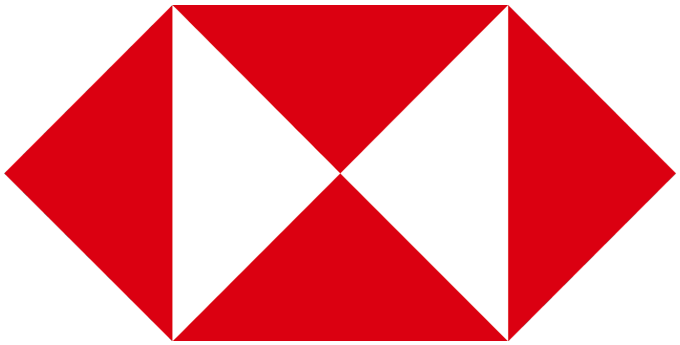


HSBC

Code-Fury

# “Asset @ Your Service” - an E-asset Management System

## Team Gravity

**TEAM COMPOSITION -**

| NAME | ROLE | NAME | ROLE |
|---|---|---|---|
| Neha | Team Lead & Backend Expert | Akanksha | Frontend developer |
| Shruti | Java Developer | Aditi | Java Developer |
| Abhishek | Frontend developer | Divanshu | Backend Expert |
| Manya | Frontend developer | Yaminee | Java Developer |
| Isha | Frontend developer | Mili | Frontend developer |

# Index -

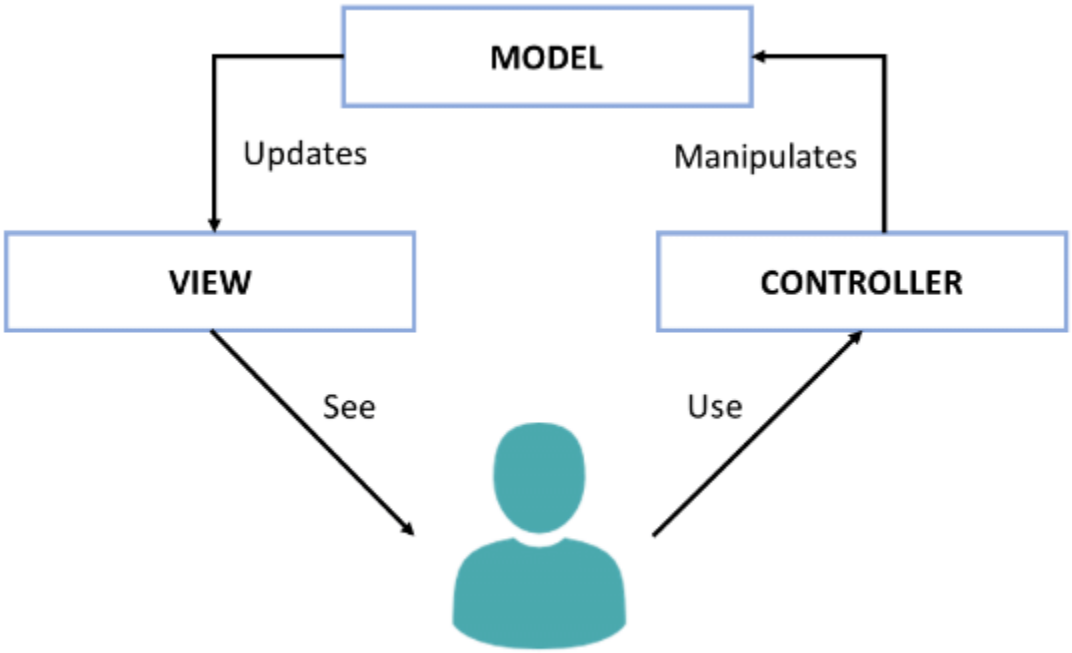
# 1. Introduction

This project aims at making the process of asset management easier for the employee borrower and the administrator alike. This is a portal backed up by a database system that a company or organization can use to keep track of the equipment and inventory vital to day-to-day operation of their businesses.

This asset management web-application is a centralized system that allows the employee and the administrator to track important details about each asset in real time. This decreases administrative costs, improves service and gives the participants greater visibility into asset utilization, costs and maintenance.

## 2. Design

Powered with a well made and formatted User Interface, made with technologies and techniques such as JavaScript, CSS, PHP, Ajax, and Servlets, provides the employees and the admin to interact with the database. The database of this project is made with the highly efficient relational database system - MySQL that has been linked to the front end via a network of Data Access Object, Service, and Controller layers. It is made in such a way that it follows MVC(Model-View-Controller) Pattern and the database operates in third normal form.

