174 Chapter 4 Use Case Analysis

Use Case Name: Search and brow	vse tunes		ID: UC -1	Priority: High			
Actor: Tune Shopper							
Description: This use case describes a tune shopper who searches and browses through tunes							
Trigger: Tune shopper arrives at Web site to search and browse through tunes							
Type:							
Preconditions:							
Web site is available							
Tune database is on-line							
Normal Course:			Information	on for Steps:			
 1.0 Search and browse tunes and s System displays default hon 	•						
	on page or enters account username a	nd password -	⋖ Username	:/password			
• • • • • • • • • • • • • • • • • • • •	an account: perform Create Account i	•		.,			
4. Tune Shopper enters search	· · ·	<	Search criteria				
5. System displays tune(s) ma	· · · · · · · · · · · · · · · · · · ·		Tunes matching search				
6. Tune Shopper selects a tune and wants to hear a sample			Tune samples New Interest				
7. Tune Shopper selects a tune to add to Favorites —			New Favorites				
8. Tune Shopper selects a tune		_	➤ Modified Favorites				
	to buy by placing it in shopping cart	_		➤ New Shopping Cart Entry			
10. Tune Shopper selects a tune	to remove from shopping cart		→ Modified S	Shopping Cart			
Alternative courses:	(horazolo ak akon 4)						
1.1 Tune Shopper is a return visitor	(brancn at step 1) mized for the return visitor using Inter	ests from «	Interests	database			
prior visits	mized for the return visitor using intere	יווטוו פעפג	IIIVEIESUS	uavavaec			
1.2 Tune Shopper has created an ac	count (branch at step 2)	<	Favorites	database			
1. System displays welcome me		◀	Targeted I	Promotions database			
2. Page is customized for the a	ccount holder using Favorites List and	Targeted					
Postconditions:							
1. One or more tunes are added	to shopper Interests						
2. Account holder favorites list							
Shopping cart contents may	be modified						
Exceptions:							
E1: Account is not valid (occurs at step 2)							
 System displays message that username/password is not valid. System asks Tune Shopper to re-enter username/password or contact customer service for help. 							
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E2: Search request returns no results (occurs at step 3)							
1. System displays message that no results were found for that search							
2. System asks Tune Shopper to try another search							
Summary Inputs	Source	Outputs		Destination			
Username/password	Tune Shopper	New Interes	t	Interests database			
Search criteria	Tune Shopper	New Favorit	es	Favorites database			
Tunes matching search	Tunes database	Modified Fa		Favorites database			
Tune samples	Tune Samples database		ng Cart Entry	Shopping Cart database			
		Woallied Sr	opping Cart	Shopping Cart database			

FIGURE 4-14

Tune Source Use Cases

Use Case Name: Purchase Tune	se Name: Purchase Tune		ID: UC -2	Priority: High				
Actor: Tune Buyer								
Description: This use case describes the Tune Buyer's purchase and download of selected tune(s)								
Trigger: Tune Shopper has placed one or more tunes in shopping cart and is ready to check-out								
Type: ☑ External ☐ Temporal								
Preconditions:								
1. One or more tunes are in shopping cart								
2. Tune Buyer has specified readin								
Normal Course:			Information	on for Steps:				
	, supplies payment, and downloads tun		Shopping cart contents Purchase authorization					
 System displays shopping cart Tune Buyer specifies intention t 	contents with prices of tunes included							
3. System collects payment inform	•			Payment information				
4. System obtains payment author		-	· · · · · ·	nuthorization				
5. Tune Buyer confirms payment t		-		onfirmation				
6. System processes payment		_	Tune Sales details					
7. System confirms payment acce		-	Payment a	occeptance				
8. System releases tunes in cart								
downloaded the system remove	ocess for each tune; as each tune is su s it from cart	ccesstully	/					
Alternative courses:	<u> </u>							
1.1 Tune buyer has established account	t (branch at step 3)							
1. Tune buyer specifies username a	The state of the s	-	Username	/password				
2. System retrieves account inform	nation including stored payment inform	ation 🔫	Account a	i latabase				
	ntion to use stored payment informati	on or —	Account r	nodification				
modify stored payment informa								
4. Return to Normal Course step	т.							
Postconditions: 1. Shopping cart is empty								
2. Tune purchase is recorded								
3. Tune sales transaction is record	ded							
Exceptions:								
E1: Payment is not authorized (occurs	at step 4)							
1. System displays message that payment is not accepted.								
2. System asks Tune buyer to enter new payment information or exit								
3. System terminates use case if tune buyers specifies exit; otherwise return to Normal Course step 4								
E2: Tune buyer cancels payment (occurs at step 5)								
1. Tune buyer cancels payment transaction								
2. System terminates use case								
Summary								
Inputs	Source	Outputs	3	Destination				
Shopping cart contents	Shopping cart database	Tune Sa	le details	Tune Sales database				
Purchase authorization	Tune Buyer	Account	t modification	Account database				
Payment Information	Tune Buyer							
Payment authorization Payment confirmation	Payment Clearinghouse Tune Buyer							
Tayment Commination	Tutto Duyet							

FIGURE 4-14 (continued)

176 Chapter 4 Use Case Analysis

Use Case Name: Promote Tunes			ID: UC -3	Priority: High				
Actor: Marketing Department Staff								
Description: This use case describes how marketing staff periodically creates new targeted promotions								
Trigger: Time for marketing department to replace current promotions/specials with new promotions/specials								
Type: □External ☑Temporal								
Preconditions:								
 Marketing staff person is au 								
2. Promotions database is available and on-line								
Favorites database is available and on-line Sales database is available and on-line								
	na on-line		lu fa ma a t	to a few Otens				
Normal Course: Information for Steps:								
1.0 Prepare promotion or special offer based on analysis of customer activity 1. Marketing staff specifies time period for analyses Time interval for analyses								
 Marketing staff specifies time period for analyses System performs customer activity analysis and sales analysis Time interval for analyses Favorites activity								
egesem periorime edesemen	Sales activity							
3. System accepts promotional details New promotion information								
4. Targeted promotions are created — New promotions								
5. Email messages for sales and promotions are created and sent								
Postconditions:								
1. New Promotions are created								
2. Email messages are sent to customers								
Summary								
Inputs	Source	Outputs		Destination				
Time interval for analyses	Marketing staff	New promotion		Promotions database				
Favorites activity	Favorites database	Email messag	jes	Customers				
Sales activity	Sales database							
New promotion information	Marketing staff							

FIGURE 4-14 (continued)