

Cinema System

CS4507: Advanced Software Eng. UCC
Kevin Patrick Murphy : 111314826

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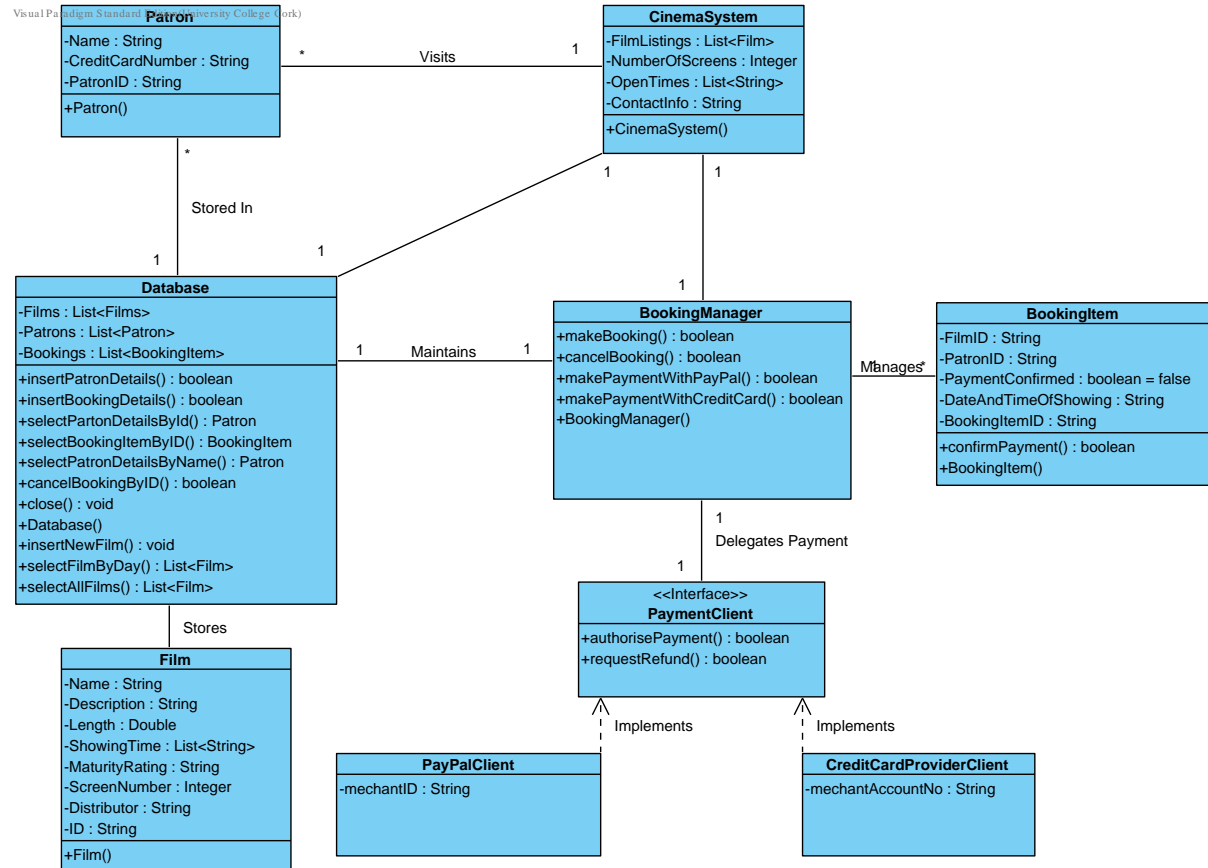
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Class Diagram

Domain Diagram



Name	Value
Name	Domain Diagram
Author	kpm2
Create Date Time	08-Oct-2014 16:39:33
Last Modified	31-Oct-2014 13:38:41

Summary

Name	Documentation
Patron	
CinemaSystem	
Database	
BookingManager	
BookingItem	
PaymentClient	
Film	
PayPalClient	
CreditCardProviderClient	

Details

Patron

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	08-Oct-2014 16:42:02
	Last Modified	31-Oct-2014 10:36:08

Attributes

private Name : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:42:12	
	Last Modified	29-Oct-2014 16:50:45	

private CreditCardNumber : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		

Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:42:14	
	Last Modified	29-Oct-2014 16:50:45	



private PatronID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:11:37	
	Last Modified	29-Oct-2014 16:50:45	



Operations

public Patron ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:51:13
	Last Modified	29-Oct-2014 16:56:29

Relationships

Stored In : Association

From	Name		Value	
	End Model Element		 Database	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		1	
	Visibility		Unspecified	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 Database	
	Project Management		Name	
			Value	
			Author	kpm2
			Create Date Time	29-Oct-2014 14:40:04
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Derived	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		29-Oct-2014 14:40:04	
	Last Modified		31-Oct-2014 10:36:08	
Visits : Association				

From	Name	Value	
	End Model Element	 CinemaSystem	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 CinemaSystem	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	08-Oct-2014 16:46:22
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:46:22	
	Last Modified	31-Oct-2014 10:36:08	

CinemaSystem

Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Quality Score	Fair

Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	08-Oct-2014 16:39:51
	Last Modified	31-Oct-2014 13:35:38

Attributes

private FilmListings : List			
Template Type Bind Info	N/A		
Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:40:04	
	Last Modified	31-Oct-2014 10:36:08	

private NumberOfScreens : Integer			
Type	Integer		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	15-Oct-2014 14:09:22	
	Last Modified	29-Oct-2014 16:50:45	

private OpenTimes : List			
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Template Type Bind Info	N/A		
Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	15-Oct-2014 14:09:28	
	Last Modified	29-Oct-2014 16:50:45	



private ContactInfo : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	15-Oct-2014 14:10:01	
	Last Modified	29-Oct-2014 16:50:45	