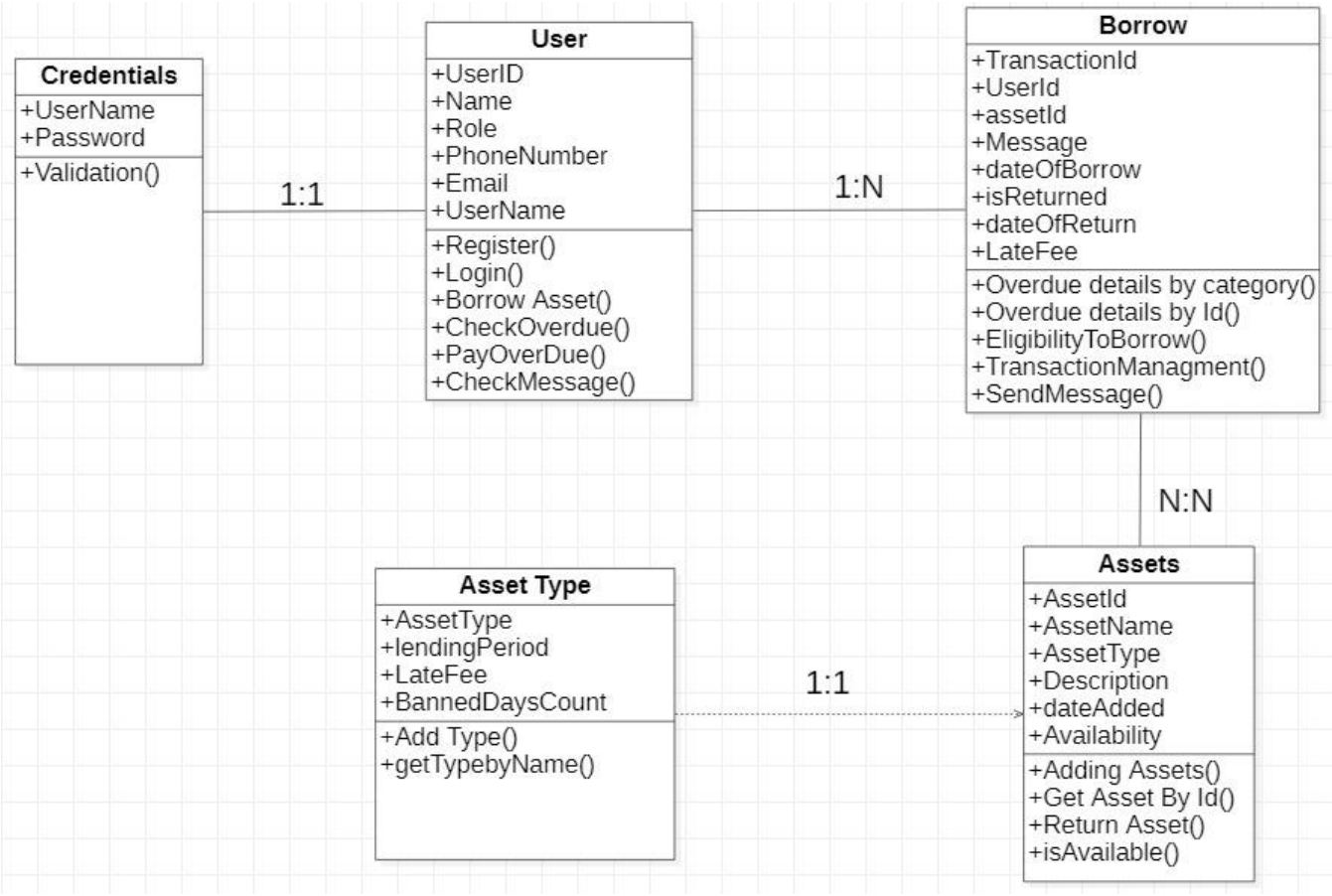


In the next few chapters we'll be seeing the various Unified Modelling Language diagrams related to this project in detail, namely -

