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Shared_Bicycle_with_Energy

Author:
Revision:

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Model Introduction

Model Specification>Documentation

Author: Hiroyasu Ishikawa
Created:4/17/17 4:29 PM.
Title: Shared bicycle also share energy
Comment:. This is a model for a higher quality bicycle sharing service.

All Project Diagrams

1. Ideas and Assumption Diagram

Diagram Specification>Documentation
In: Concept Model.Data.Ideas and Assumption Diagram

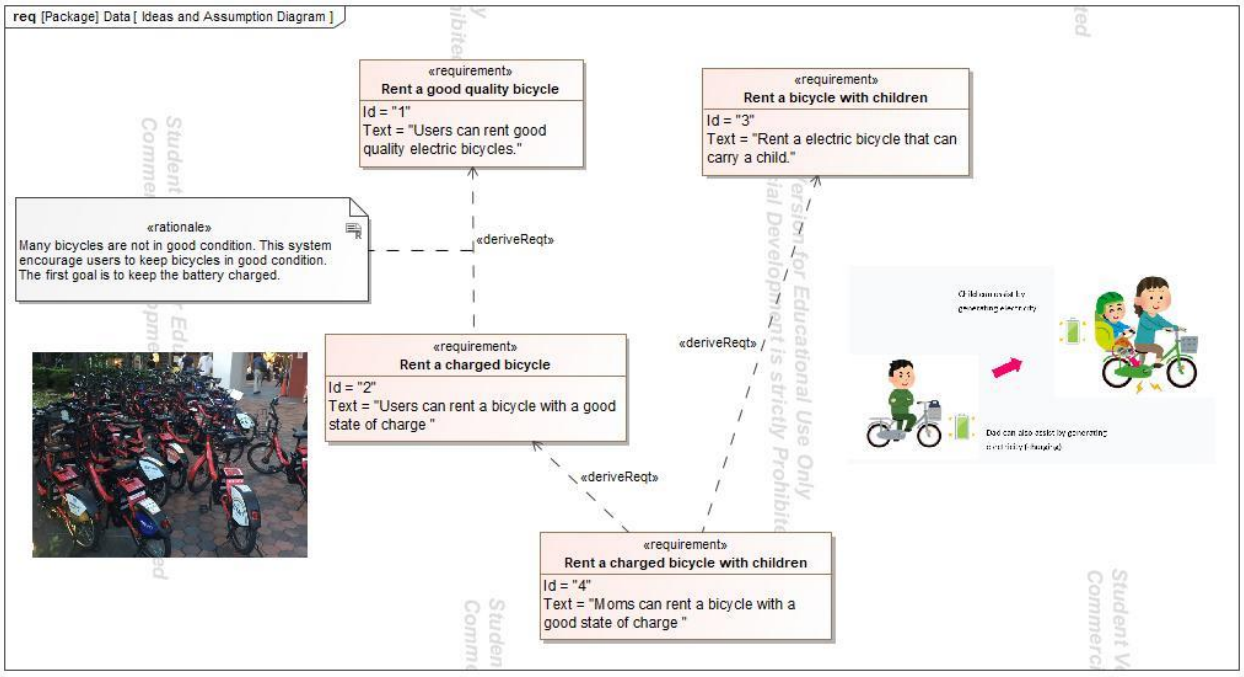


Figure 1 Diagram Ideas and Assumption Diagram

2. Get on Mom or Dad's Bicycle

Diagram Specification>Documentation

In: Concept Model.Get on Mom or Dad's Bicycle.Get on Mom or Dad's Bicycle.Get on Mom or Dad's Bicycle

