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Model Digital Shoppinglist

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Model Introduction

Model Specification>Documentation

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Created: 10/24/22 4:29 PM.
Title: Digital shopping list
Comment:
This model represent the conceptual design of a digital shopping were users can ether manually on a tablet or via an app. In an home with multiple students, it becomes difficult to know what products the households need, who eats at home and to bill other users when you do groceries. This model has the function of adding products, changing notes, bill other users. All these different functions will be presented on a tablet or on an app of the smartphone of the user. This concept model contains an use case diagram, with all the functions. But also a BDD and IDB to furthermore explain the parts of the model.

All Project Diagrams

1. Connecting with Input

Diagram Specification>Documentation
In: Concept Model.Connecting with Input

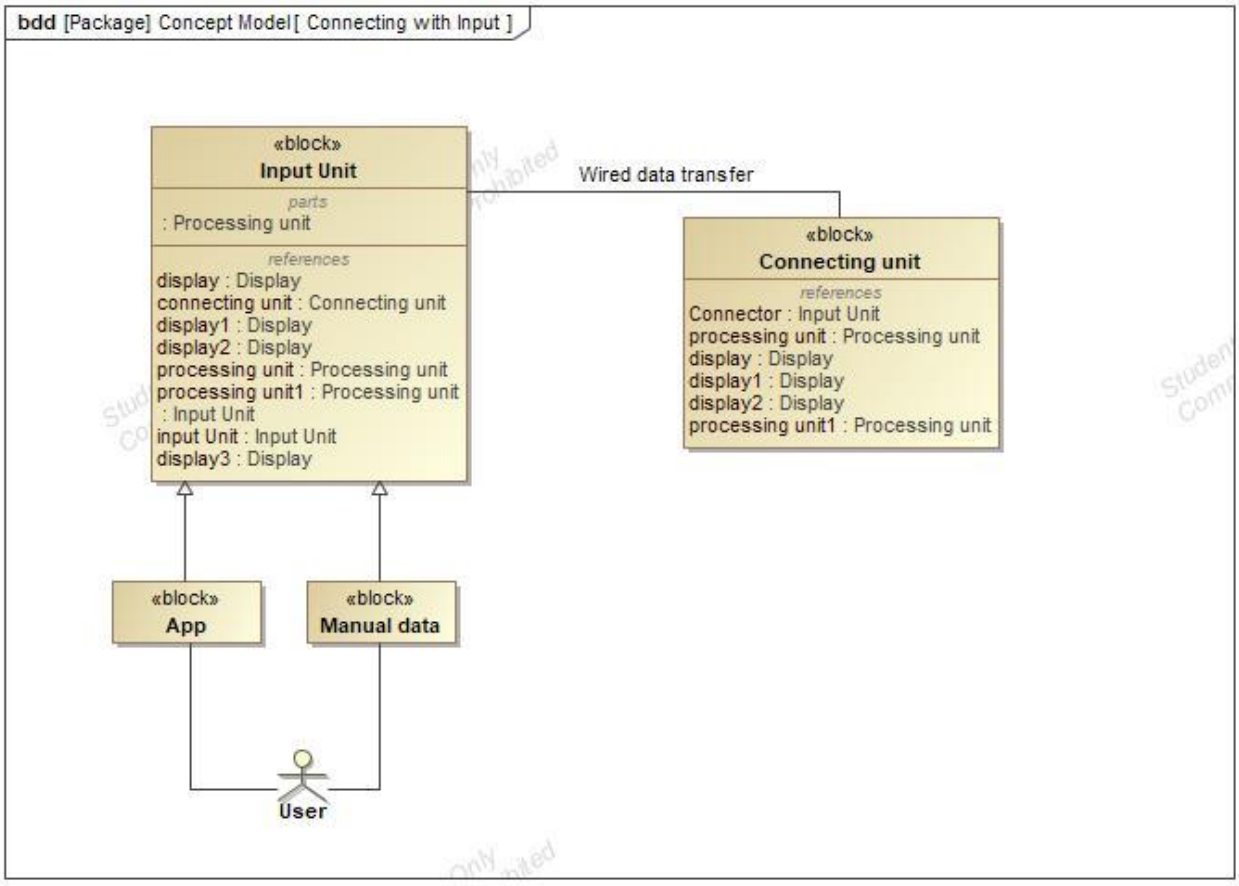


Figure 1 Diagram Connecting with Input

2. Use Case Diagram

Diagram Specification>Documentation
In: Concept Model.Use Case Diagram

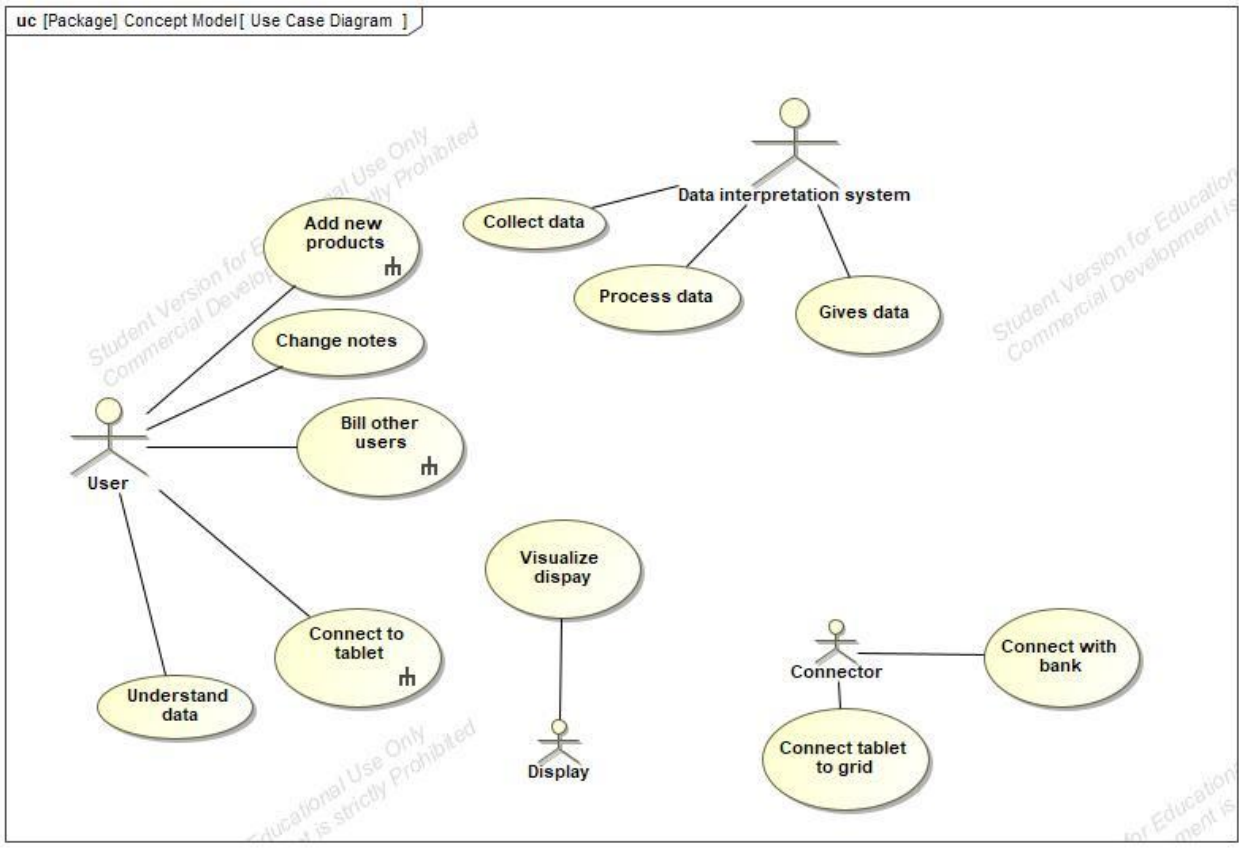


Figure 2 Diagram Use Case Diagram

3. Bill other users

Diagram Specification>Documentation
In: Concept Model.Bill other users.Bill other users.Bill other users

