Credit Card Processing System UML Diagrams

The **Credit Card Processing System UML Diagrams** are based on UML and are used to represent the system's primary users, roles, activities, artifacts, or classes. The UML Diagrams are created to easily understand, update, maintain, and document the methodologies and development of the credit card processing system.

The **UML diagrams for the credit card processing system** were used to visualize the project. It can be done before the development begins or to document its progress once it is completed. However, these **UML Diagrams** can be used in any sector, not only in software engineering. Its overall objective is to help teams or developers visualize what a project is or how it will work.

Users of Credit Card Processing System

The users of the Credit Card Processing System Sequence Diagram are the following:

- Bank Admin
- Crews/Employees
- Bank Member/clients

List of UML Diagrams for Credit Card Processing System:

- Sequence Diagram
- Activity Diagram
- Class Diagram
- Use Case Diagram
- Deployment Diagram
- Component Diagram

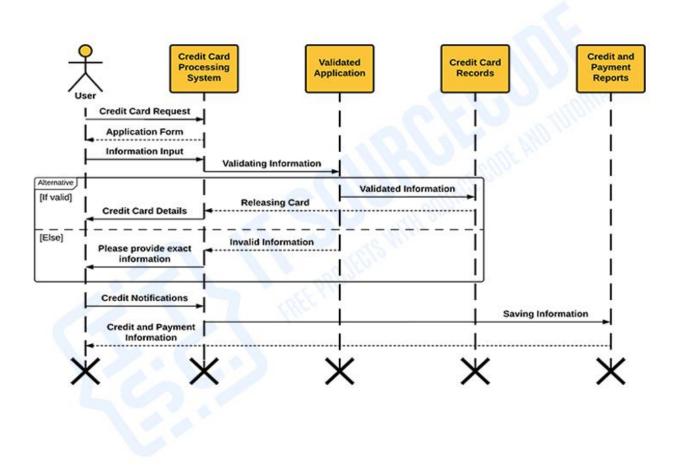
The UML Diagrams of Credit Card Processing System

Here are the UML Diagrams that complete the Credit Card Processing System. Each of the UML Diagrams has a major role in achieving a well-developed and functioning Credit Card Processing System.

Sequence Diagram for Credit Card Processing System

The <u>Credit Card Processing System Sequence Diagram</u> represents the scenario and the messages that must be passed between objects. This is done for the scenario's functionality to be realized. It's an interaction diagram that shows how activities are carried out, including when and how messages are sent.

CREDIT CARD PROCESSING SYSTEM



SEQUENCE DIAGRAM

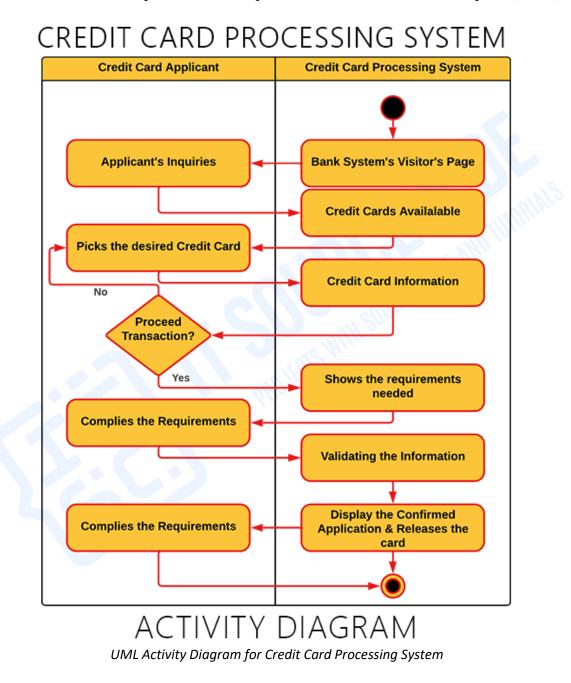
Sequence Diagram for Credit Card Processing System

The credit card processing system sequence diagram has several boxes (objects) which are the credit card processing system, validated Information, credit card information, and credit and payment reports. Its user is the card applicant and holders.