1. Class Diagram
2. Data Flow Diagram
3. Entity Relationship Diagram
4. Use-Case Diagram

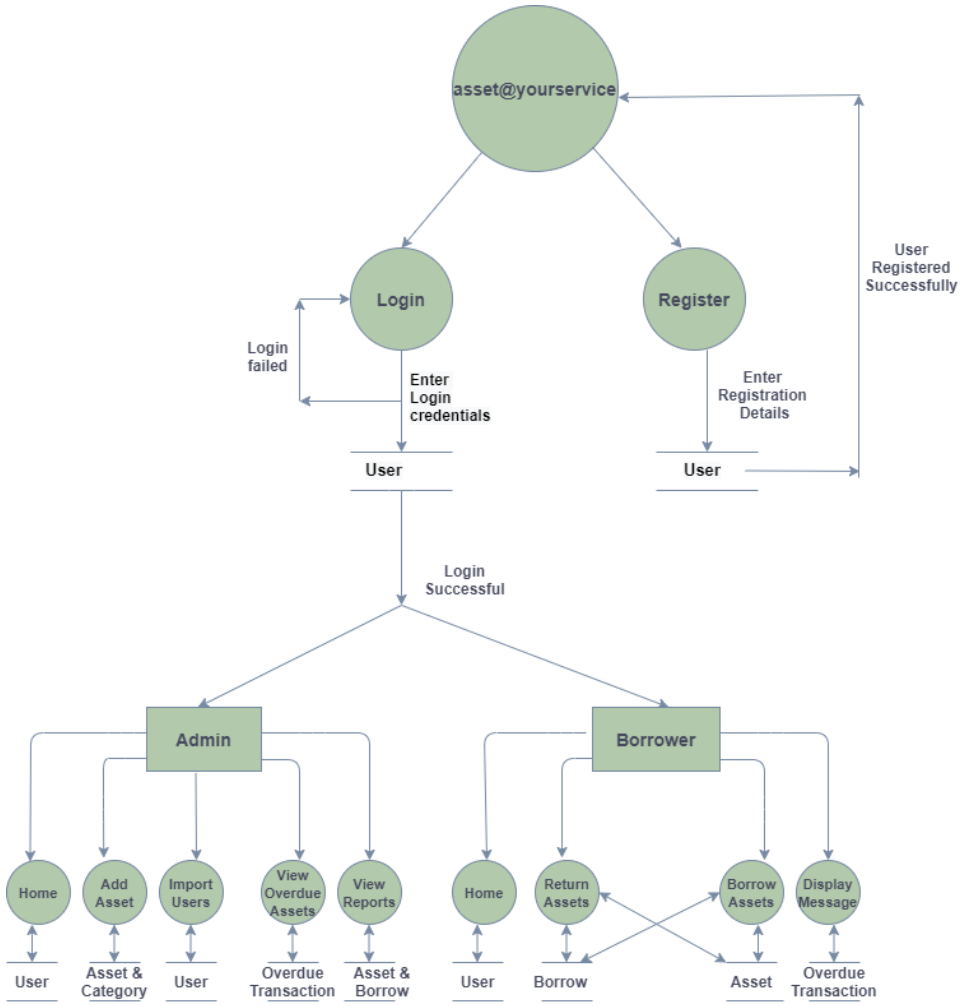
## 3. Class Diagram

Class diagrams are the main building block in object-oriented modeling. The E-asset management system class diagram shows the different objects in the management system, their attributes, their operations and the relationships among them.