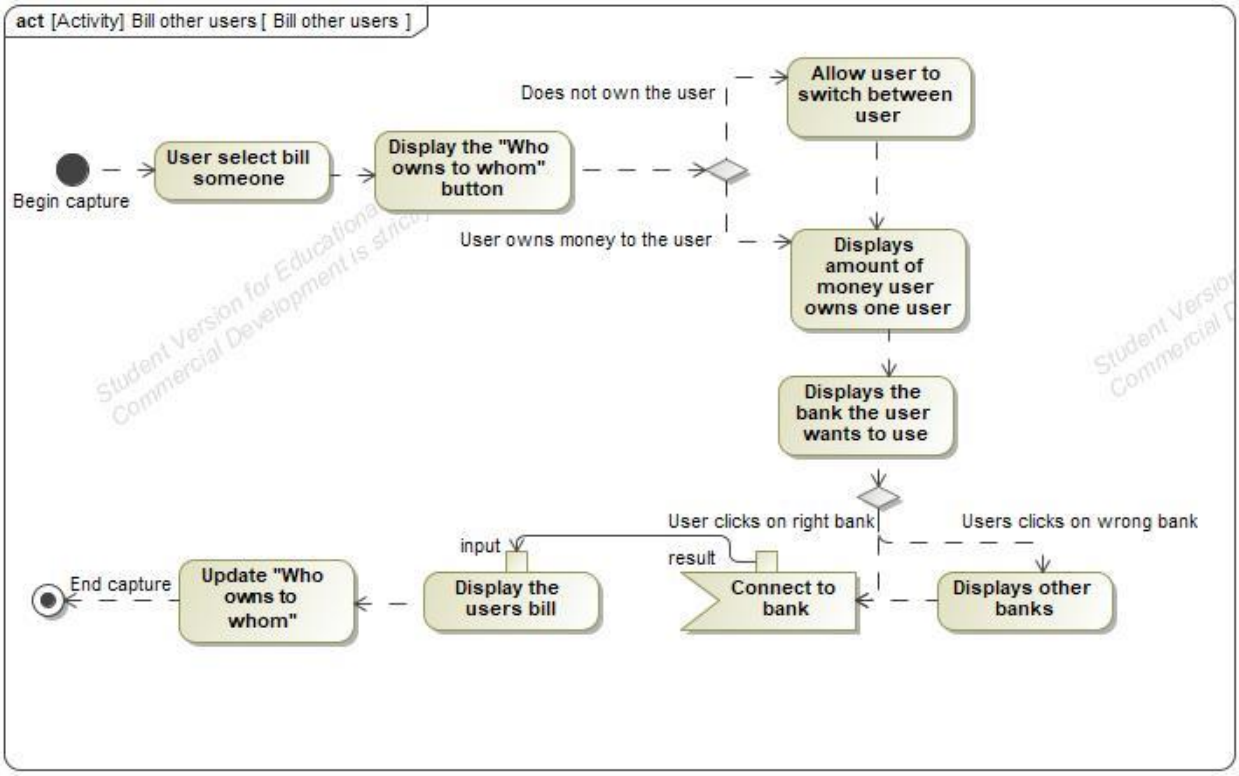


Figure 3 Diagram Bill other users

4. Internal Block Diagram of the Tablet

Diagram Specification>Documentation
In: Concept Model.Data.Tablet concept.Internal Block Diagram of the Tablet

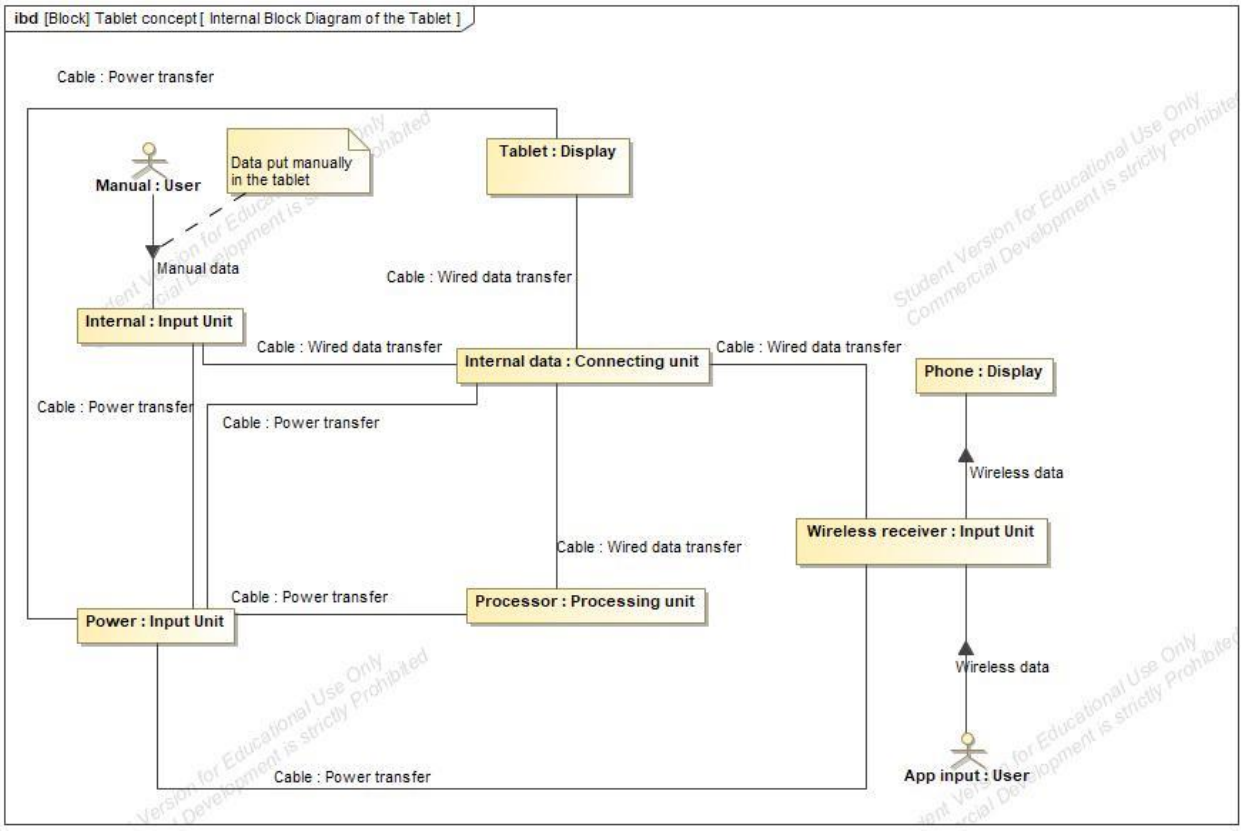


Figure 4 Diagram Internal Block Diagram of the Tablet

5. Add new products

Diagram Specification>Documentation
In: Concept Model.Add new products.Add new products.Add new products

