

CARD COST API

OVERVIEW

A payment card number, primary account number (PAN), or simply a card number, is the card identifier found on payment cards. The PAN is a 16 digit number displayed on one side of the card. The first 6 digits of a payment card number (credit cards, debit cards, etc.) are known as the Issuer Identification Numbers (IIN), previously known as Bank Identification Number (BIN). These identify the institution that issued the card to the card holder.

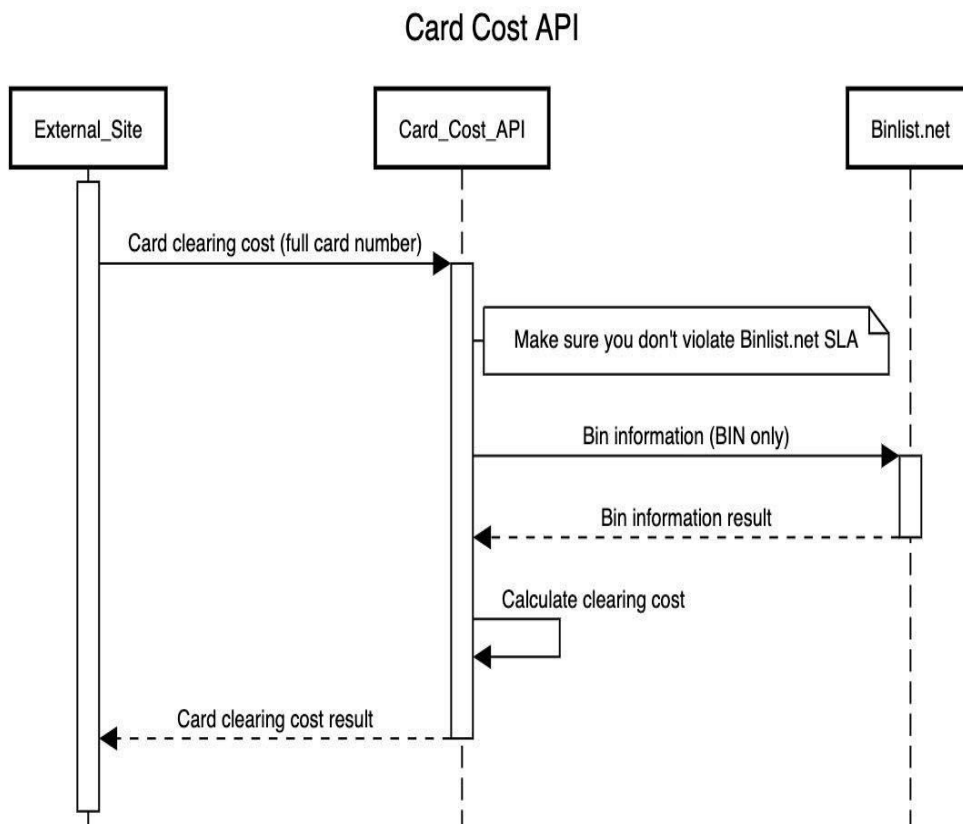
Given the following clearing cost matrix:

Card issuing country	Clearing Cost (USD)
US	\$5
GR	\$15
Others	\$10

The Cadr-Cost service contains a REST API that can do the following:

- Have full Create Read Update Delete operations on the clearing cost matrix
- Can respond with the clearing cost of a given card number, utilizing the information provided by this public API <https://binlist.net/>

The card clearing cost calculation is depicted in the following diagram:



Deliverable traits

- A web (HTTP) API that can support the following action
 - HTTP POST on /payment-cards-cost of the following JSON:

```
{  
  "card_number": <pan>  
}
```

- Response:

```
{  
  "country": <iso2_code>,  
  "cost": <decimal>,  
}
```

- The implementation of the API should be written in JAVA
- Comprehensive unit and integration test
- Full source code
- Comprehensive documentation
- Docker deployable solution
- Detailed instructions
- Security considerations