The explanation for the credit card processing system discusses how the illustration works. It has the figures which will clarify the sequence of activities and their alternatives. The box figures represent the object, the stick man is for the user, and the broken lines are for the lifelines. Messages are then presented by vertical arrows.

Activity diagram for Credit Card Processing System

The **credit card processing system activity diagram** is a UML behavioral model that shows the credit card process by presenting the flow of activities that happens when one applies to a bank for a credit card. This example activity diagram uses symbols to define the overall workflow of the credit card process. It is composed of activities, decisions, and paths (flows).



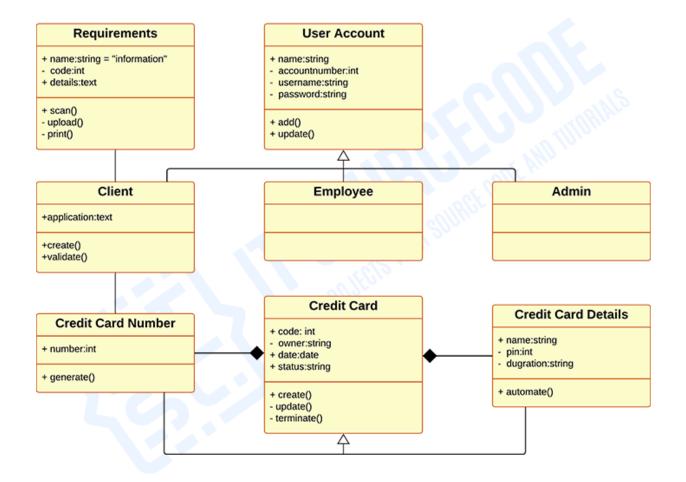
Additionally, the activity diagram depicts software operations as a series of actions. These diagrams are used to document and define the system processes and use cases. It can clarify

difficult use cases to simplify and improve any process. An activity diagram also models the system's actions, functions, and processes.

Class Diagram for Credit Card Processing System

A <u>Credit Card Processing System Class Diagram</u> is a form of structural (UML) diagram that depicts the structure of a system. This is designed by displaying the system's **classes**, **attributes**, **methods**, and **relationships** between classes.

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CLASS DIAGRAM

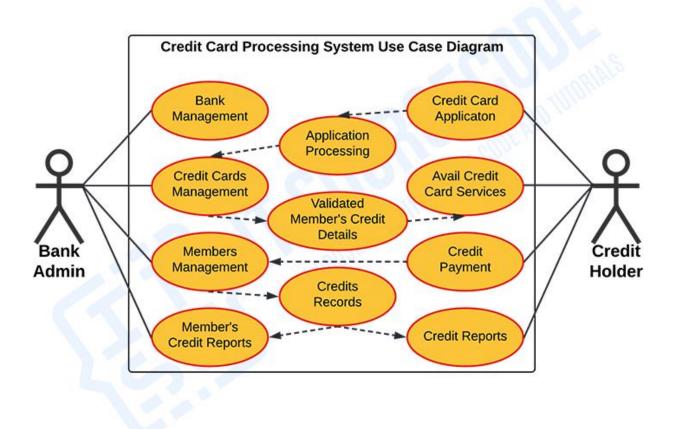
Credit Card Processing System UML Class Diagram

Class diagrams reveal the class structure blueprint of the Credit Card Processing System. It is used to model the items that make up the system and depict their relationships. This is to define the function of an object and the operation it provides.

Use Case Diagram for Credit Card Processing System

The <u>Use Case Diagram for Credit Card Processing System</u> is a graphic summary of the software and user details. It's usually depicted as a graphical representation of the entities' interactions.