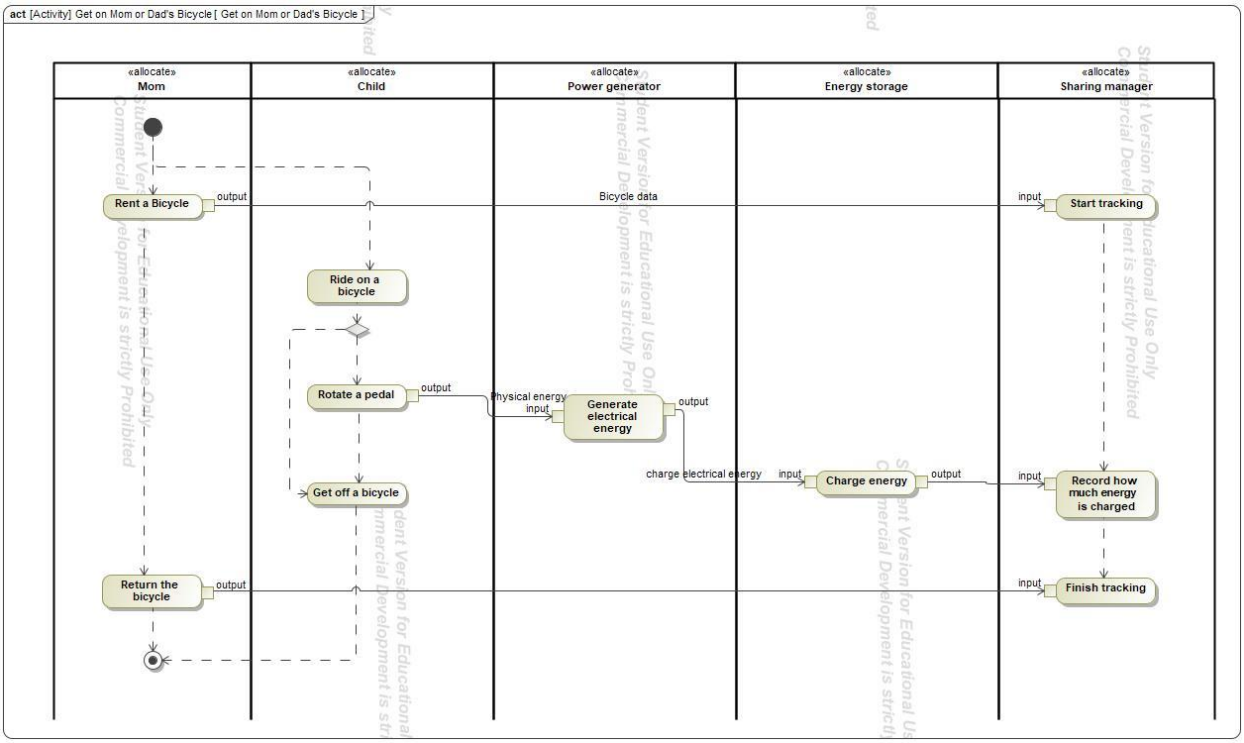


Figure 2 Diagram Get on Mom or Dad's Bicycle

3. Mapping Concept to PoC

Diagram Specification>Documentation
In: Proof of Concepts.Procurement PoC1.Mapping Concept to PoC