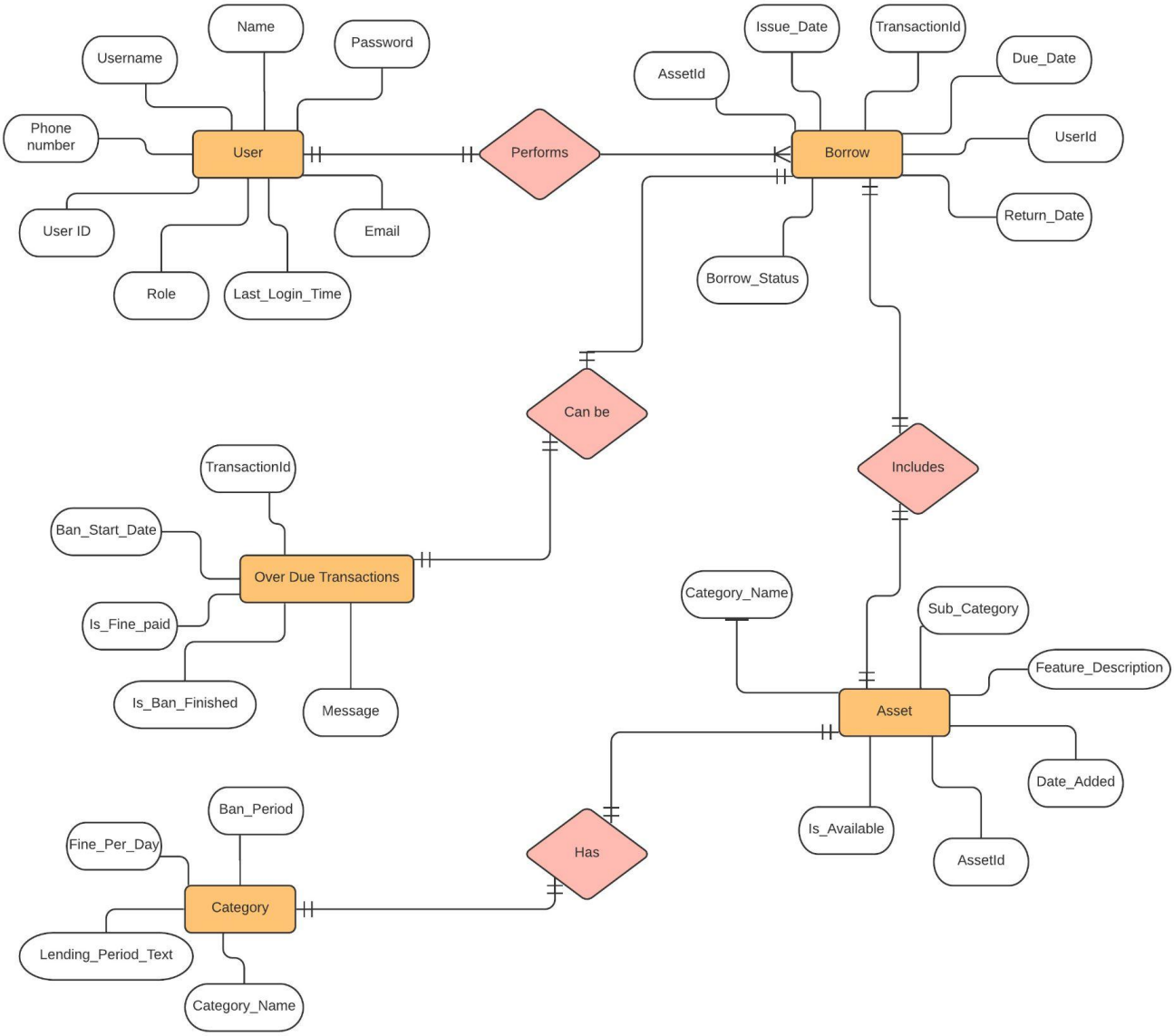
## 4. Data Flow Diagram

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both. It shows how data enters and leaves the system, what changes the information, and where data is stored.