Operations



public CinemaSystem ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:51:10
	Last Modified	31-Oct-2014 13:35:38

Relationships

Unnamed Association				
To	Name	Value		
	End Model Element	 BookingManager		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	1		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Type	 BookingManager		
	Project Management	Name	Value	
		Author	kpm2	
		Create Date Time	15-Oct-2014 14:11:39	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Quality Score	Good			
Derived	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		15-Oct-2014 14:11:39	
	Last Modified		29-Oct-2014 14:49:36	
Visits : Association				

To	Name		Value			
	End Model Element		 Patron			
	Provide Property Getter Method		false			
	Provide Property Setter Method		false			
	Multiplicity		*			
	Visibility		Unspecified			
	Aggregation Kind		None			
	Navigable		Navigable			
	Derived		false			
	Derived Union		false			
	Read Only		false			
	Static		false			
	Leaf		false			
	Type		 Patron			
	Project Management		Name		Value	
			Author		kpm2	
			Create Date Time		08-Oct-2014 16:46:22	
Abstract		false				
Leaf		false				
Visibility		Unspecified				
Quality Score		Fair				
Quality Reason		Problem		Suggestion		
		Name does not contain glossary terms		Define name as term in glossary		
Derived		false				
Project Management		Name		Value		
		Author		kpm2		
		Create Date Time		08-Oct-2014 16:46:22		
		Last Modified		31-Oct-2014 10:36:08		

Unnamed Association

From	Name	Value	
	End Model Element	 Database	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 Database	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:40:37
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Good		
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:40:37	
	Last Modified	29-Oct-2014 14:49:36	

Database

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:29:40
	Last Modified	31-Oct-2014 12:57:08

Attributes

private Films : List			
Template Type Bind Info	N/A		
Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:55:09	
	Last Modified	29-Oct-2014 16:56:29	

private Patrons : List			
Template Type Bind Info	N/A		
Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:55:15	
	Last Modified	29-Oct-2014 16:56:29	

private Bookings : List	
Template Type Bind Info	N/A

Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:55:17	
	Last Modified	29-Oct-2014 16:56:29	

Operations

public insertPatronDetails () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:30:02
	Last Modified	29-Oct-2014 16:50:45

public insertBookingDetails () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:37:13
	Last Modified	29-Oct-2014 16:50:45

public selectPartonDetailsByld () : Patron	
Leaf	false
Ordered	false
Unique	true
Query	false

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:38:19
	Last Modified	29-Oct-2014 16:50:45

public selectBookingItemByID () : BookingItem		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:38:38
	Last Modified	29-Oct-2014 16:50:45

public selectPatronDetailsByName () : Patron		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:38:53
	Last Modified	29-Oct-2014 16:50:45

public cancelBookingByID () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:44:31
	Last Modified	31-Oct-2014 12:57:08

public close () : void	
Leaf	false
Ordered	false
Unique	true
Query	false

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:31:23
	Last Modified	31-Oct-2014 10:46:17

public Database ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:50:34
	Last Modified	29-Oct-2014 16:50:45



public insertNewFilm () : void		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 10:34:10
	Last Modified	31-Oct-2014 10:36:08



public selectFilmByDay () : List		
Leaf	false	
Template Type Bind Info	N/A	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 10:34:30
	Last Modified	31-Oct-2014 10:36:08

public selectAllFilms () : List	
Leaf	false
Template Type Bind Info	N/A
Ordered	false
Unique	true
Query	false



Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 10:34:56
	Last Modified	31-Oct-2014 10:36:08

Relationships



Stored In : Association				
To	Name	Value		
	End Model Element	 Patron		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	*		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Type	 Patron		
	Project Management	Name	Value	
		Author	kpm2	
		Create Date Time	29-Oct-2014 14:40:04	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Derived	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		29-Oct-2014 14:40:04	
	Last Modified		31-Oct-2014 10:36:08	
Maintains : Association				

To	Name	Value	
	End Model Element	 BookingManager	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 BookingManager	
	Project Management	Name	Value
		Author	kpm2
Create Date Time		29-Oct-2014 14:40:10	
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:40:10	
	Last Modified	31-Oct-2014 10:36:08	

Unnamed Association

To	Name		Value
	End Model Element	 CinemaSystem	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 CinemaSystem	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:40:37
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Good		
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:40:37	
	Last Modified	29-Oct-2014 14:49:36	

Stores : Association

To	Name		Value			
	End Model Element		 Film			
	Provide Property Getter Method		false			
	Provide Property Setter Method		false			
	Multiplicity		Unspecified			
	Visibility		Unspecified			
	Aggregation Kind		None			
	Navigable		Navigable			
	Derived		false			
	Derived Union		false			
	Read Only		false			
	Static		false			
	Leaf		false			
	Type		 Film			
	Project Management		Name		Value	
			Author		kpm2	
			Create Date Time		31-Oct-2014 10:33:36	
Abstract		false				
Leaf		false				
Visibility		Unspecified				
Quality Score		Fair				
Quality Reason		Problem		Suggestion		
		Name does not contain glossary terms		Define name as term in glossary		
Derived		false				
Project Management		Name		Value		
		Author		kpm2		
		Create Date Time		31-Oct-2014 10:33:36		
		Last Modified		31-Oct-2014 10:46:17		