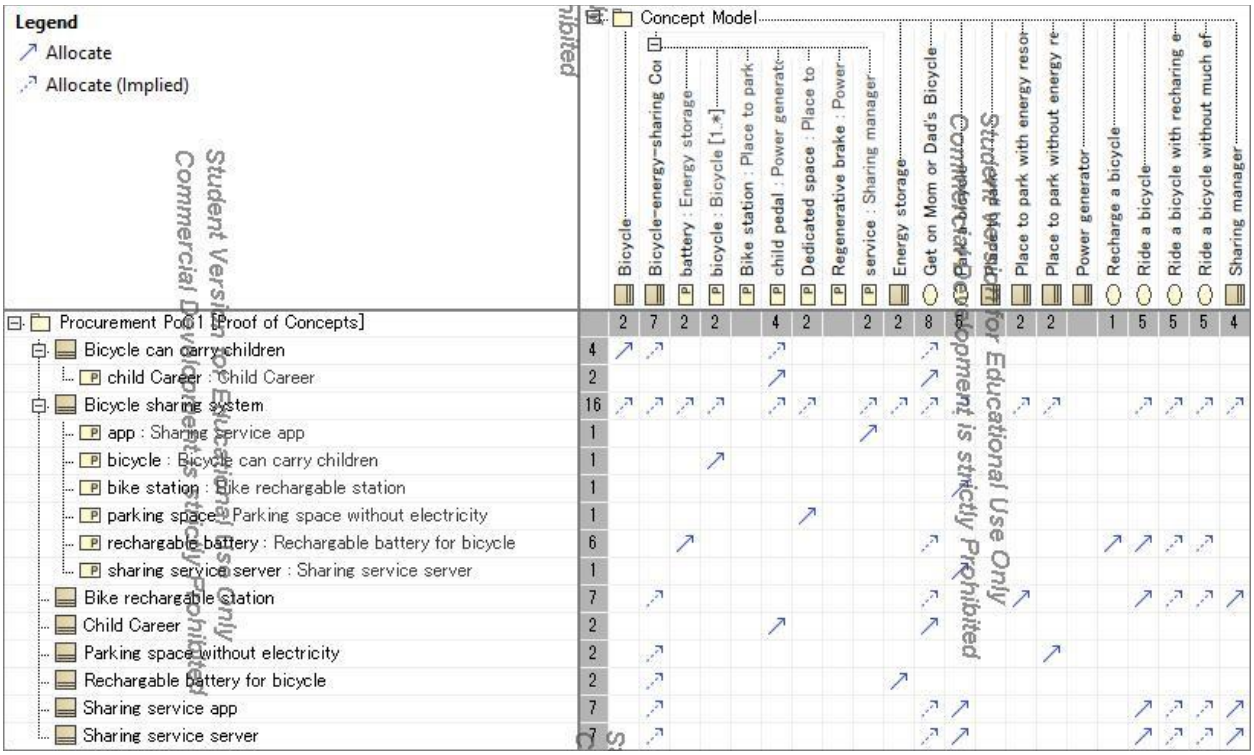


Figure 3 Diagram Mapping Concept to PoC

4. Park a bicycle

Diagram Specification>Documentation
In: Concept Model.Park a bicycle.Park a bicycle.Park a bicycle

