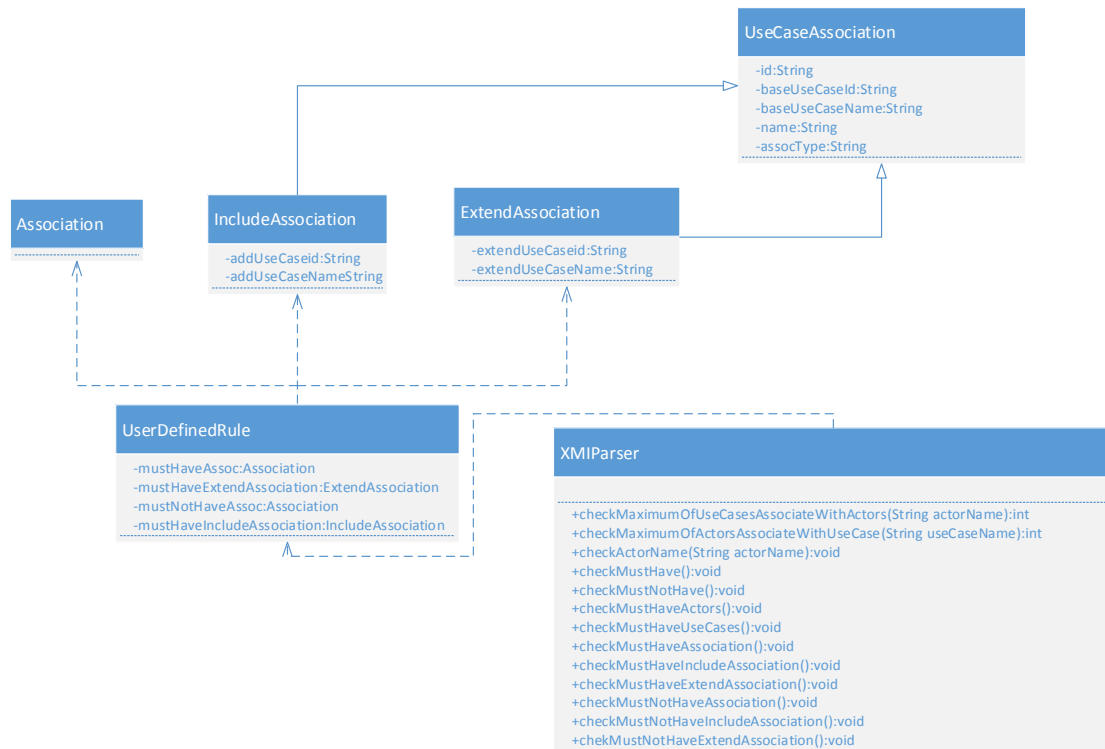


Implementation of Policy

Author: Yang Zheng, Bing Li, Chao Li

1. Implement the User-Defined Rules

Class Diagram:



2. Function Explanation:

checkActorName(): Check if the actor name is default name "actor".

checkMustHaveActors(): Check must have actors.

checkMustHaveUseCases(): Check must have use cases.

checkMustHaveAssociation(): check must have associations.

checkMustHaveIncludeAssociation(): check must have include associations.

checkMustHaveExtendAssociation(): Check must have extend associations.

checkMustNotHaveAssociation(): Check must not have associations.

