

System Vision Document

Problem Description

Maret Sofia has her own business and she needs a website to help her manage her business. Currently she uses Magento CMS but which doesn't offer much help in inventory management. This system should be able to provide reports on what have been sold and insights regarding what blocks should be prepared.

System Capacities

- Keep track of the inventory on her quilt blocks
- Able to generate reports in terms of weeks
- Record sales of kits and blocks
- Update the values of system
- Provide insights of stock level
- Connecting via WIFI to transmit data
- Communicating with Magento

Application Benefits

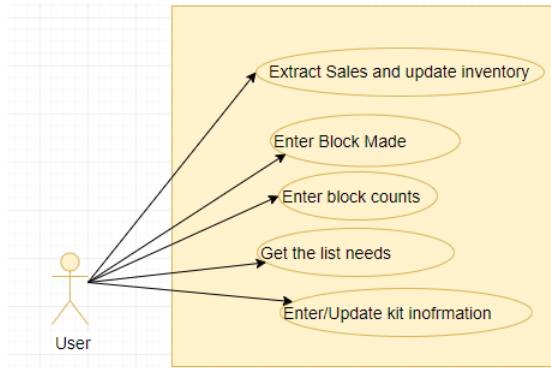
- A systematic platform to manage her business
- Facilitate aunt's decision makings on material preparation, etc.

I think One System is enough.

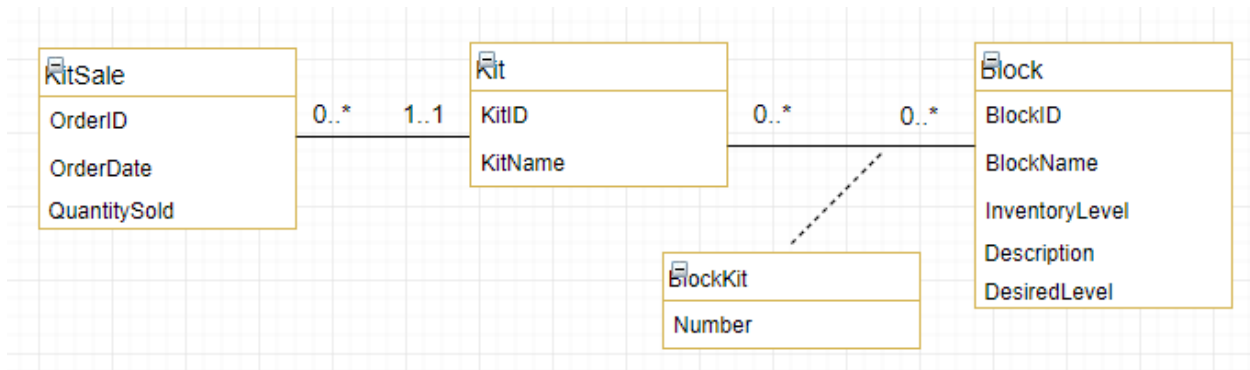
A list of user cases

| Use Case | Description |
|------------------------------------|--|
| Extract Sales and update inventory | Maret would see sales and check inventory on a regular basis |
| Enter block made | Maret would know how many block was sold Monday |
| Enter block counts | Maret would know the number of blocks in inventory |
| Get the list needs | Maret wants to know the list of products she should buy |
| Enter/update kit information | Record or update kit information |

User case diagram



Domain class diagram



CRUD

| Use Case | Kit | Block | BlockKit | KitSale |
|------------------------------------|-----|-------|----------|---------|
| Extract Sales and update inventory | R | U | | CR |
| Enter block made | | RU | R | |
| Enter block counts | | RU | | |
| Get the list needs | | R | | |
| Enter/update kit information | CU | | CU | |