BookingManager

Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Quality Score	Fair

Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	08-Oct-2014 16:49:38
	Last Modified	31-Oct-2014 12:57:08

Operations

public makeBooking () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	15-Oct-2014 14:12:27
	Last Modified	29-Oct-2014 16:56:29

public cancelBooking () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	15-Oct-2014 14:13:01
	Last Modified	29-Oct-2014 16:56:29



public makePaymentWithPayPal () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:41:59
	Last Modified	29-Oct-2014 16:56:29



public makePaymentWithCreditCard () : boolean		
Leaf	false	
Ordered	false	
Unique	true	

Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:42:19
	Last Modified	29-Oct-2014 16:56:29



public BookingManager ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:50:24
	Last Modified	29-Oct-2014 16:50:45



Relationships

Manages : Association		
To	Name	Value
	End Model Element	 BookingItem
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	*
	Visibility	Unspecified
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 BookingItem
	Project Management	Name
		Value
		Author
		Create Date Time
		29-Oct-2014 15:42:47
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Quality Score	Fair	

Quality Reason	Problem		Suggestion		
	Name does not contain glossary terms		Define name as term in glossary		
Derived	false				
Project Management	Name		Value		
	Author		kpm2		
	Create Date Time		29-Oct-2014 15:42:47		
	Last Modified		31-Oct-2014 10:36:08		
Delegates Payment : Association					
To	Name		Value		
	End Model Element		 PaymentClient		
	Provide Property Getter Method		false		
	Provide Property Setter Method		false		
	Multiplicity		1		
	Visibility		Unspecified		
	Aggregation Kind		None		
	Navigable		Navigable		
	Derived		false		
	Derived Union		false		
	Read Only		false		
	Static		false		
	Leaf		false		
	Type		 PaymentClient		
	Project Management		Name		Value
			Author		kpm2
			Create Date Time		31-Oct-2014 10:26:12
Abstract	false				
Leaf	false				
Visibility	Unspecified				
Quality Score	Fair				
Quality Reason	Problem		Suggestion		
	Name does not contain glossary terms		Define name as term in glossary		
Derived	false				
Project Management	Name		Value		
	Author		kpm2		
	Create Date Time		31-Oct-2014 10:26:12		
	Last Modified		31-Oct-2014 13:07:23		

Unnamed Association

From	Name		Value			
	End Model Element		 CinemaSystem			
	Provide Property Getter Method		false			
	Provide Property Setter Method		false			
	Multiplicity		1			
	Visibility		Unspecified			
	Aggregation Kind		None			
	Navigable		Navigable			
	Derived		false			
	Derived Union		false			
	Read Only		false			
	Static		false			
	Leaf		false			
	Type		 CinemaSystem			
	Project Management		Name		Value	
			Author		kpm2	
			Create Date Time		15-Oct-2014 14:11:39	
Abstract		false				
Leaf		false				
Visibility		Unspecified				
Quality Score		Good				
Derived		false				
Project Management		Name		Value		
		Author		kpm2		
		Create Date Time		15-Oct-2014 14:11:39		
		Last Modified		29-Oct-2014 14:49:36		
Maintains : Association						

From	Name	Value	
	End Model Element	 Database	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 Database	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:40:10
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:40:10	
	Last Modified	31-Oct-2014 10:36:08	

BookingItem

Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Quality Score	Fair


Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:41:24
	Last Modified	29-Oct-2014 16:56:29

Attributes

private FilmID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 15:41:38	
	Last Modified	29-Oct-2014 16:56:29	

private PatronID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 15:41:49	
	Last Modified	29-Oct-2014 16:56:29	

private PaymentConfirmed : boolean	
Initial Value	false

Type	 boolean		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:16:21	
	Last Modified	29-Oct-2014 16:56:29	

private DateAndTimeOfShowing : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:22:25	
	Last Modified	29-Oct-2014 16:56:29	

private BookingItemID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:50:00
	Last Modified	29-Oct-2014 16:56:29



Operations

public confirmPayment () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:19:02
	Last Modified	29-Oct-2014 16:56:29

public BookingItem ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:51:01
	Last Modified	29-Oct-2014 16:56:29

Relationships

Manages : Association

From	Name		Value			
	End Model Element		 BookingManager			
	Provide Property Getter Method		false			
	Provide Property Setter Method		false			
	Multiplicity		1			
	Visibility		Unspecified			
	Aggregation Kind		None			
	Navigable		Navigable			
	Derived		false			
	Derived Union		false			
	Read Only		false			
	Static		false			
	Leaf		false			
	Type		 BookingManager			
	Project Management		Name		Value	
			Author		kpm2	
			Create Date Time		29-Oct-2014 15:42:47	
Abstract	false					
Leaf	false					
Visibility	Unspecified					
Quality Score	Fair					
Quality Reason	Problem			Suggestion		
	Name does not contain glossary terms			Define name as term in glossary		
Derived	false					
Project Management	Name			Value		
	Author			kpm2		
	Create Date Time			29-Oct-2014 15:42:47		
	Last Modified			31-Oct-2014 10:36:08		

PaymentClient

Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Stereotypes	Interface
Quality Score	Fair

Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 12:58:27
	Last Modified	31-Oct-2014 13:07:23



Operations

public authorisePayment () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 12:58:55
	Last Modified	31-Oct-2014 13:07:23


public requestRefund () : boolean		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 12:59:13
	Last Modified	31-Oct-2014 13:07:23


