system needs to be able to actively calculate amounts expected to be sold over say 3 months. But also needs to be able to recognise seasonal amounts, such as Gatorade in the summer months.

Project Management: Start a basic Microsoft project  
Version Control: Git/Google Drive  
Collaboration: Google Drive  
Communication: Discord