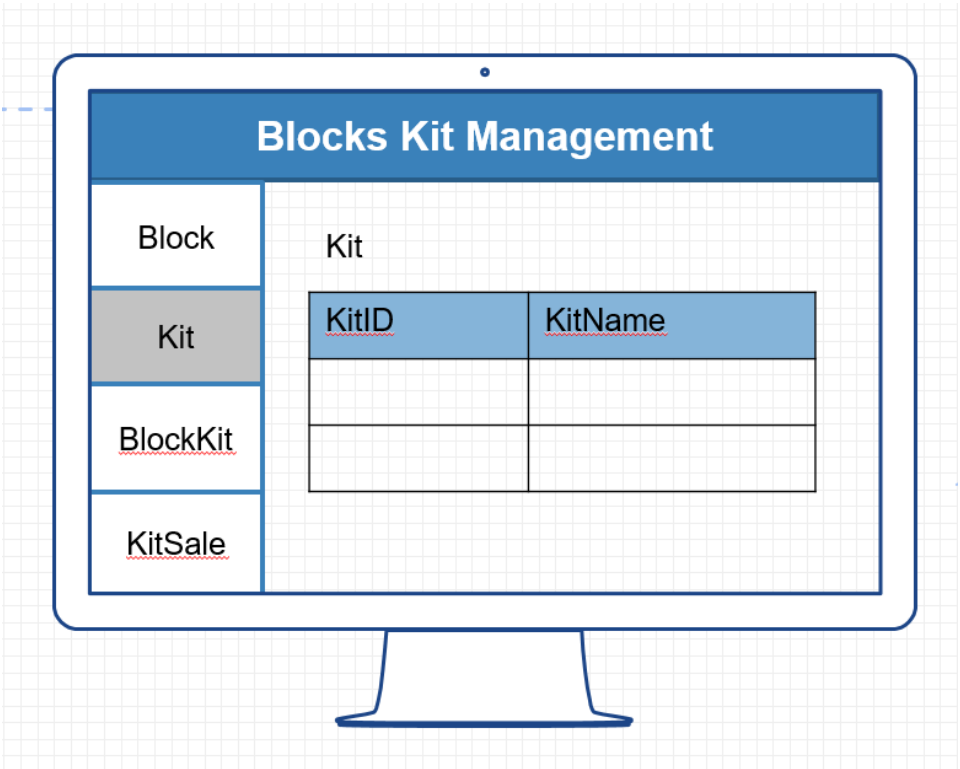
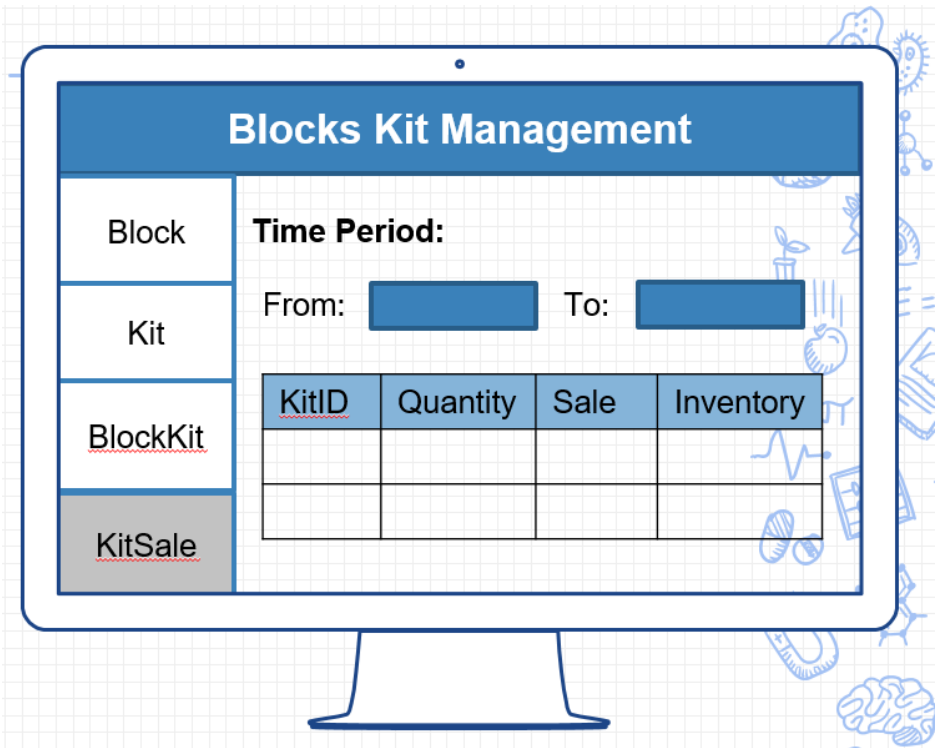
Fully defined use cases

