Individual Project Part 2:

# Problem Statement:

* Determine if the credit card provided is an account that really exists and if so, who is the credit card issuer.
* The secondary problem is how we would create the appropriate objects to fulfill our design pattern.

# Design Pattern:

* **Chain of Responsibility**: To solve this problem statement I believe that the chain or responsibility will the design pattern of choice. This is because it will allow us to pass the credit card to the credit card class, which will then pass it onto each of the classes VisaCC, MastercardCC, AmexCC, DiscoverCC, where we will check if it’s an valid account number and who is the issuer of the card.
* **Factory Pattern**: To solve the issue of determining the file type. Using this we can determine if the user has provided the correct file inputs, and outputs, and which class to send it to be parsed and determine if the correct file creditcard is present.
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# Consequences:

* It would have to be sent to each of the subclasses to determine the issuer, so it would have an effect on the performance
* It could have the classes and it does not mean that the classes will ever be used, the chain might end early.
* We have to create a new connection for each of the handlers.