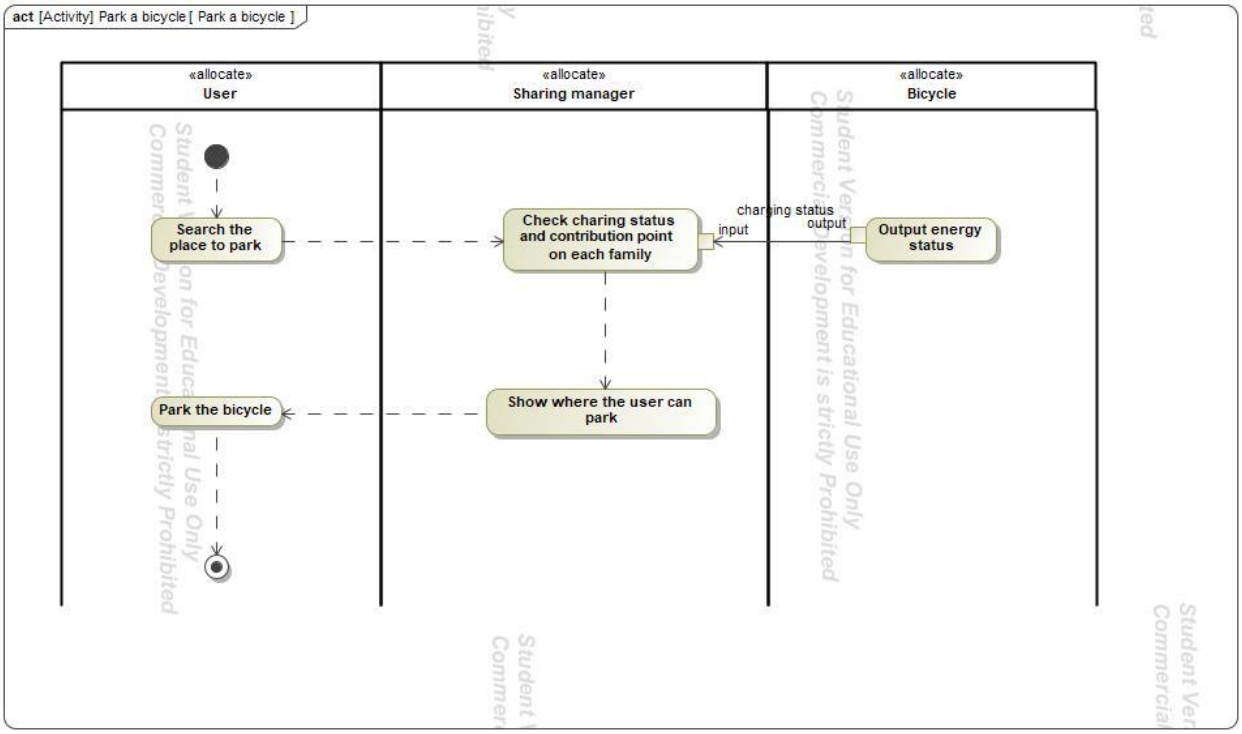


Figure 4 Diagram Park a bicycle

5. Bicycle-energy-sharing Concept

Diagram Specification>Documentation
In: Concept Model.Bicycle-energy-sharing Concept.Bicycle-energy-sharing Concept