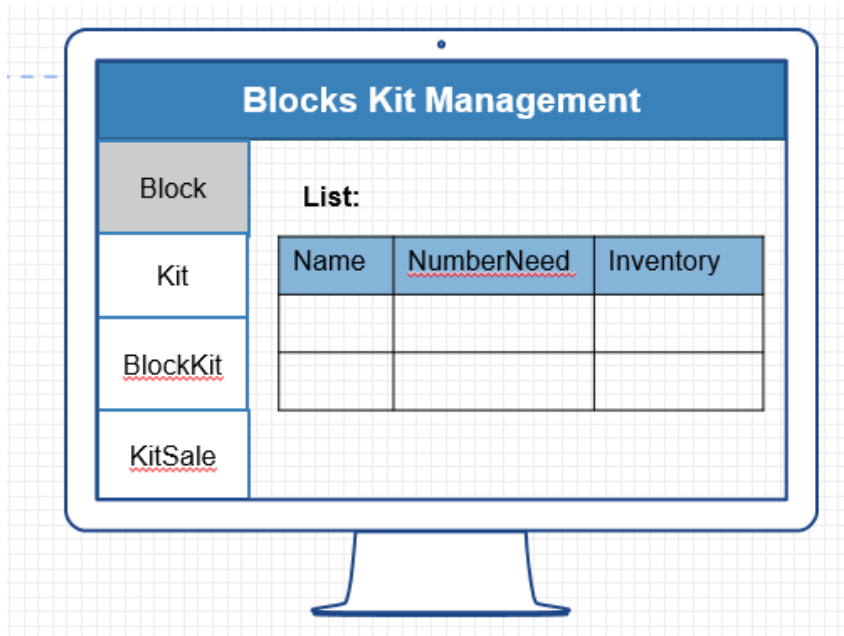
| | | |
|------------------------------|---|--|
| Use case name: | Extract Sales and update inventory | |
| Scenario: | Maret wants to extract sales of previous week | |
| Triggering event: | Maret want to know the sales of last week and manage inventory | |
| Brief description: | By knowing sales of prior week, it could help tell the amount of kit that has been sold before. | |
| Actors: | Maret | |
| Related use cases: | | |
| Stakeholders: | Maret | |
| Preconditions: | The date was also recorded in the system. | |
| Postconditions: | Maret could know how many of each kit was sold last week. | |
| Flow of activities | Actor | System |
| | Enter period that she wishes to know sales | Provide summary of block kit sales of previous week. |
| Exception conditions: | | |

| | | |
|------------------------------|--|---|
| Use case name: | Get list needs | |
| Scenario: | Maret hopes to get a shopping list | |
| Triggering event: | Maret wants to buy something | |
| Brief description: | Maret hopes to get shopping list for shopping. | |
| Actors: | Maret | |
| Related use cases: | Update inventory | |
| Stakeholders: | Maret | |
| Preconditions: | There has recorded inventory in system. | |
| Postconditions: | Maret gets a shopping list. | |
| Flow of activities | Actor | System |
| | Maret clicks to get a report that should be purchased next week. | System returns a list of products that should be purchased. |
| Exception conditions: | | |

| | | |
|------------------------------|---|--|
| Use case name: | Enter/Update kit information | |
| Scenario: | Create new or change the information of kit | |
| Triggering event: | New information of kit is available | |
| Brief description: | When new information of kit is available, the information of kit should be updated. | |
| Actors: | Maret | |
| Related use cases: | | |
| Stakeholders: | Maret | |
| Preconditions: | Relevant information is in the system. | |
| Postconditions: | New information is in the system. | |
| Flow of activities | Actor | System |
| | Maret wants to record new information of kits in the system. | New information is stored in the system. |
| Exception conditions: | | |

Storyboard





Database Design

| Table | Fields |
|----------|---|
| Kitsale | OrderID , <i>KitID</i> , Orderdate, QuantitySold |
| Kit | KitID , KitName |
| Block | BlockID , BlockName, InventoryLevel, DesiredLevel, Description |
| Blockkit | KitBlockID , <i>KitID</i> , Number |

Architecture Diagram