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USE CASE DIAGRAM

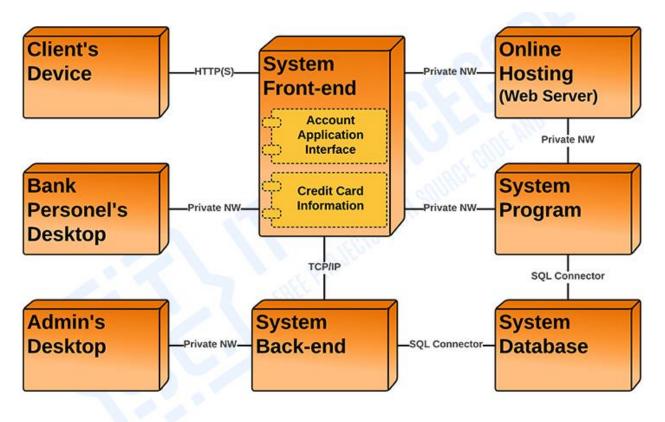
Use Case Diagram for Credit Card Processing in UML

The broken arrows are indications that the following diagrams connected to them are parts of a process. They could either be one of the indications which were the include or extend. The include indication means that the following use case should be performed to finish the task and the extend indication is otherwise.

The Use Case Diagram for Credit Card Processing System with Explanation is discussed and clarified in this article. These use case diagrams are shown in different processes and are based on credit card processing. This diagram contains the main use cases and users in the system. These use cases are elaborated by either use case connected to them by the broken arrows.

Deployment Diagram for Credit Card Processing System

A <u>Deployment Diagram for Credit Card Processing System</u> is a form of UML model used to describe the execution architecture of the Credit Card Processing System. It contains elements such as hardware, software, and the middleware that connects them. UML **Deployment Diagram** presents the system's physical hardware and software

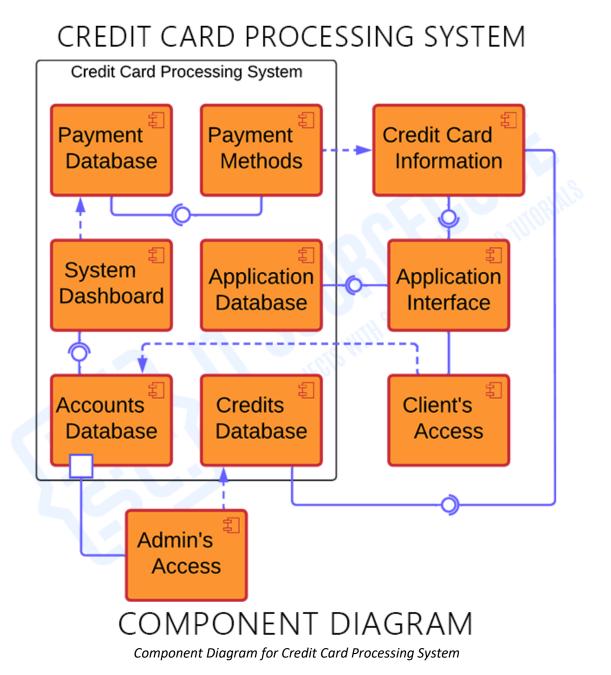


UML Deployment Diagram for Credit Card Processing

The function modules are Using the "Process Credit Card" option in the Global menus, payments can be quickly collected from both the Invoice and Accounts Receivable modules. Users are requested to submit credit card information, and a posted Cash Receipt record is created once the transaction is finished.

Component Diagram of Credit Card Processing System

The <u>Credit Card Processing System component diagram</u> in the (UML) Unified Modeling Language shows how parts are wired together to create bigger parts of the card processing system. They are used to show the structure of the credit card processing system.



The UML component diagram shows how a credit card processing system is made and the set of deployable components, such as dynamic-link library (DLL) files, executable files, or web services. Using well-defined interfaces, these parts communicate with each other and keep their internal details hidden from each other and the outside world.