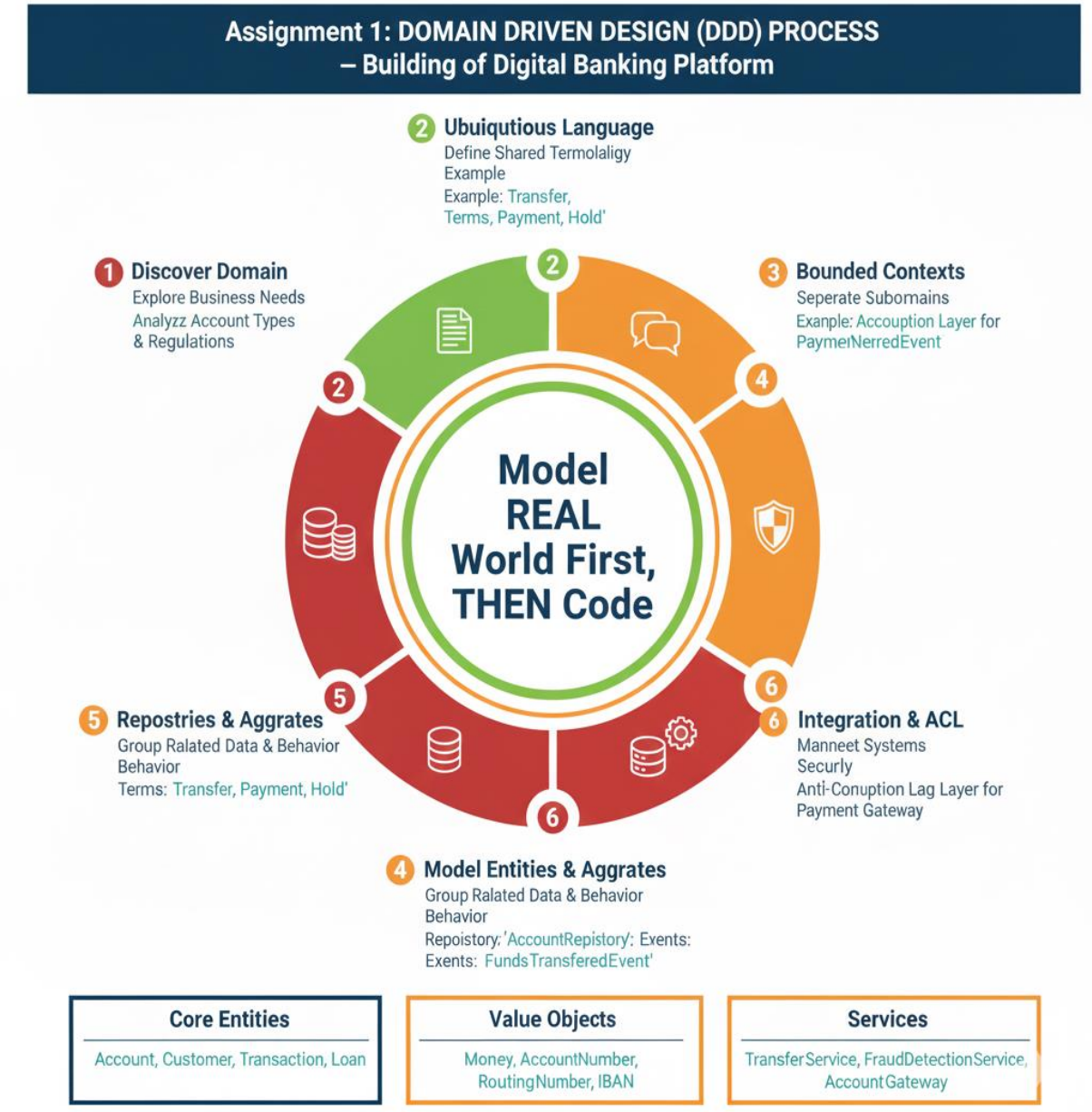
[55958- Aman Goswami, Assignment-3, Date-12 Dec 2025]

Assignment- Create an infographic illustrating the Domain Driven Design (DDD) process. Highlight steps within it and a real-world use case

Domain-Driven Design (DDD) – Banking Application

Domain-Driven Design (DDD) is a software design approach where we focus on understanding the business domain first and then build software that follows the real-world banking rules.

"Learn how the bank works → break it into parts → create classes and rules that match the real system."



Steps of Domain Driven Design

1. **Discover the Domain**
   Understand how the business works by talking to experts.
2. **Create a Ubiquitous Language**
   Use one common vocabulary so everyone speaks the same terms.
3. **Identify Bounded Contexts**
   Break the big system into small modules like Accounts, Payments, and KYC.
4. **Model Entities, Value Objects & Aggregates**
   Create classes that represent real banking things (Account, Customer, Money).
5. **Define Repositories, Services & Domain Events**
   Write business logic (TransferService), events (PaymentCompleted), and storage rules.
6. **Integrate Using Anti-Corruption Layer (ACL)**
   Protect the system when connecting to external services like payment gateways.

Real-World Use Case: Bank Money Transfer System

Imagine you are building a **"Transfer Money"** feature for a bank.

How DDD helps:

- **Discover Domain:** Learn rules like "transfer cannot happen if balance is low."
- **Ubiquitous Language:** Everyone uses the same words — Account, Transfer, Transaction.
- **Bounded Contexts:** Transfers happen in the **Payments Context**, balances in the **Accounts Context**.
- **Entities:**
  - Account stores balance
  - Transaction records transfer details
- **Value Objects:**
  - Money(amount, currency), AccountNumber

- **Service:**
  - TransferService checks balance, updates accounts, records transaction
- **Event:**
  - PaymentCompletedEvent after successful transfer
- **ACL:**
  - Payment gateway adapter connects with external systems safely

Result:

The money transfer works exactly like in a real bank — safely, clearly, and with proper rules.