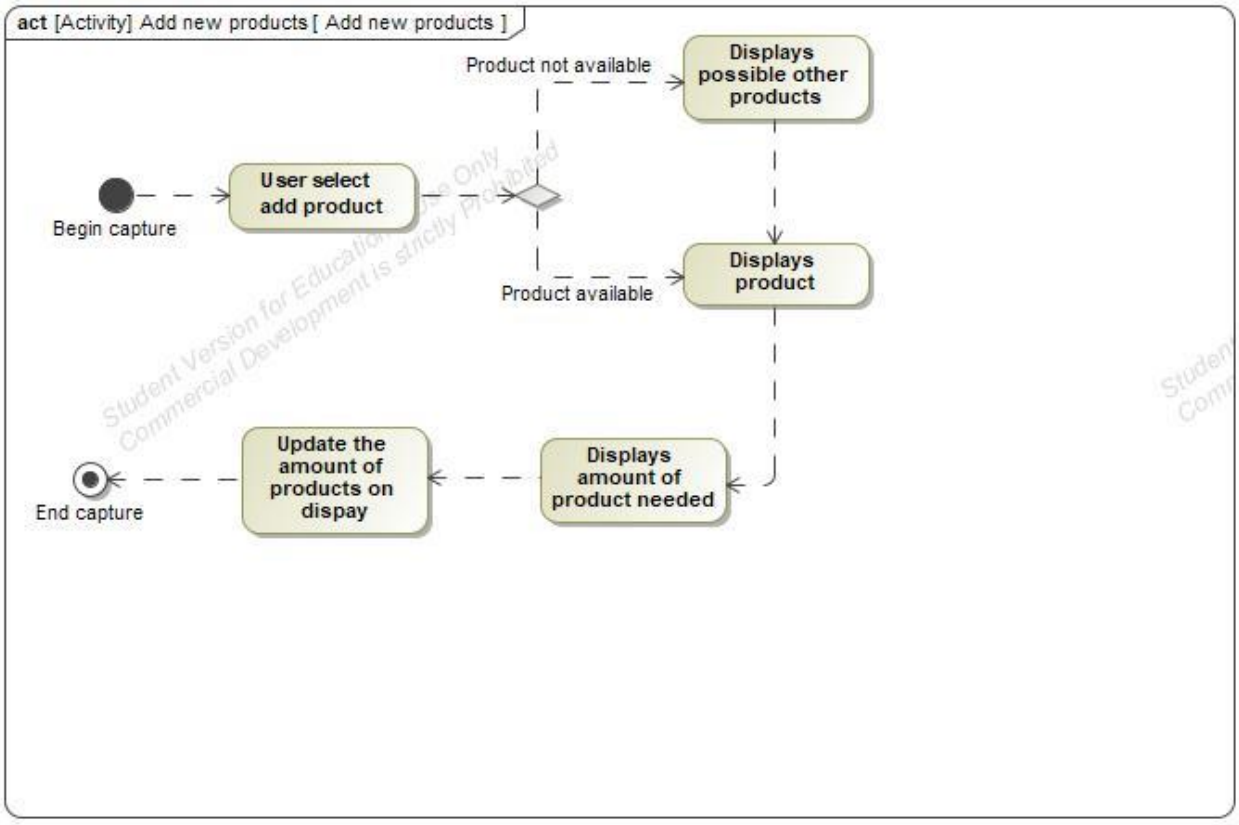


Figure 5 Diagram Add new products

6. Connect to tablet user

Diagram Specification>Documentation
In: Concept Model.Connect to tablet.Connect to tablet user.Connect to tablet user

