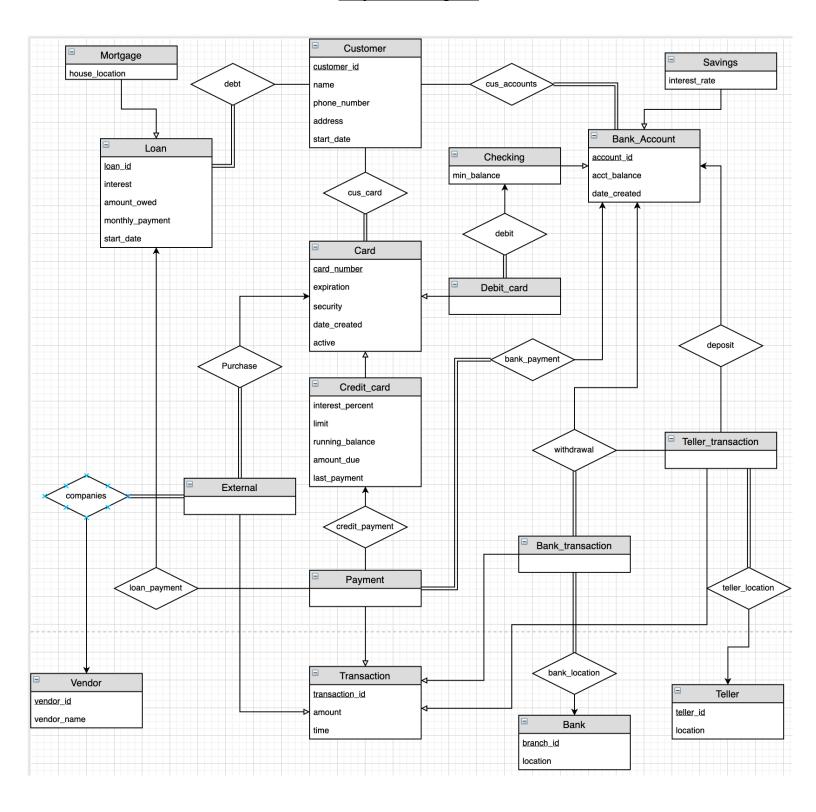
## Project ER Diagram



## **Assumptions**

- In this bank it is allowed for loans, accounts and cards to have multiple customers associated with them
- An account, card, loan, can have many transactions, but a transaction can only be associated with one of these each
  - o It is the same idea as before for vendor, bank and teller
- Total participation is expected for a lot of specializations in some relationship sets
- There are no weak entity sets that could identified as you cannot really delete financial information without destroying a financial trail that government agencies may need
- Some attributes such as name in customer have not been broken down into more complex attributes but could be in the future if identified as a need. It was not seen a necessary for the iteration based on the interface demands
- Customers are expected to know their customer ID, their account ID, loan ID if they have a loan, and all their card information. If they forget one of these, they will have to contact a bank personnel and confirm their identity to gain access back. For cards they can cancel and then create a new card through the interface.
- If a customer sees that false transactions are being made on their behalf, they will have to contact bank personnel, verify their identity and identify the false transactions made.
- Since most transactions happen through the Banks created interface, we do not expect a customer to create a password, instead they are expected to not share their ANY of their ID information to prevent fraud. Once a system is made to operate on a website, then that field will be necessary, and you will have to encrypt and store them for protection.
- Currently we have the amount fields, balance fields and other fields regarding monetary value set as numbers with a decimal limit of two. This was decided for simplicity and the fact that Nickel Bank will have a quite small number of customers at the start, meaning that any floating-point errors will cause minimal issues in the bank. However, as the bank size increases, it could be a good idea to separate the dollars and cents amounts to prevent floating point errors.
- Payment was used for loan\_payment and credit\_payment as they fundamentally have the exact same behavior, just paying off different items