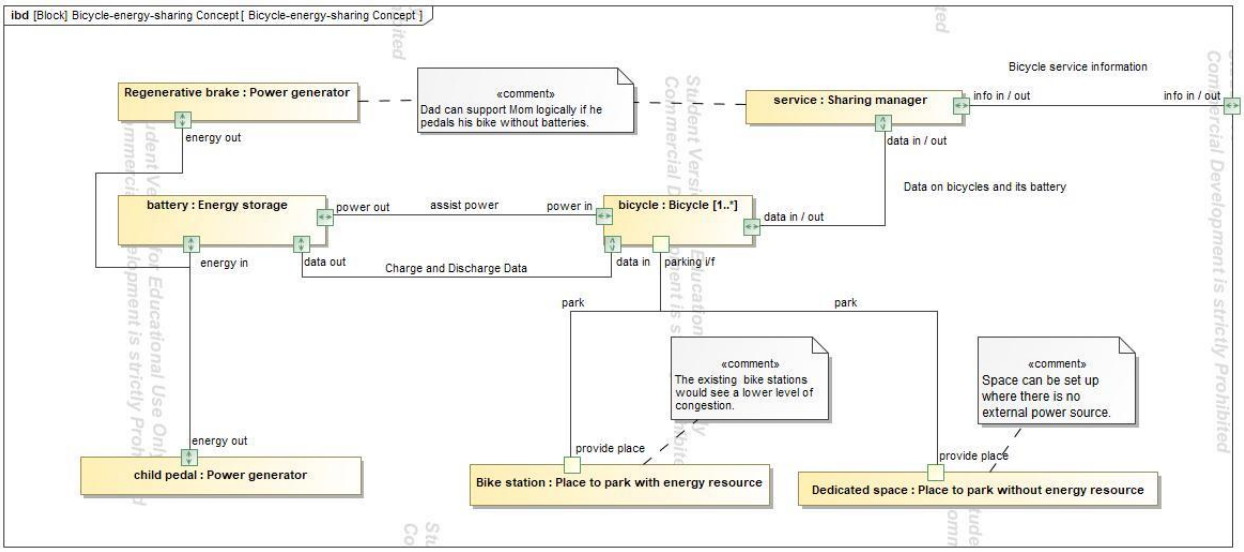


Figure 5 Diagram Bicycle-energy-sharing Concept

6. Product Use Case Diagram

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

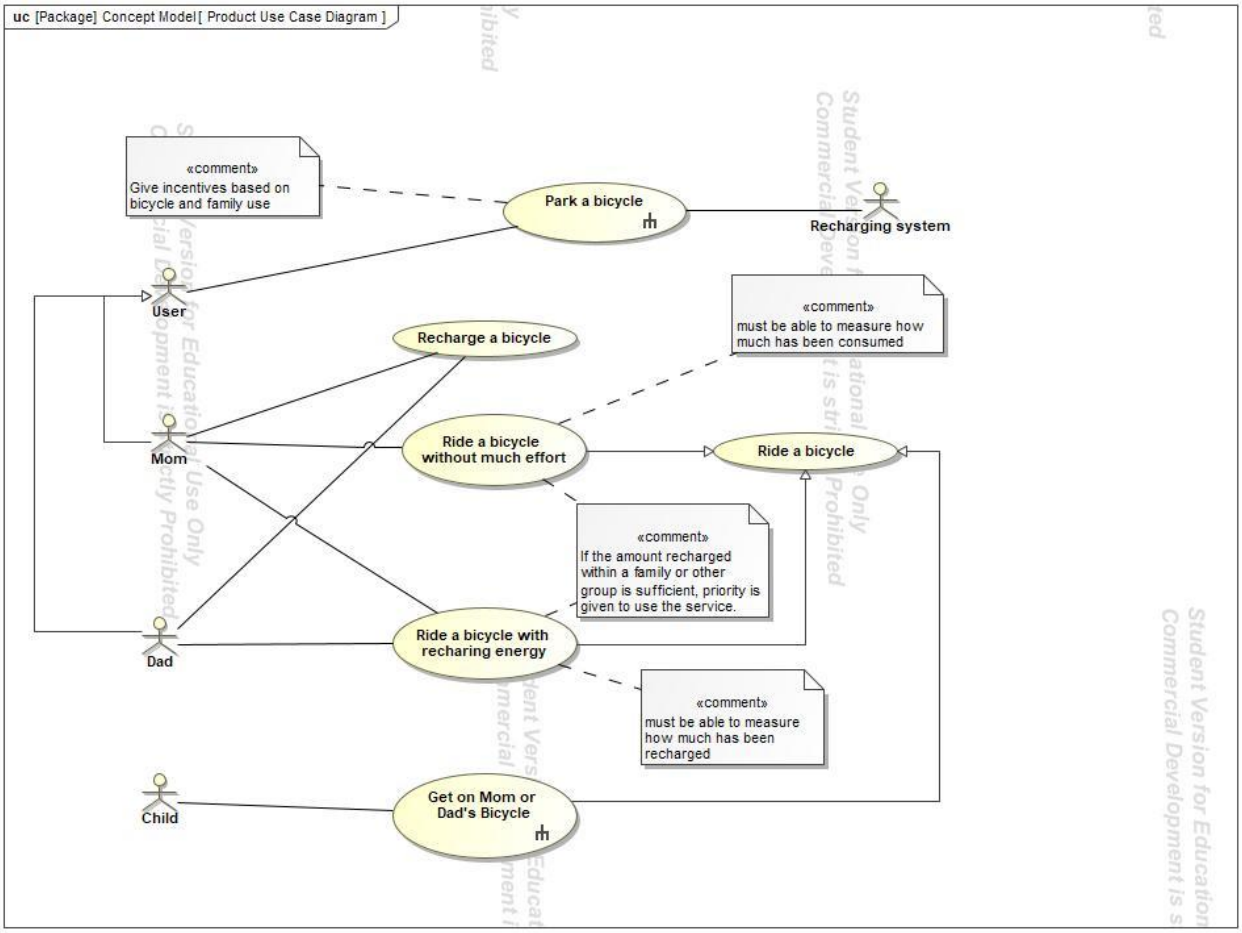


Figure 6 Diagram Product Use Case Diagram