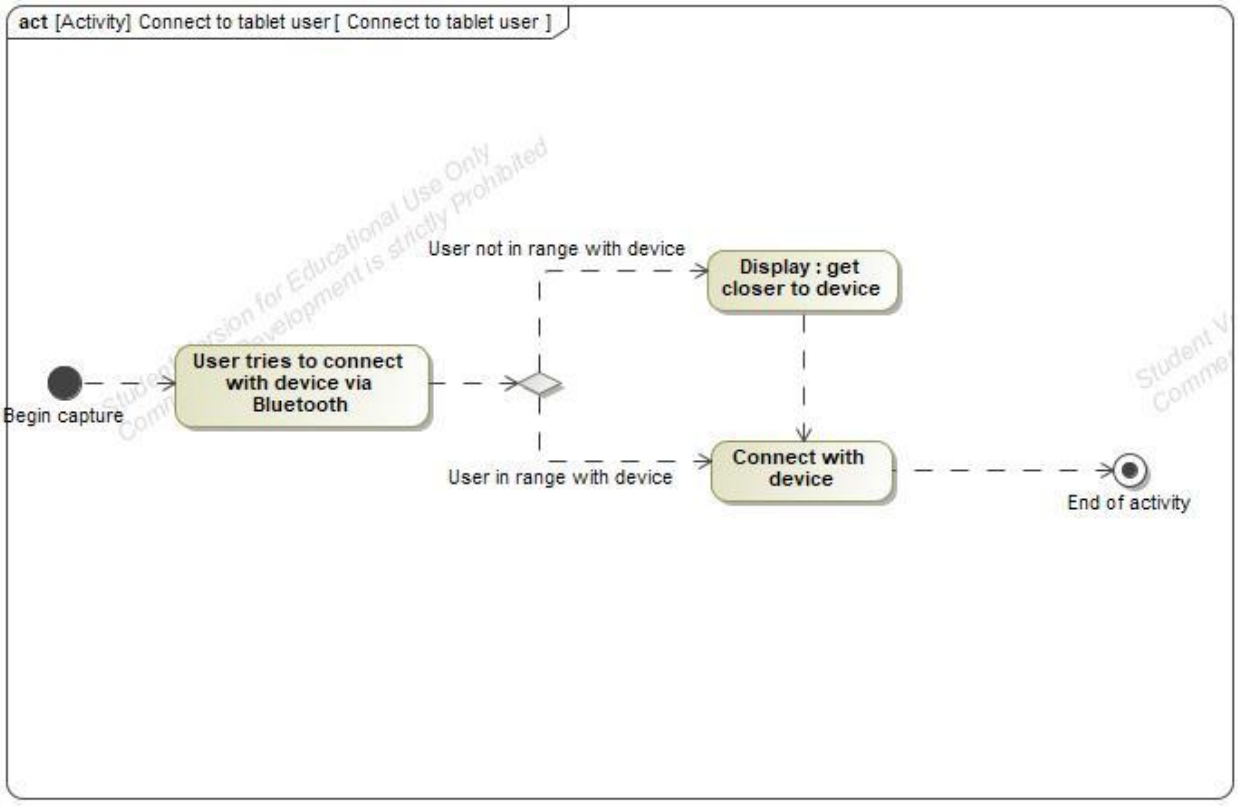


Figure 6 Diagram Connect to tablet user

7. IBD of the tablet with pictures

Diagram Specification>Documentation
In: Concept Model.Data.Tablet concept.IBD of the tablet with pictures

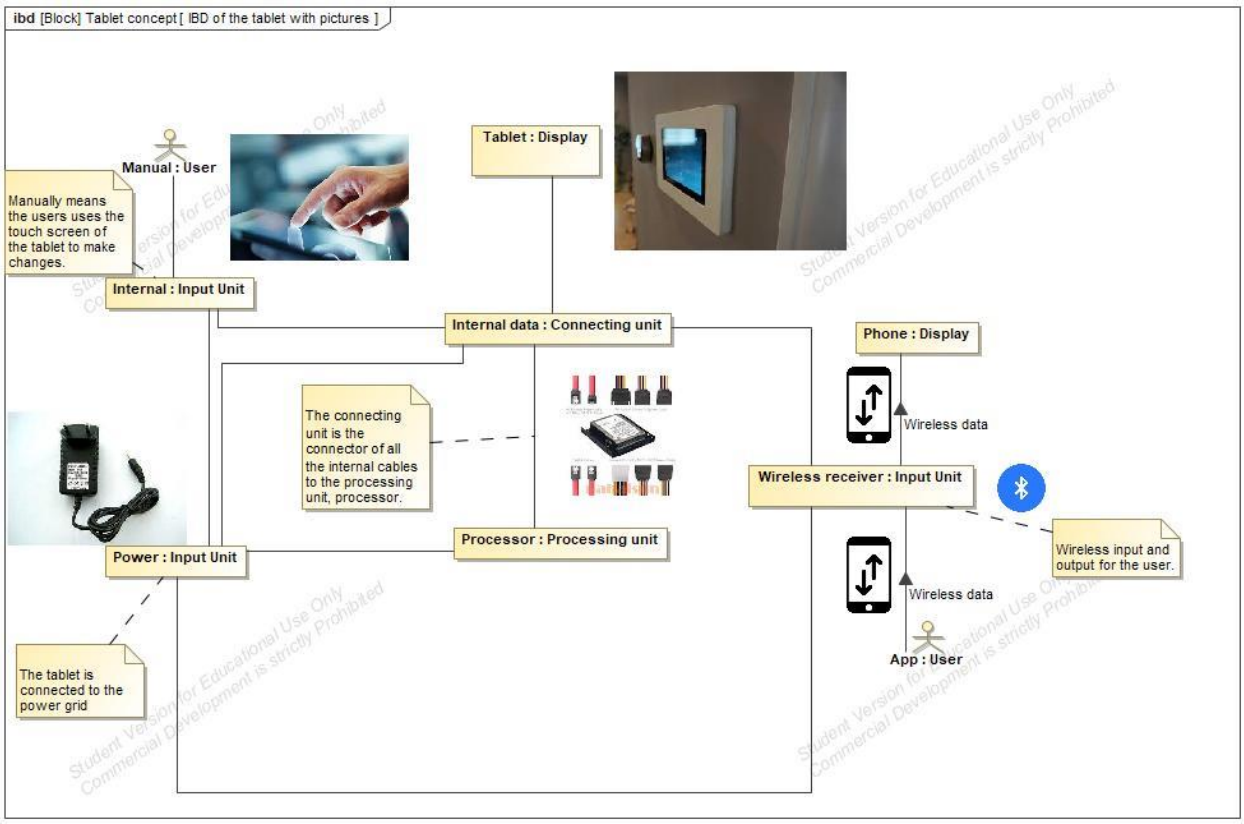


Figure 7 Diagram IBD of the tablet with pictures

8. Proof of Concepts Allocation Matrices

Diagram Specification>Documentation
In: Proof of Concepts.Proof of Concepts Allocation Matrices