Relationships

Delegates Payment : Association

From	Name		Value	
	End Model Element		 BookingManager	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		1	
	Visibility		Unspecified	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 BookingManager	
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 10:26:12

Abstract	false	
Leaf	false	
Visibility	Unspecified	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Derived	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 10:26:12
	Last Modified	31-Oct-2014 13:07:23

Implements : Dependency			
From	 PayPalClient		
Visibility	Unspecified		
Quality Score	Good		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		31-Oct-2014 13:01:50
	Last Modified		31-Oct-2014 13:33:16

Implements : Dependency	
From	 CreditCardProviderClient
Visibility	Unspecified

Quality Score	Good	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:02:06
	Last Modified	31-Oct-2014 13:33:16

Film

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	08-Oct-2014 16:40:31
	Last Modified	31-Oct-2014 13:35:14

Attributes

private Name : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:40:39	
	Last Modified	29-Oct-2014 16:50:45	

private Description : String	
Type	String

Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:40:56	
	Last Modified	29-Oct-2014 16:50:45	

private Length : Double			
Type	Double		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:41:06	
	Last Modified	29-Oct-2014 16:50:45	

private ShowingTime : List			
Template Type Bind Info	N/A		
Type	List		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		08-Oct-2014 16:41:15	
	Last Modified		31-Oct-2014 13:35:14	

private MaturityRating : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		08-Oct-2014 16:41:33
	Last Modified		31-Oct-2014 13:35:14

private ScreenNumber : Integer			
Type	Integer		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		08-Oct-2014 16:41:41
	Last Modified		31-Oct-2014 13:35:14

private Distributor : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		

Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	08-Oct-2014 16:41:53	
	Last Modified	29-Oct-2014 16:50:45	



private ID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:13:53	
	Last Modified	29-Oct-2014 16:50:45	

Operations

public Film ()		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:51:07
	Last Modified	29-Oct-2014 16:56:29

Relationships

Stores : Association

From	Name	Value	
	End Model Element	 Database	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 Database	
	Project Management	Name	Value
		Author	kpm2
Create Date Time		31-Oct-2014 10:33:36	
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Derived	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 10:33:36	
	Last Modified	31-Oct-2014 10:46:17	

PayPalClient


Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false
Root	false
Quality Score	Fair

Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 10:25:40
	Last Modified	31-Oct-2014 13:07:23

Attributes

private merchantID : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 13:00:38	
	Last Modified	31-Oct-2014 13:07:23	

Relationships

Implements : Dependency		
To	 PaymentClient	
Visibility	Unspecified	
Quality Score	Good	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:01:50
	Last Modified	31-Oct-2014 13:33:16

CreditCardProviderClient


Name	Value
Active	false
Business Key Mutable	true
Business Model	false
Visibility	public
Leaf	false

Root	false	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 12:56:11
	Last Modified	31-Oct-2014 13:07:23

Attributes

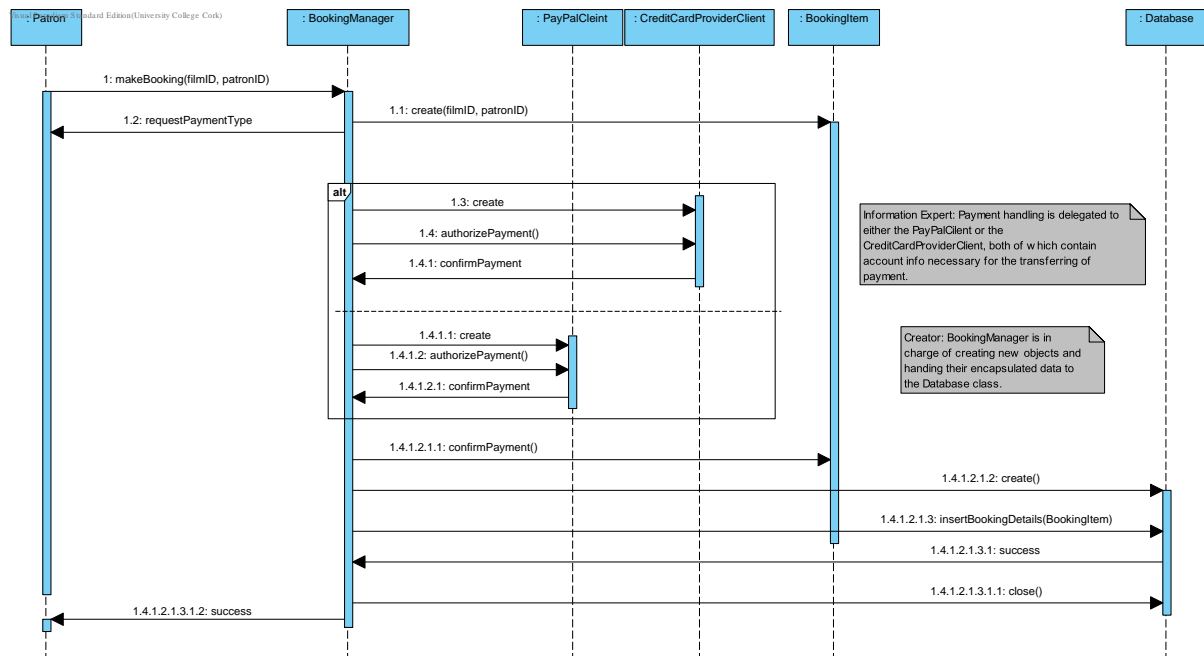
private mechantAccountNo : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 13:00:58	
	Last Modified	31-Oct-2014 13:07:23	