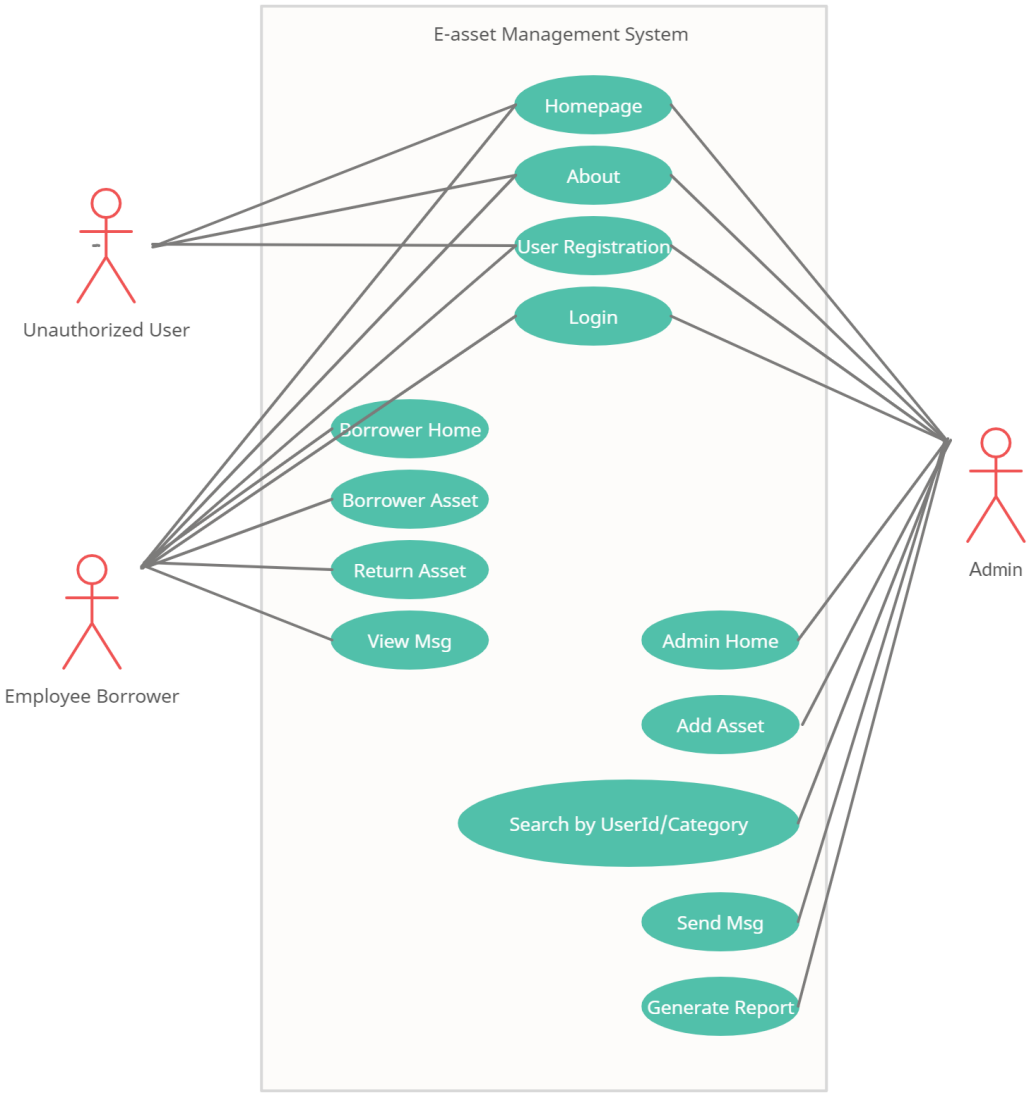
## 5. Entity Relationship Diagram

An Entity–relationship model (ER model) describes the structure of a database with the help of a diagram, which is known as Entity Relationship Diagram (ER Diagram). An ER model is a design or blueprint of a database that can later be implemented as a database. The main components of the E-R model are: entity set and relationship set.



## 6. Use-Case Diagram

The E-asset management system  use case diagram is a graphical depiction of a user's possible interactions with the system. This  use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well.



## 7. Scope of the Project

The functionalities and the features of the E-asset system can be highlighted by the following -

a. **Centralize asset information**: A Computerized Maintenance Management System, as part of E-Asset Management System, tells administrators where an asset is, what it needs, who should work on it and when. It automates critical asset management workflows and makes them accessible and auditable.

b. **Resolve issues before they happen**: Asset management software supports preventive capabilities to maintain equipment for stable, continuous operations. It helps ensure warranty compliance and preempt issues that disrupt production.

c. **Monitor assets smarter**: A well structured layout and monitoring delivers actionable insight into current and expected states of assets. It aggregates data across fields and tables, allowing for fewer, more accurate alerts and enhanced decision-making.

d. **Maximize asset utilization**: Historical and real-time data collected from the backend relational databases help extend the availability, reliability and usable life of physical assets.

e. **Work Management:** Centrally manage planned and unplanned work, from initial request through completion and including the recording of actuals.

f. **Consolidate operational applications:** E-Asset Management System helps establish a single technology system to manage virtually all asset types. Processes are unified and standardized for wide-ranging asset functions across an enterprise.

## 8. Application

- The following project is used to manage the way an organization keeps in check the material assets, in the form of technical equipment such as laptops, headphones etc. are managed. It keeps in check the time for which it was borrowed and the final pricing incase of overlimits.

- An e-asset management system can also be applied to commercial websites/applications such as rental platforms for cars, movies, books etc. Helping in keeping a check on the lending/borrowing.

- SImilarly, it can also be used in educational and training websites where periodic subscriptions and rentable course material can be considered the asset and can be monitored with the help of the following system.

## 9. Conclusion

The E-asset management system has come a long way and evolved over the years. As the world changes and grows, the scope of using technology to ensure certain tasks, proven to be difficult to be done manually, increases. With this project we came to know how different technologies can work in synergy to produce a power tool that various organizations can incorporate to make daily work simpler and more organized.

We as a team also learnt the way of working, by following the principles of SDLC and the art of delegating work in such a manner that optimized the efforts of all the team members while letting the opportunity to learn and grow, open.