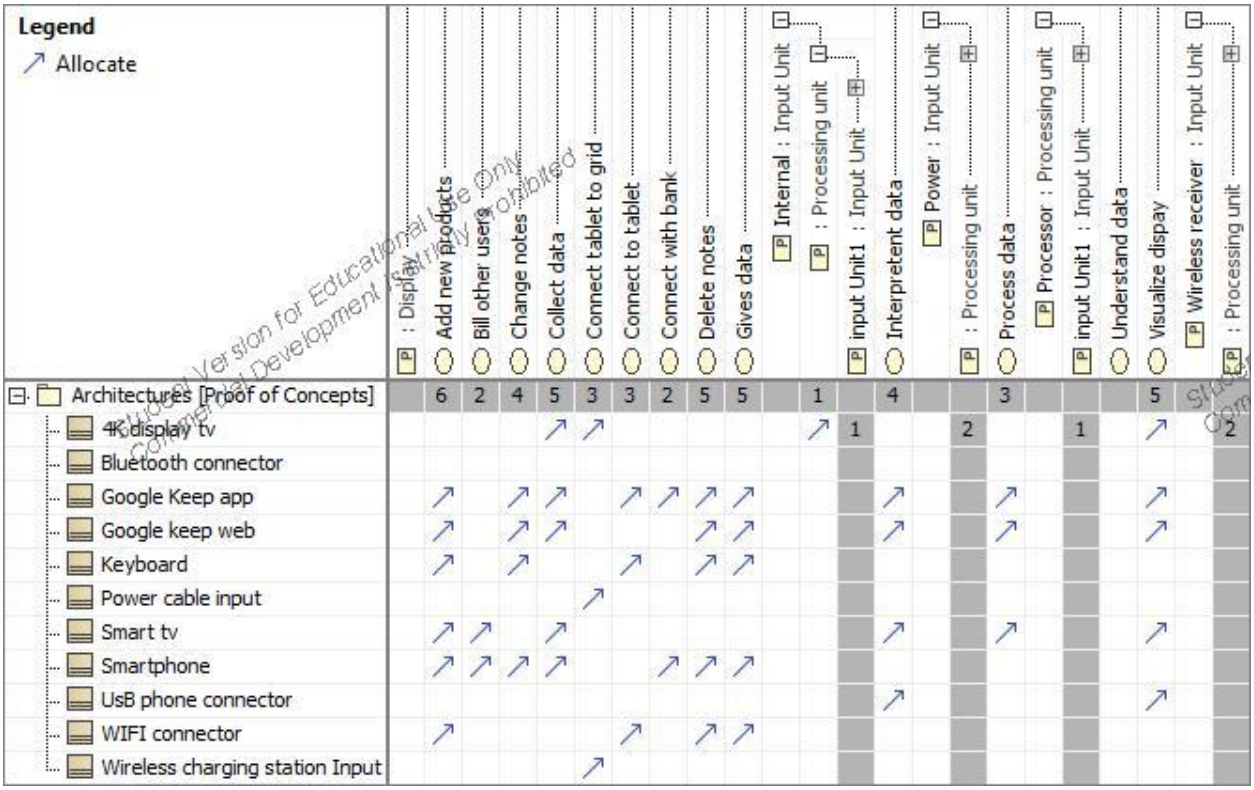


Figure 8 Diagram Proof of Concepts Allocation Matrices

9. Tablet model

Diagram Specification>Documentation
In: Concept Model.Data.Tablet model

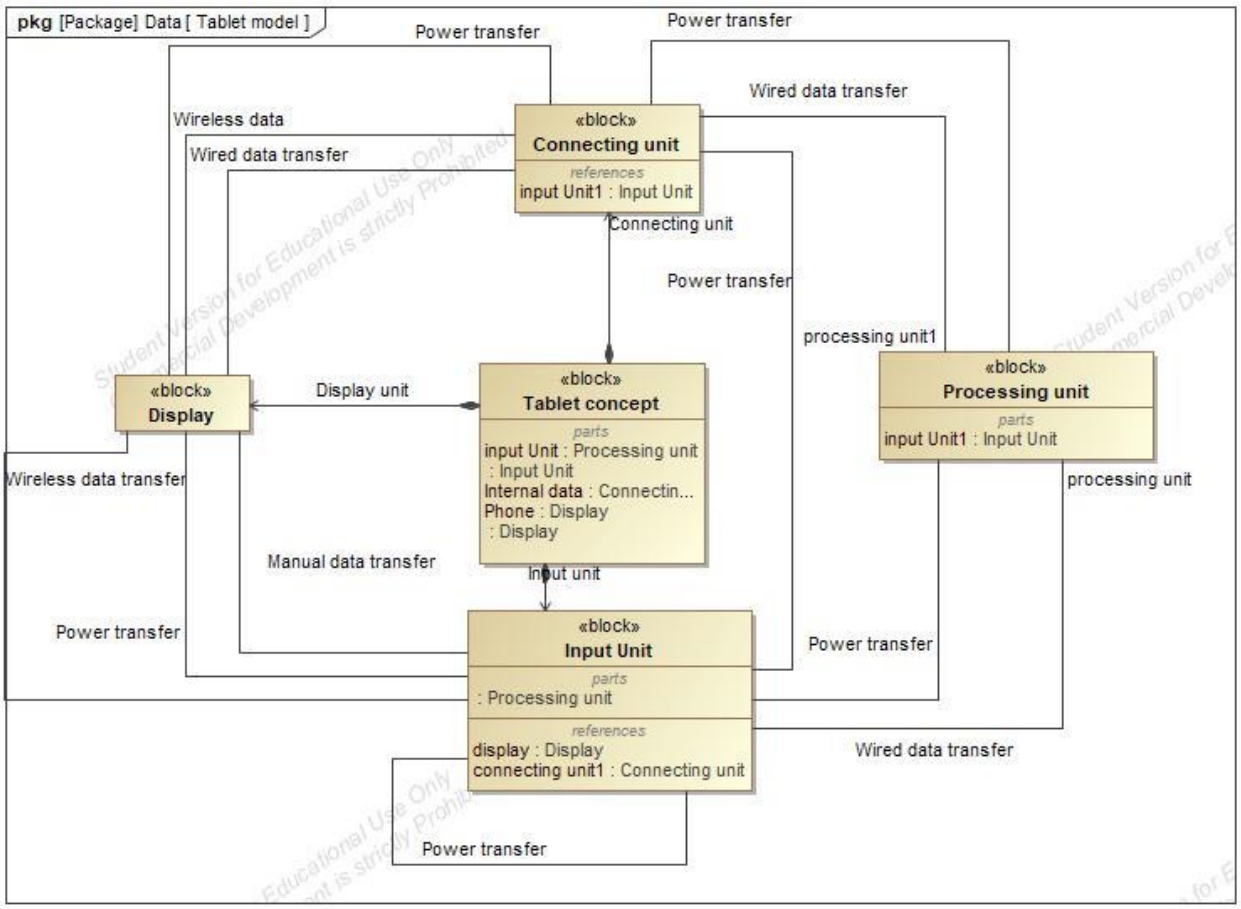


Figure 9 Diagram Tablet model

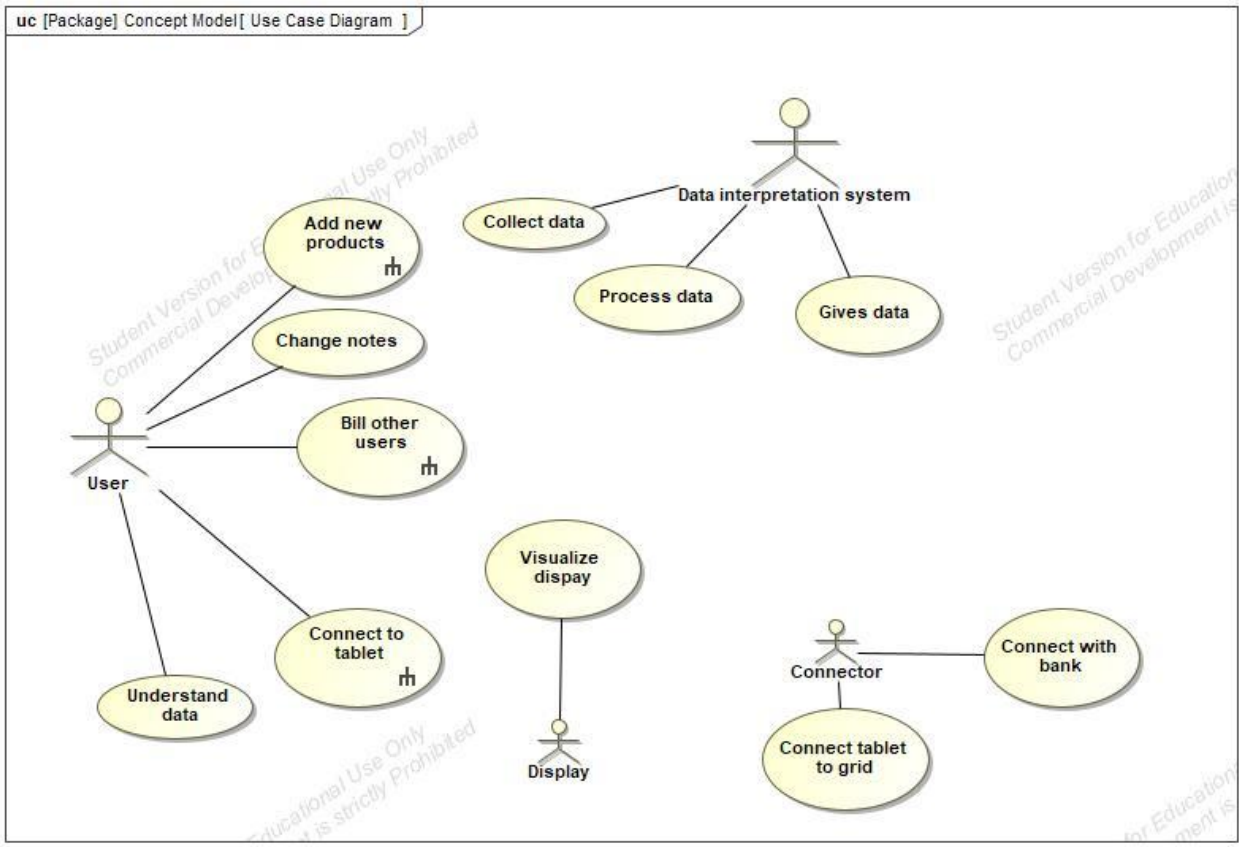
Concept Use-Cases

UseCase
Add new products
Bill other users
Change notes
Collect data
Connect tablet to grid
Connect to tablet
Connect with bank
Gives data
Process data
Understand data
Visualize dispay

Actor Summary

Primary Actor	Use Cases
Connector	• Connect tablet to grid • Connect with bank
Connector	
Data interpretation system	• Collect data • Gives data • Interpretent data • Interpretent data • Process data
Display	• Visualize dispay
Processor	• Add new products • Change notes • Collect data • Delete notes • Gives data
User	• Add new products • Bill other users • Change notes • Connect to tablet • Delete notes • Understand data

Use Case: Use Case Diagram Diagram



Add new products Use Case

Use Case Name	Add new products	**ID**	
Complexity	Average Complexity		
Description	The adding new product function is the function of adding something to the wishing list of the shared shopping list. The adding of products begins by users selecting the "add product" function. The user searches for products, and if the product is not available, it will show other possible correct products the user wants to add. Afterwards, the users gets the possibility to select the amount of products that they wish to add to the shoppings list. then, the amount of products will be updated and displayed on ether theyir phone or their on the tablet.		
Actors	• Processor • User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Processor Actor • User Actor
Generalization	

Bill other users Use Case

Use Case Name	Bill other users	**ID**	
Complexity	Average Complexity		