7. Concept Model

Diagram Specification>Documentation
In: Concept Model.Concept Model

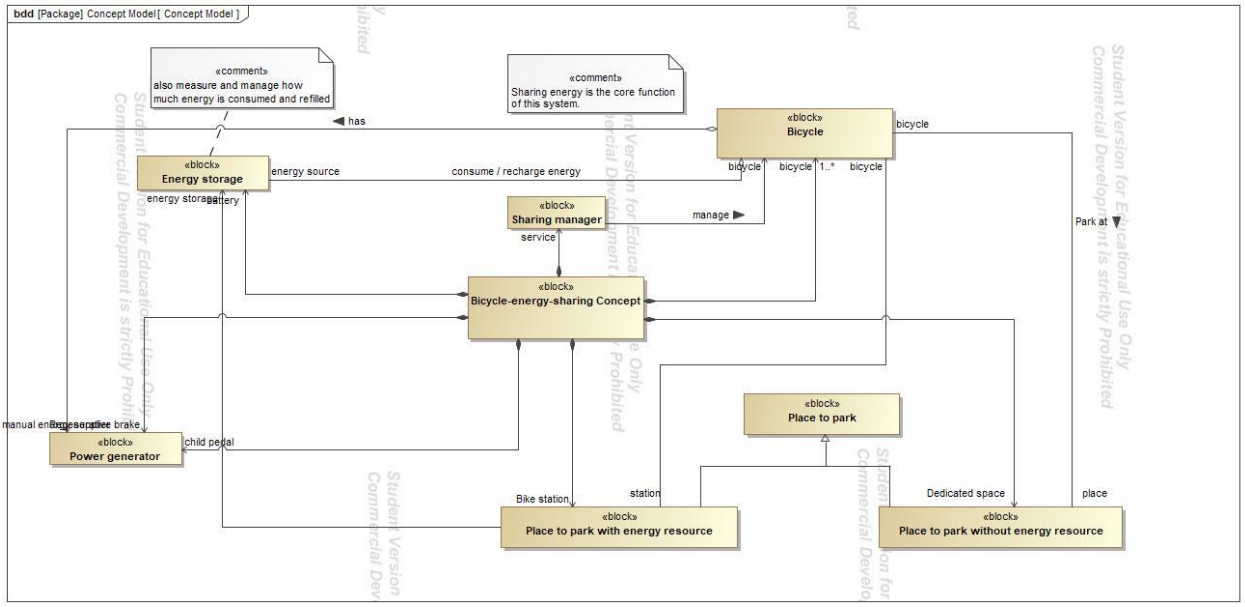


Figure 7 Diagram Concept Model

8. PoC Blocks

Diagram Specification>Documentation
In: Proof of Concepts.Procurement PoC1.PoC Blocks