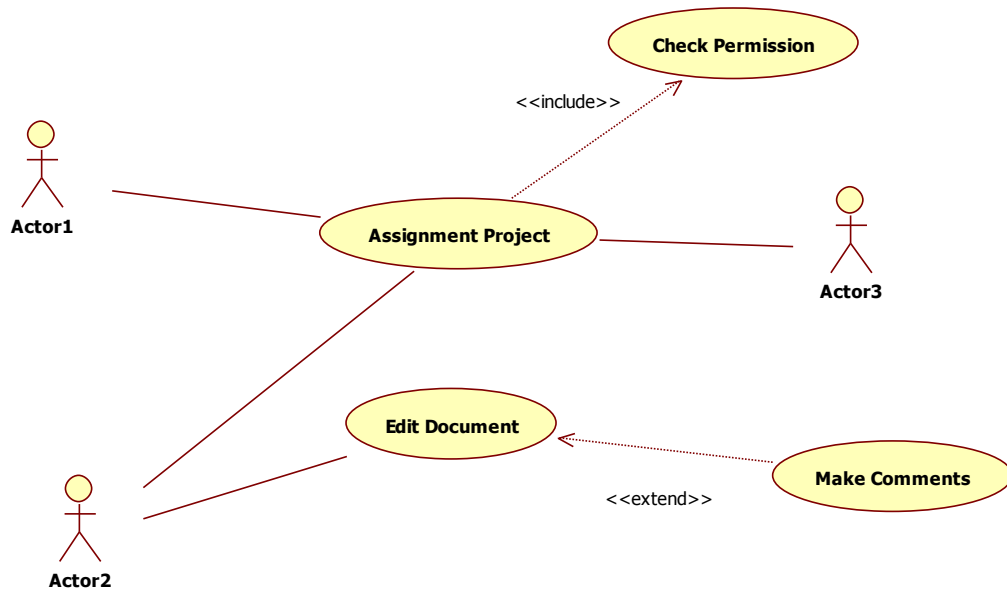
checkMustNotHaveIncludeAssociation(): Check must not have include associations.

checkMustNotHaveExtendAssociation(): Check must not have extend associations.

checkMustNotHave(): Call all the must not have functions.

checkMustHave(): Call all the must have functions.

3. Test Case:



UMLActor.3 Actor1

UMLActor.4 Actor2

UMLActor.5 Actor3

UMLUseCase.7 Assignment Project

UMLUseCase.8 Document

UMLUseCase.21 CheckPermission

UMLUseCase.23 MakeComments

UMLUseCase.24 EditDocument

Association: UMLActor.3:Actor1-----UMLAssociation.9-----UMLUseCase.7:Project

Type:association

Association: UMLActor.4:Actor2-----UMLAssociation.12-----UMLUseCase.7:Project

Type:association

Association: UMLActor.5:Actor3-----UMLAssociation.15-----UMLUseCase.7:Project

Type:association

Association: UMLActor.4:Actor2-----UMLAssociation.18-----UMLUseCase.8:Document

Type:association

ExtendId:UMLExtend.25 From:UMLUseCase.8:Document----->To:UMLUseCase.23:MakeComments

Type:extend

ExtendId:UMLExtend.26 From:UMLUseCase.8:Document----->To:UMLUseCase.24:EditDocument

Type:extend

IncludeId:UMLInclude.22 From:UMLUseCase.7:Project----->

To:UMLUseCase.21:CheckPermission Type:include

Must Have AND Must Not Have List:

Must have actor: Student

Must have use case: Add Course

Must have relationship: Actor1 with Project

Must have include association: Check Permission with Project

Must have extend Association: Document with Make comments

Must not have relationship: Actor2 with Project

Test Result:

Found Default actor name:Actor1. -----Need to fix

Found Default actor name:Actor2. -----Need to fix

Found Default actor name:Actor3. -----Need to fix

Actor:"Student" Doesn't exist.-----NEED TO FIX

UseCase:"Add Course" Doesn't exist-----NEED TO FIX

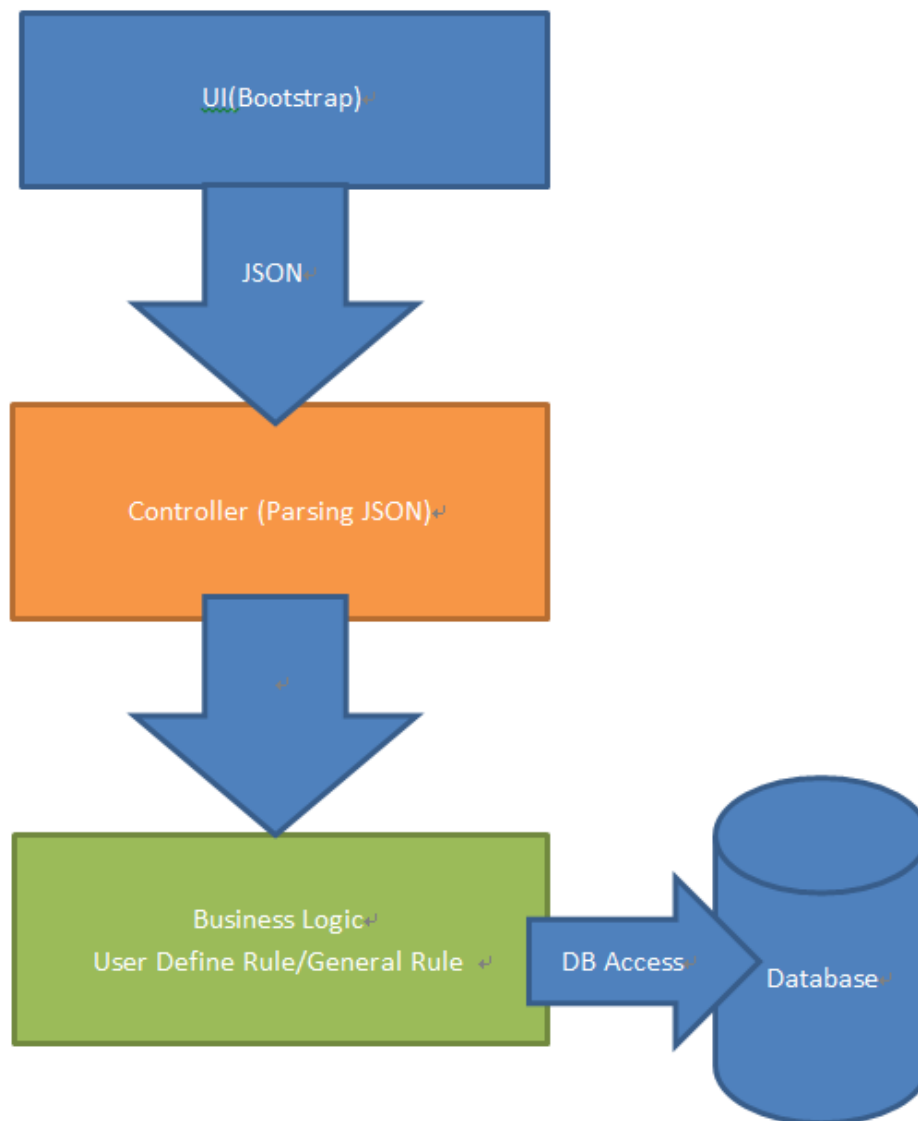
Can't find this include association:Actor2

Can't find this include association-----NEED TO FIX

This is must not have association:Actor2-----association-----Project

This is must not have association:Actor2-----association-----Project

4. UI and BackEnd



5. User Interface

Technique: Bootstrap, Ajax, JQuery, JSON.



Actors

Add Actor

Actor Name	Max Number of Use Cases	Operations
test name	3	 



Must-have Associations

Add Association

Actor Name	Use Case Name	Operations
test name	test use case	 

Must-have Inclusions/Extensions

Add Inclusion/Extension

Use Case 1	Relationship	Use Case 2	Operations
test name	includes	test name	 

Submit



Use Cases

Add Use Case

Use Case Name	Max Number of Actors	Operations
test name	3	 

Must-not-have Associations

Add Association

Actor Name	Use Case Name	Operations
test name	Test use case	 

Must-not-have Inclusions/Extensions

Add Inclusion/Extension

Use Case 1	Relationship	Use Case 2	Operations
test name	includes	test name	 

Cancel

Use Cases

Actor Infomation

X

Actor Name

Max Number of Use Cases

Cancel

Add