Relationships

Implements : Dependency		
To	 PaymentClient	
Visibility	Unspecified	
Quality Score	Good	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:02:06
	Last Modified	31-Oct-2014 13:33:16

Sequence Diagram


Make Booking and Booking Detail Storage



Name	Value
Name	Make Booking and Booking Detail Storage
Author	kpm2
Create Date Time	29-Oct-2014 14:51:51
Last Modified	31-Oct-2014 13:35:38
Show Parameter Types In Message Operation Signature	true

Summary

Name	Documentation
: Patron	
: BookingManager	
: BookingItem	
: CreditCardProviderClient	
: PayPalCleint	
: Database	
N/A	Creator: BookingManager is in charge of creating new objects and handing their encapsulated data to the Database class.
CombinedFragment	
Operand	
Operand2	



 N/A	Information Expert: Payment handling is delegated to either the PayPalClient or the CreditCardProviderClient, both of which contain account info necessary for the transferring of payment.
---	---


Details

: Patron

Name	Value	
Multiplicity	Unspecified	
Base Classifier	Patron	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:57:19
	Last Modified	31-Oct-2014 13:26:43

Relationships


makeBooking(filmID, patronID) : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:57:41
Type	Message		
Sequence Number	1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:57:41	
	Last Modified	31-Oct-2014 13:26:43	
success : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:32:50
Type	Message		
Sequence Number	1.4.1.2.1.3.1.2		


Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		29-Oct-2014 16:32:50	
	Last Modified		31-Oct-2014 13:26:43	
requestPaymentType : Message				
From	Name		Value	
	End Model Element		 N/A	
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		29-Oct-2014 15:45:09
Type	Message			
Sequence Number	1.2			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		29-Oct-2014 15:45:09	
	Last Modified		31-Oct-2014 13:26:43	


: BookingManager


Name	Value	
Multiplicity	Unspecified	
Base Classifier	BookingManager	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	
	Value	
	Author	
	kpm2	
	Create Date Time	
	29-Oct-2014 14:52:07	
	Last Modified	
	31-Oct-2014 13:26:43	

Relationships


create : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:24:37
Type	Message		
Sequence Number	1.3		


Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:24:37	
	Last Modified		31-Oct-2014 13:26:43	
authorizePayment() : Message				
To	Name		Value	
	End Model Element  N/A			
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 13:22:57
Type	Message			
Sequence Number	1.4			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:22:57	
	Last Modified		31-Oct-2014 13:26:43	


authorizePayment() : Message			
To	Name		Value
	End Model Element		 N/A
	Project Management	Name	
		Value	
		Author	
	Create Date Time		29-Oct-2014 15:49:16
Type	Message		
Sequence Number	1.4.1.2		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		29-Oct-2014 15:49:16
	Last Modified		31-Oct-2014 13:26:43

insertBookingDetails(BookingItem) : Message			
To	Name		Value
	End Model Element		 N/A
	Project Management	Name	
		Value	
		Author	
	Create Date Time		29-Oct-2014 14:58:35
Type	Message		
Sequence Number	1.4.1.2.1.3		


Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:58:35
	Last Modified	31-Oct-2014 13:26:43


close() : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:47
Type	Message		
Sequence Number	1.4.1.2.1.3.1.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:30:47	
	Last Modified	31-Oct-2014 13:26:43	


create(filmID, patronID) : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:17:50
Type	Message		
Sequence Number	1.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:17:50	
	Last Modified	31-Oct-2014 13:26:43	

create() : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:28
Type	Message		
Sequence Number	1.4.1.2.1.2		


Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:30:28
	Last Modified	31-Oct-2014 13:26:43


confirmPayment() : Message		
To	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:22:51
Type	Message	
Sequence Number	1.4.1.2.1.1	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:22:51
	Last Modified	31-Oct-2014 13:26:43


create : Message		
To	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:24:57
Type	Message	
Sequence Number	1.4.1.1	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:24:57
	Last Modified	31-Oct-2014 13:26:43

requestPaymentType : Message		
To	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:45:09
Type	Message	
Sequence Number	1.2	


Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:45:09
	Last Modified	31-Oct-2014 13:26:43


success : Message		
To	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:50
Type	Message	
Sequence Number	1.4.1.2.1.3.1.2	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:50
	Last Modified	31-Oct-2014 13:26:43

confirmPayment : Message		
From	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:24:22
Type	Message	
Sequence Number	1.4.1	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:24:22
	Last Modified	31-Oct-2014 13:26:43

success : Message		
From	Name	Value
	End Model Element	 N/A
	Project Management	Name
		Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:00
Type	Message	
Sequence Number	1.4.1.2.1.3.1	

Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:00
	Last Modified	31-Oct-2014 13:26:43

makeBooking(filmID, patronID) : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:57:41
Type	Message		
Sequence Number	1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 14:57:41	
	Last Modified	31-Oct-2014 13:26:43	



confirmPayment : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 15:57:03
Type	Message		
Sequence Number	1.4.1.2.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 15:57:03	
	Last Modified	31-Oct-2014 13:26:43	

: BookingItem

Name	Value
Multiplicity	Unspecified
Base Classifier	BookingItem
Active	false
Stopped	false
Multi Object	false

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:15:08
	Last Modified	31-Oct-2014 13:26:43