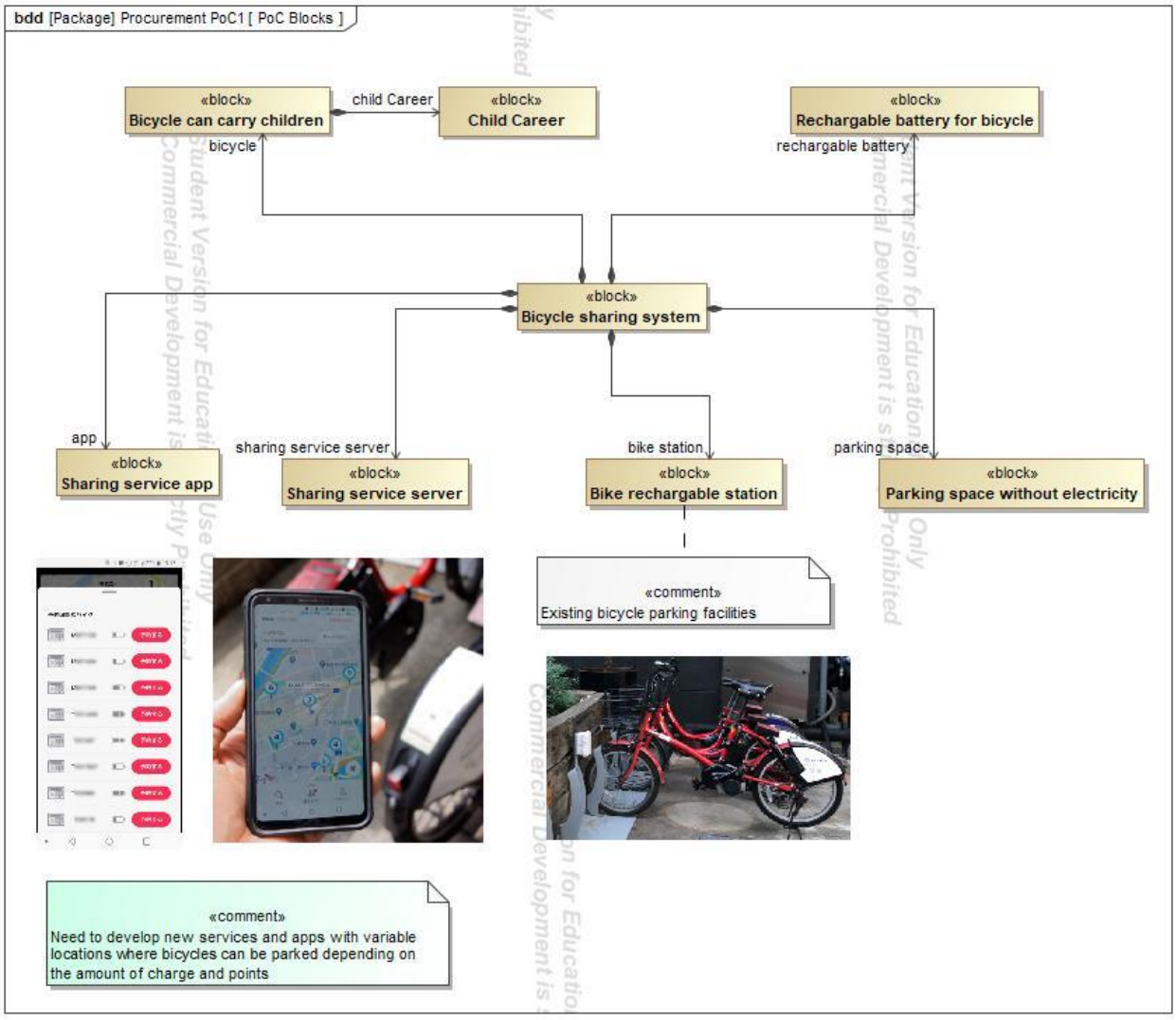


Figure 8 Diagram PoC Blocks

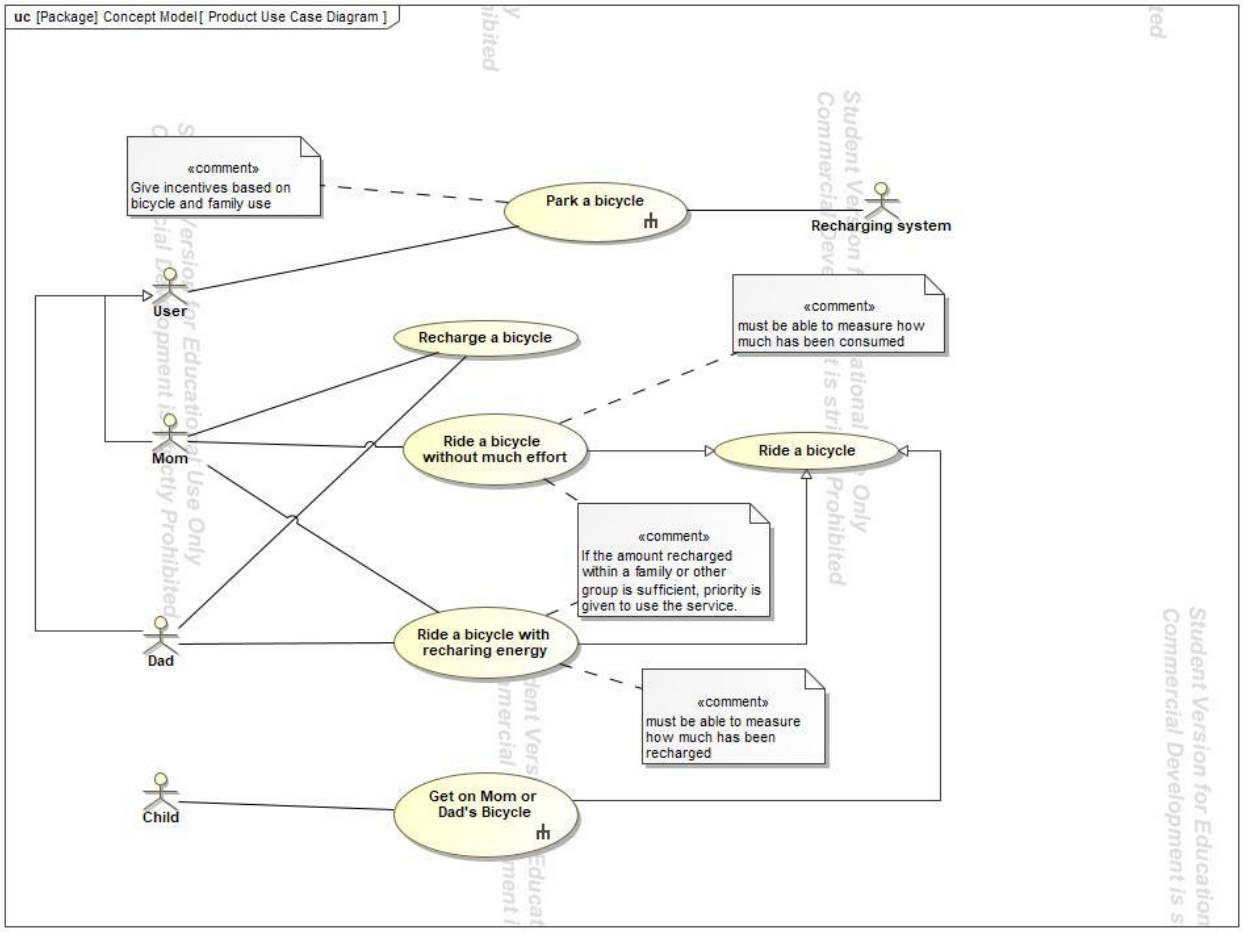
Concept Use-Cases

UseCase
Get on Mom or Dad's Bicycle
Park a bicycle
Recharge a bicycle
Ride a bicycle
Ride a bicycle with recharing energy
Ride a bicycle without much effort

Actor Summary

Primary Actor	Use Cases
Child	• Get on Mom or Dad's Bicycle
Dad	• Recharge a bicycle • Ride a bicycle with recharing energy
Mom	• Recharge a bicycle • Ride a bicycle with recharing energy • Ride a bicycle without much effort
Recharging system	• Park a bicycle
User	• Park a bicycle

Use Case: Product Use Case Diagram Diagram



Get on Mom or Dad's Bicycle Use Case

Use Case Name	Get on Mom or Dad's Bicycle	**ID**	
Complexity	Average Complexity		
Description	The child can supply energy by pedaling at the same time as riding the parent's bicycle.		
Actors	• Child		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Child Actor
Generalization	• Ride a bicycle UseCase

Park a bicycle Use Case

Use Case Name	Park a bicycle	**ID**	
Complexity	Average Complexity		
Description	The user can park bicycles where there are no facilities to supply energy.		
Actors	• Recharging system • User		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Recharging system Actor • User Actor
Generalization	

Recharge a bicycle Use Case

Use Case Name	Recharge a bicycle	**ID**	
Complexity	Average Complexity		
Description	The user charges energy without moving the bicycle.		
Actors	• Dad • Mom		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Dad Actor • Mom Actor
Generalization	

Ride a bicycle Use Case

Use Case Name	Ride a bicycle	**ID**	
Complexity	Average Complexity		
Description			
Actors	See parent class for actor associations		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	No direct association to this use case. Check the parent use case (see Generalization below.)
Generalization	

Ride a bicycle with recharing energy Use Case

Use Case Name	Ride a bicycle with recharing energy	**ID**	
Complexity	Average Complexity		
Description	The user can ride a bike with charging energy, can also ride without charging.		
Actors	• Dad • Mom		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Dad Actor • Mom Actor
Generalization	• Ride a bicycle UseCase

Ride a bicycle without much effort Use Case

Use Case Name	Ride a bicycle without much effort	**ID**	
Complexity	Average Complexity		
Description	Ride a bicycle without much effort using the charged energy.		
Actors	• Mom		
Goal			
Assumption	No assumption for this use case.		
Non Functional Requirements	No non-functional requirement for this use case.		

Relations	
Association	• Mom Actor
Generalization	• Ride a bicycle UseCase