

Experiential Learning on Use Case Model

Analyze the given scenario and construct the Use Case diagram using StarUML tool.

1. An author writes a story using an Editing system which supports the use case WriteStory. There are two additional use cases (i) CheckSpelling (ii) CheckGrammar. The requirement is that spelling should always be checked and grammar may be checked only if it is some prose and not a drama. How should these use cases be related? Why?
2. **Credit Card Processing System** (aka Credit Card Payment Gateway) is a [subject](#), i.e. system under design or consideration. Primary [actor](#) for the system is a **Merchant's Credit Card Processing System**. The merchant submits some credit card transaction request to the credit card payment gateway on behalf of a customer. Bank which issued customer's credit card is actor which could approve or reject the transaction. If transaction is approved, funds will be transferred to merchant's bank account.

Authorize and Capture use case is the most common type of credit card transaction. The requested amount of money should be first authorized by **Customer's Credit Card Bank**, and if approved, is further submitted for settlement. During the settlement funds approved for the credit card transaction are deposited into the **Merchant's Bank** account.

In some cases, only **authorization** is requested and the transaction will not be sent for settlement. In this case, usually if no further action is taken within some number of days, the authorization expires. Merchants can submit this request if they want to verify the availability of funds on the customer's credit card, if item is not currently in stock, or if merchant wants to review orders before shipping.

Capture (request to capture funds that were previously authorized) use case describes several scenarios when merchant needs to complete some previously authorized transaction - either submitted through the payment gateway or requested without using the system, e.g. using voice authorization.