Relationships

create(filmID, patronID) : Message					
From	Name		Value		
	End Model Element		 N/A		
	Project Management	Name		Value	
		Author		kpm2	
		Create Date Time		29-Oct-2014 16:17:50	
Type	Message				
Sequence Number	1.1				
Asynchronous	false				
Project Management	Name		Value		
	Author		kpm2		
	Create Date Time		29-Oct-2014 16:17:50		
	Last Modified		31-Oct-2014 13:26:43		
confirmPayment() : Message					
From	Name		Value		
	End Model Element		 N/A		
	Project Management	Name		Value	
		Author		kpm2	
		Create Date Time		29-Oct-2014 16:22:51	
Type	Message				
Sequence Number	1.4.1.2.1.1				
Asynchronous	false				
Project Management	Name		Value		
	Author		kpm2		
	Create Date Time		29-Oct-2014 16:22:51		
	Last Modified		31-Oct-2014 13:26:43		






: CreditCardProviderClient

Name	Value
Multiplicity	Unspecified
Base Classifier	CreditCardProviderClient
Active	false
Stopped	false
Multi Object	false

Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:20:44
	Last Modified	31-Oct-2014 13:26:43

Relationships

confirmPayment : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:24:22
Type	Message		
Sequence Number	1.4.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 13:24:22	
	Last Modified	31-Oct-2014 13:26:43	
authorizePayment() : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:22:57
Type	Message		
Sequence Number	1.4		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 13:22:57	
	Last Modified	31-Oct-2014 13:26:43	
create : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:24:37
Type	Message		
Sequence Number	1.3		
Asynchronous	false		



Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:24:37
	Last Modified	31-Oct-2014 13:26:43




: PayPalCleint

Name	Value	
Multiplicity	Unspecified	
Base Classifier	PayPalCleint	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:53:55
	Last Modified	31-Oct-2014 13:26:43

Relationships

confirmPayment : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 15:57:03
Type	Message		
Sequence Number	1.4.1.2.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 15:57:03	
	Last Modified	31-Oct-2014 13:26:43	
authorizePayment() : Message			
From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 15:49:16
Type	Message		
Sequence Number	1.4.1.2		
Asynchronous	false		


Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		29-Oct-2014 15:49:16	
	Last Modified		31-Oct-2014 13:26:43	
create : Message				
From	Name		Value	
	End Model Element		 N/A	
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 13:24:57
Type	Message			
Sequence Number	1.4.1.1			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:24:57	
	Last Modified		31-Oct-2014 13:26:43	



: Database


Name	Value	
Multiplicity	Unspecified	
Base Classifier	Database	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:52:56
	Last Modified	31-Oct-2014 13:26:43

Relationships

success : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:32:00
Type	Message		
Sequence Number	1.4.1.2.1.3.1		
Asynchronous	false		

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:00
	Last Modified	31-Oct-2014 13:26:43

insertBookingDetails(BookingItem) : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:58:35


Type	Message
------	---------

Sequence Number	1.4.1.2.1.3
-----------------	-------------

Asynchronous	false
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Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:58:35
	Last Modified	31-Oct-2014 13:26:43

create() : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:28


Type	Message
------	---------

Sequence Number	1.4.1.2.1.2
-----------------	-------------

Asynchronous	false
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Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:30:28
	Last Modified	31-Oct-2014 13:26:43

close() : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:47

Type	Message
------	---------

Sequence Number	1.4.1.2.1.3.1.1
-----------------	-----------------

Asynchronous	false
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Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:30:47
	Last Modified	31-Oct-2014 13:26:43

N/A

Name	Value	
Documentation	Creator: BookingManager is in charge of creating new objects and handing their encapsulated data to the Database class.	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:14:25
	Last Modified	31-Oct-2014 13:26:43




CombinedFragment

Name	Value	
Operator Kind	alt	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:47:28
	Last Modified	31-Oct-2014 13:26:43

Interaction Operands

Value
Operand
Operand2

Covered LifeLines

Name	Documentation
 N/A	
 N/A	
 N/A	

Operand

Name	Value		
Guard	Name	Value	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 15:47:28

Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:47:28
	Last Modified	31-Oct-2014 13:26:43



Operand2

Name	Value		
Guard	Name	Value	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 15:47:28
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 15:47:28	
	Last Modified	31-Oct-2014 13:26:43	