Description	The product should provide the possibility to bill someone. If the user pays for products for instance, it is important that the user can bill other users to get their money back. The activity within this function is, is that a user first select the function to bill someone. The display then shows the user which users owns which other user. The user can then click on the user that he wants to receive his money from. This will create a function to select on which bank the user wants to receive his money. After connecting to the bank, the other user can pay and the users will no longer be in debt with each other.		
Actors	• User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• User Actor
Generalization	

Change notes Use Case

Use Case Name	Change notes	**ID**	
Complexity	Average Complexity		
Description	Changing of the notes has the same internal diagram as the adding of products. The user can add or change notes. These notes will be displayed on the tablet or on the users phone.		
Actors	• Processor • User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Processor Actor

	• User Actor
Generalization	

Collect data Use Case

Use Case Name	Collect data	**ID**	
Complexity	Average Complexity		
Description			
Actors	• Data interpretation system • Processor		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Data interpretation system Actor • Processor Actor
Generalization	

Connect tablet to grid Use Case

Use Case Name	Connect tablet to grid	**ID**	
Complexity	Average Complexity		
Description	The connector is the infrastructure between the input from the user, to the processor, back to the user again. The tablet requires power, this power is derived from the power grid. This function represent the need for a connector to be able to connect the tablet to the power grid.		
Actors	• Connector		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Connector Actor
Generalization	

Connect to tablet Use Case

Use Case Name	Connect to tablet	**ID**	
Complexity	Average Complexity		
