CS324-SDA Activity

Collaboration Diagram

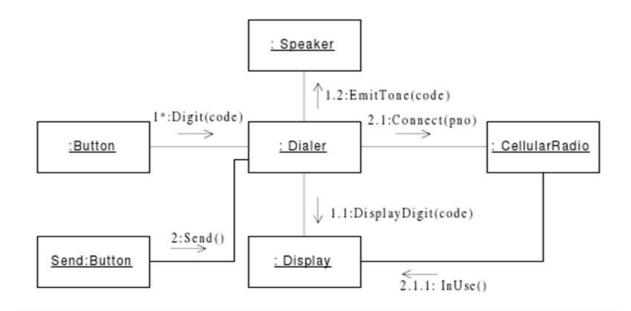
Consider the software that controls a very simple cellular telephone. Such a phone has buttons for dialing digits, and a "send" button for initiating a call. It has "dialer" hardware and software that gathers the digits to be dialed and emits the appropriate tones. It has a cellular radio that deals with the connection to the cellular network. It has a speaker, and a display.

Use case: Make Phone Call

- 1. User presses the digit buttons to enter the phone number.
- 2. For each digit, the display is updated to add the digit to the phone number.
- 3. For each digit, the dialer generates the corresponding tone and emits it from the speaker.
- 4. User presses "Send" for connecting to the network. The accumulated digits are sent to the network. The cellular radio establishes a connection to the network.
- 5. The "in use" indicator is illuminated on the display
- 6. The connection is made to the called party.

Robustness Analysis

Use case ID	UC001A
Use case name	Search Products
Actors	Customer
Description	Search for products based on some criteria.
Trigger	The customer wants to browse among products or the customer would like to search for certain products.
Precondition	Customer starts a web browser.
Postcondition	Search results meeting the criteria are displayed.
Normal flow	Customer visits application home page.
	2. Customer clicks Search button.
	3. Search page is displayed by the system.
	4. Customer enters search criteria.
	5. The system validates the criteria provided.
	6. The system looks up the catalog to find the products that meet the criteria.
	7. Search results page is displayed with the products fulfilling the criteria.
Alternative flows	Refine Search Results
	The following steps are added:
	8. Customer refines search results by providing additional criteria.
	9. Steps 5–7 are re-executed.
Exceptions	In Step 5, if search criteria is invalid or even missing then Step 3 (display search page) will be executed along with some hints on valid criteria.
	In Step 6, if no products meet the criteria then Step 3 (display search page) will be executed along with providing the error message "Product not found".
Includes	None
Notes and issues	None



Collaboration Diagram of "Make Phone Call" use case.