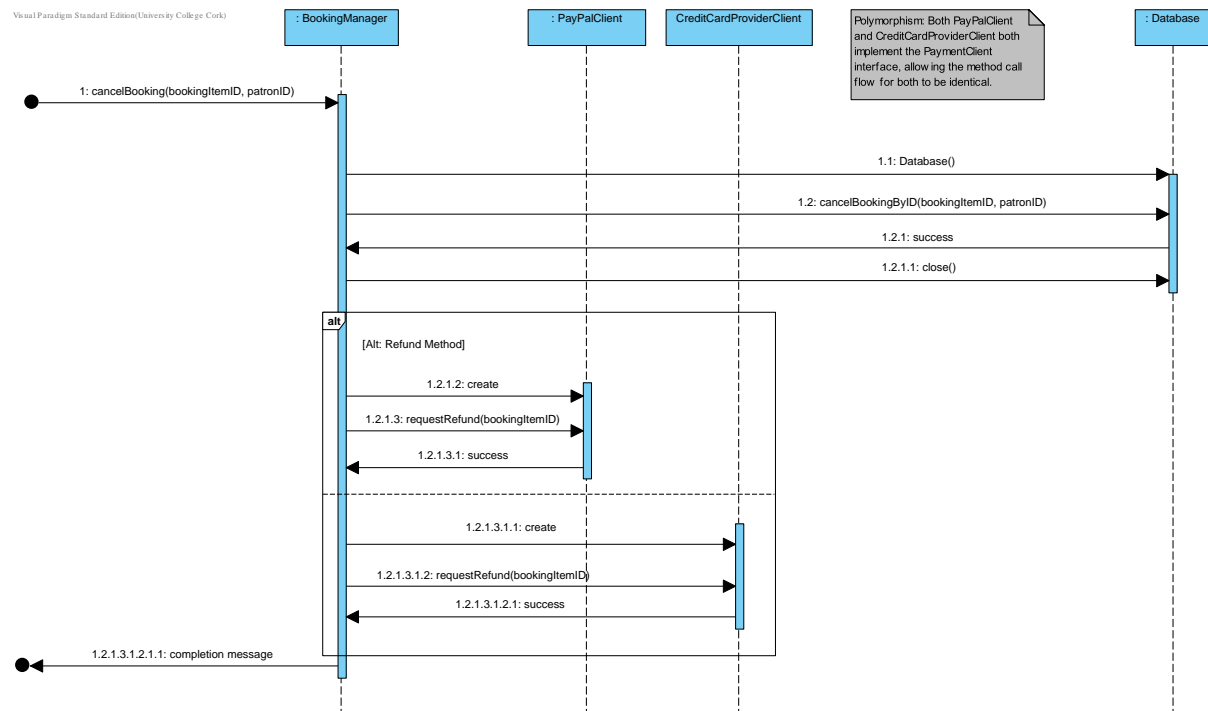
 N/A

Name		Value
Documentation	Information Expert: Payment handling is delegated to either the PayPalClient or the CreditCardProviderClient, both of which contain account info necessary for the transferring of payment.	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:28:29
	Last Modified	31-Oct-2014 13:31:17

Sequence Diagram

Cancel Booking

Visual Paradigm Standard Edition(University College Cork)



Name	Value
Name	Cancel Booking
Author	kpm2
Create Date Time	31-Oct-2014 10:45:21
Last Modified	31-Oct-2014 13:35:38
Show Parameter Types In Message Operation Signature	true

Summary

Name	Documentation
: BookingManager	
: Database	
: PayPalClient	
CreditCardProviderClient	
Alt: Refund Method	
Operand3	
Operand4	
N/A	Polymorphism: Both PayPalClient and CreditCardProviderClient both implement the PaymentClient interface, allowing the method call flow for both to be identical.



Details




: BookingManager

Name	Value	
Quality Score	Good	
Multiplicity	Unspecified	
Base Classifier	BookingManager	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:52:07
	Last Modified	31-Oct-2014 13:08:22

Relationships


create : Message					
To	Name		Value		
	End Model Element		 CreditCardProviderClient		
	Project Management	Name		Value	
		Author		kpm2	
		Create Date Time		31-Oct-2014 13:07:46	
Quality Score	Fair				
Quality Reason	Problem		Suggestion		
	Name does not contain glossary terms		Define name as term in glossary		
Type	Message				
Sequence Number	1.2.1.3.1.1				
Asynchronous	false				
Project Management	Name		Value		
	Author		kpm2		
	Create Date Time		31-Oct-2014 13:07:46		
	Last Modified		31-Oct-2014 13:26:43		
create : Message					
To	Name		Value		
	End Model Element		 N/A		
	Project Management	Name		Value	
		Author		kpm2	
		Create Date Time		31-Oct-2014 13:06:59	
Quality Score	Fair				


Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Type	Message	
Sequence Number	1.2.1.2	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:06:59
	Last Modified	31-Oct-2014 13:26:43

close() : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:47
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2.1.1		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		29-Oct-2014 16:30:47
	Last Modified		31-Oct-2014 13:08:22


completion message : Message			
To	Name	Value	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:05:50
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2.1.3.1.2.1.1		
Asynchronous	false		


Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:05:50
	Last Modified	31-Oct-2014 13:26:43


cancelBookingByID(bookingItemID, patronID) : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:58:35
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		29-Oct-2014 14:58:35
	Last Modified		31-Oct-2014 13:08:22

requestRefund(bookingItemID) : Message			
To	Name	Value	
	End Model Element	 CreditCardProviderClient	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 13:04:39
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2.1.3.1.2		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		31-Oct-2014 13:04:39
	Last Modified		31-Oct-2014 13:08:22

requestRefund(bookingItemID) : Message			
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To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 12:53:35
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Type	Message		
Sequence Number	1.2.1.3		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 12:53:35	
	Last Modified	31-Oct-2014 13:08:22	

Database() : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:28
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.1		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		29-Oct-2014 16:30:28
	Last Modified		31-Oct-2014 13:07:23

success : Message				
From	Name		Value	
	End Model Element		 CreditCardProviderClient	
	Project Management		Name	Value
			Author	kpm2
			Create Date Time	31-Oct-2014 13:05:17
Quality Score	Fair			


Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Type	Message	
Sequence Number	1.2.1.3.1.2.1	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:05:17
	Last Modified	31-Oct-2014 13:26:43

success : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:32:00
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2.1		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		29-Oct-2014 16:32:00
	Last Modified		31-Oct-2014 13:08:22

cancelBooking(bookingItemID, patronID) : Message

From	Name	Value	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 12:46:38
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		31-Oct-2014 12:46:38
	Last Modified		31-Oct-2014 13:07:23


success : Message			
From	Name		Value
	End Model Element		 N/A
	Project Management	Name	
		Value	
		Author	kpm2
		Create Date Time	31-Oct-2014 12:54:09
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		
Sequence Number	1.2.1.3.1		
Asynchronous	false		
Project Management	Name		Value
	Author		kpm2
	Create Date Time		31-Oct-2014 12:54:09
	Last Modified		31-Oct-2014 13:08:22