Description	This function is necessary for users who do not want to put in changes manually on the tablet but rather by their own smartphone. In order to to this, the user should connect his smartphone with the tablet via bluetooth. All changes the user makes, will also be visable on their phone.		
Actors	• User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• User Actor
Generalization	

Connect with bank Use Case

Use Case Name	Connect with bank	**ID**	
Complexity	Average Complexity		
Description	The connector should also be able to connect the user with the bank of their preference. This is necessary in order to bill someone.		
Actors	• Connector		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Connector Actor
Generalization	

Gives data Use Case

Use Case Name	Gives data	**ID**	
Complexity	Average Complexity		
Description			
Actors	• Data interpretation system • Processor		
Goal			
Assumption	No assumption for this use case.		

Non Functional Requirements	No non-functional requirement for this use case.

Relations	
Association	• Data interpretation system Actor • Processor Actor
Generalization	

Process data Use Case

Use Case Name	Process data	**ID**	
Complexity	Average Complexity		
Description			
Actors	• Data interpretation system		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Data interpretation system Actor
Generalization	

Understand data Use Case

Use Case Name	Understand data	**ID**	
Complexity	Average Complexity		
Description	The user should understand the information that is being displayed in front of them. This is important to keep in mind with the concept design.		
Actors	• User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• User Actor
Generalization	

Visualize dispay Use Case

Use Case Name	Visualize dispay	**ID**	
Complexity	Average Complexity		
Description	This function is important as the back-end of the product. The changes in data has to be represented on a display. The representation of the data and the potential changes that were made will be shown here.		
Actors	• Display		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Display Actor
Generalization	