: Database


Name	Value	
Quality Score	Good	
Multiplicity	Unspecified	
Base Classifier	Database	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:52:56
	Last Modified	31-Oct-2014 13:08:22

Relationships

success : Message			
To	Name		Value
	End Model Element		 N/A
	Project Management	Name	
		Value	
		Author	kpm2
		Create Date Time	29-Oct-2014 16:32:00
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary

Type	Message	
Sequence Number	1.2.1	
Asynchronous	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:32:00
	Last Modified	31-Oct-2014 13:08:22

cancelBookingByID(bookingItemID, patronID) : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 14:58:35

Quality Score	Fair
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Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary


Type	Message
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Sequence Number	1.2
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Asynchronous	false
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Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 14:58:35
	Last Modified	31-Oct-2014 13:08:22

close() : Message

From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:47

Quality Score	Fair
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Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary


Type	Message
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Sequence Number	1.2.1.1
-----------------	---------

Asynchronous	false
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Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 16:30:47
	Last Modified	31-Oct-2014 13:08:22

Database() : Message


From	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	29-Oct-2014 16:30:28
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Type	Message		
Sequence Number	1.1		
Asynchronous	false		
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	29-Oct-2014 16:30:28	
	Last Modified	31-Oct-2014 13:07:23	





: PayPalClient

Name	Value	
Quality Score	Good	
Multiplicity	Unspecified	
Base Classifier	PayPalClient	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	29-Oct-2014 15:53:55
	Last Modified	31-Oct-2014 13:07:23



Relationships


success : Message			
To	Name	Value	
	End Model Element	 N/A	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 12:54:09
Quality Score	Fair		
Quality Reason	Problem		Suggestion
	Name does not contain glossary terms		Define name as term in glossary
Type	Message		

Sequence Number	1.2.1.3.1			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 12:54:09	
	Last Modified		31-Oct-2014 13:08:22	
requestRefund(bookingItemID) : Message				
From	Name		Value	
	End Model Element  N/A			
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 12:53:35
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Type	Message			
Sequence Number	1.2.1.3			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 12:53:35	
	Last Modified		31-Oct-2014 13:08:22	
create : Message				
From	Name		Value	
	End Model Element  N/A			
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 13:06:59
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Type	Message			
Sequence Number	1.2.1.2			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:06:59	
	Last Modified		31-Oct-2014 13:26:43	

Name	Value	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Multiplicity	Unspecified	
Active	false	
Stopped	false	
Multi Object	false	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:03:45
	Last Modified	31-Oct-2014 13:08:22

Relationships

success : Message				
To	Name	Value		
	End Model Element	 N/A		
	Project Management	Name	Value	
		Author	kpm2	
		Create Date Time	31-Oct-2014 13:05:17	
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Type	Message			
Sequence Number	1.2.1.3.1.2.1			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:05:17	
	Last Modified		31-Oct-2014 13:26:43	
requestRefund(bookingItemID) : Message				
From	Name	Value		
	End Model Element	 N/A		
	Project Management	Name	Value	
		Author	kpm2	
		Create Date Time	31-Oct-2014 13:04:39	
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Type	Message			
Sequence Number	1.2.1.3.1.2			

Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:04:39	
	Last Modified		31-Oct-2014 13:08:22	
create : Message				
From	Name		Value	
	End Model Element		 N/A	
	Project Management	Name		Value
		Author		kpm2
		Create Date Time		31-Oct-2014 13:07:46
Quality Score	Fair			
Quality Reason	Problem		Suggestion	
	Name does not contain glossary terms		Define name as term in glossary	
Type	Message			
Sequence Number	1.2.1.3.1.1			
Asynchronous	false			
Project Management	Name		Value	
	Author		kpm2	
	Create Date Time		31-Oct-2014 13:07:46	
	Last Modified		31-Oct-2014 13:26:43	




Alt: Refund Method

Name	Value	
Quality Score	Fair	
Quality Reason	Problem	Suggestion
	Name does not contain glossary terms	Define name as term in glossary
Operator Kind	alt	
Project Management	Name	
	Value	
	Author	
	kpm2	
	Create Date Time	
	31-Oct-2014 12:51:31	
	Last Modified	
	31-Oct-2014 13:07:23	

Interaction Operands

Value
Operand3
Operand4

Covered LifeLines

Name	Documentation
 N/A	
 N/A	
 CreditCardProviderClient	

Operand3

Name	Value		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Guard	Name	Value	
	Constraint	Alt: Refund Method	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 12:51:49
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 12:51:31	
	Last Modified	31-Oct-2014 13:07:23	

Operand4

Name	Value		
Quality Score	Fair		
Quality Reason	Problem	Suggestion	
	Name does not contain glossary terms	Define name as term in glossary	
Guard	Name	Value	
	Project Management	Name	Value
		Author	kpm2
		Create Date Time	31-Oct-2014 12:51:32
Project Management	Name	Value	
	Author	kpm2	
	Create Date Time	31-Oct-2014 12:51:32	
	Last Modified	31-Oct-2014 13:08:22	

N/A

Name	Value
Documentation	Polymorphism: Both PayPalClient and CreditCardProviderClient both implement the PaymentClient interface, allowing the method call flow for both to be identical.

Quality Score	Good	
Project Management	Name	Value
	Author	kpm2
	Create Date Time	31-Oct-2014 13:10:28
	Last Modified	31-Oct-2014 13:26:43