



# E-Asset Management

Presentation 2023  
Training Room 13



**Presented By:**  
**Team**  
**Dev\_Octs**

# Overview

- 1.Team Members**
- 2.Project Scope**
- 3.Application Features**
- 4.UISnapshots**
- 5.Designing**
- 6.Challenges**
- 7.Learnings**
- 8.Acknowledgement**



# 1.Team Dev\_Octs



## Team Structure And Responsibilities

### UI TEAM

- **Rajnandini Singare**
- **Maturu Thrinadh**
- **Roohi Sood**
- **Ishika Murarka**
- **Manas Singh**

### Back-End Team

- **Anannya Agrawal**
- **Kanisha Jain**
- **Souri Yaswanth Krishna**

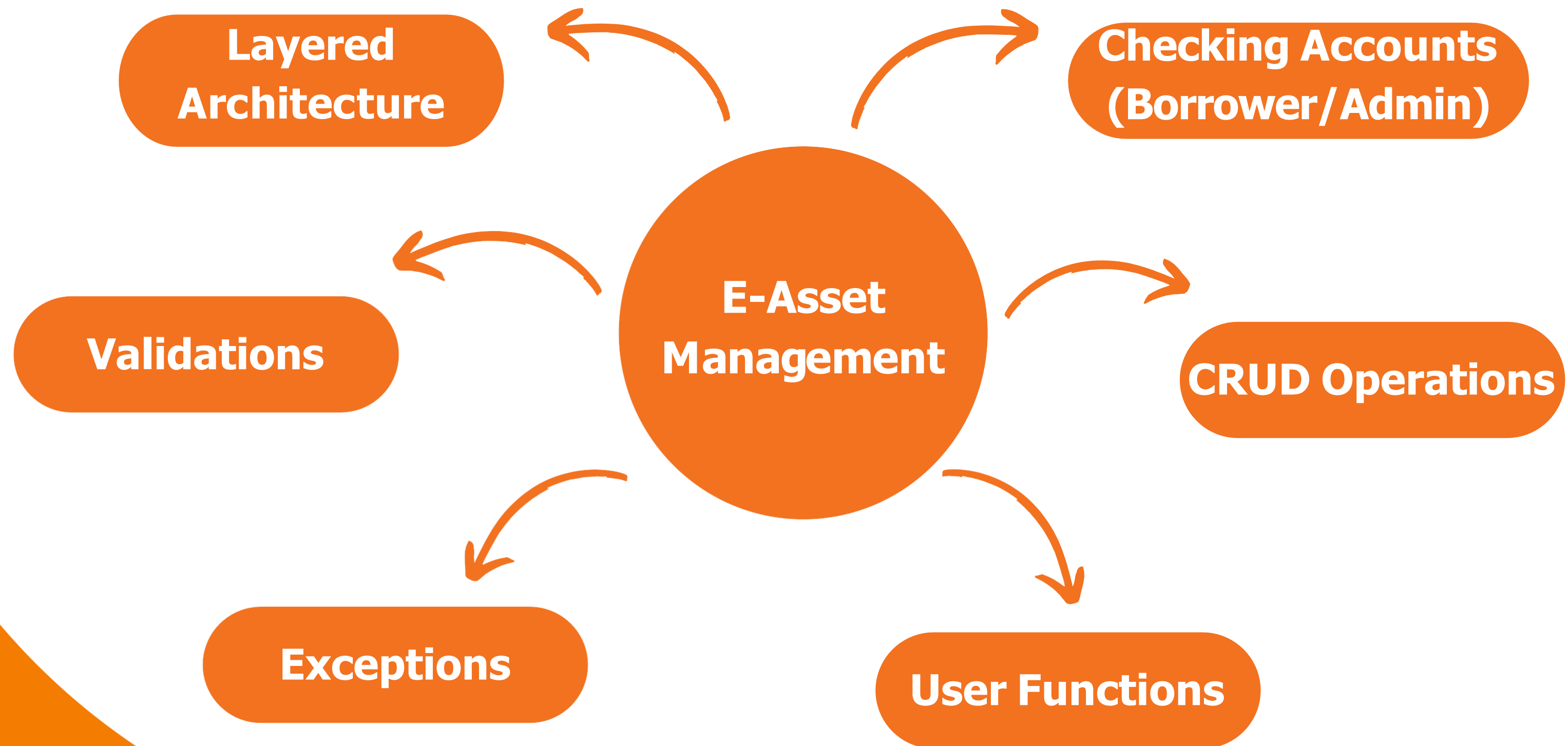
## **2. Project Scope**

**The E-Asset Management system is a web - based application to keep track of several assets that can be borrowed, their availability, their current location, the current borrower and the asset history.**

**Assets include Laptops, Books, Mobiles and Devices.**

**The system should also be extensible.**

# 3.Application Features



# Brief Description and details about Application Features

## 1.CRUD OPERATIONS

### DAO LAYER

- **SAVE -**
  - int save(Asset asset)
  - int save(Borrower borrower)
- **SHOW -**
  - Asset findById(AssetName)
  - List<Asset>findAllAssets()
  - Borrower findByIdByBorrowerEmail(Borrower b)
  - List<Borrower>findAllBorrowers()
- **DELETE -**
  - boolean deleteById(AssetName)
  - boolean deleteByBorrowerEmail(String email)
- **UPDATE -**
  - Asset updateAccount(Asset asset);
  - Borrower updateBorrower(Borrower borrower)

## 2.CUSTOM EXCEPTION

- Exception which will tell that the assets are not present - **AssetNotFoundException**
- Exception which will tell that the borrower is not eligible to borrow assets - **NotEligibleForAssetBorrowing**

### DAO EXCEPTION

- Exception which will tell that the datastore is full and now no other element can be inserted - **DataStoreFullException**
- Will tell that the particular record is no present in the datastore - **RecordNotFoundException**
- Will be thrown when credentials entered are wrong - **InvalidCredentialsException**
- For Repeatative data - **DataAlreadyExistsException**

### 3.USER FUNCTIONS

#### SERVICE LAYER (Borrower) Business methods

- method to search for the availability of asset -  
**boolean checksAssetAvailability(Asset asset,Borrower borrower)**
- method to check whether the borrower can actually borrow the asset or not -  
**public boolean canBorrow(Asset asset)**
- method will generate total fine -  
**public boolean returnAsset(Asset asset,Borrower borrower);**
- **public boolean isLoginSuccess(Borrower b)**

#### SERVICE LAYER (ASSET) Business methods

- method used to calculate the total fine amount imposed to the borrower  
**public double fineImposed(Asset asset)**

## **4. Checking Accounts (Borrower/Admin)**

**Checking all the accounts of Borrowers  
and admin**

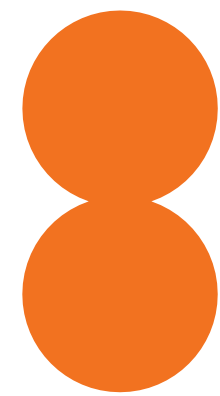
## **5. Validations**

- **Validation of frontend Credentials**
- **Validation of TEXT FIELDS**

## **6. Layered Architecture**

- **Model**
- **Controller**
- **JdbcConnection Class**
- **Dao Interface**
- **DaoImpl Class**
- **Service Interface**
- **ServiceImpl Class**
- **Exception Classes**
- **Enum Class**
- **Util Class**





# IMPORTANT NOTE -

## **User Accounts and Assets Checks -**

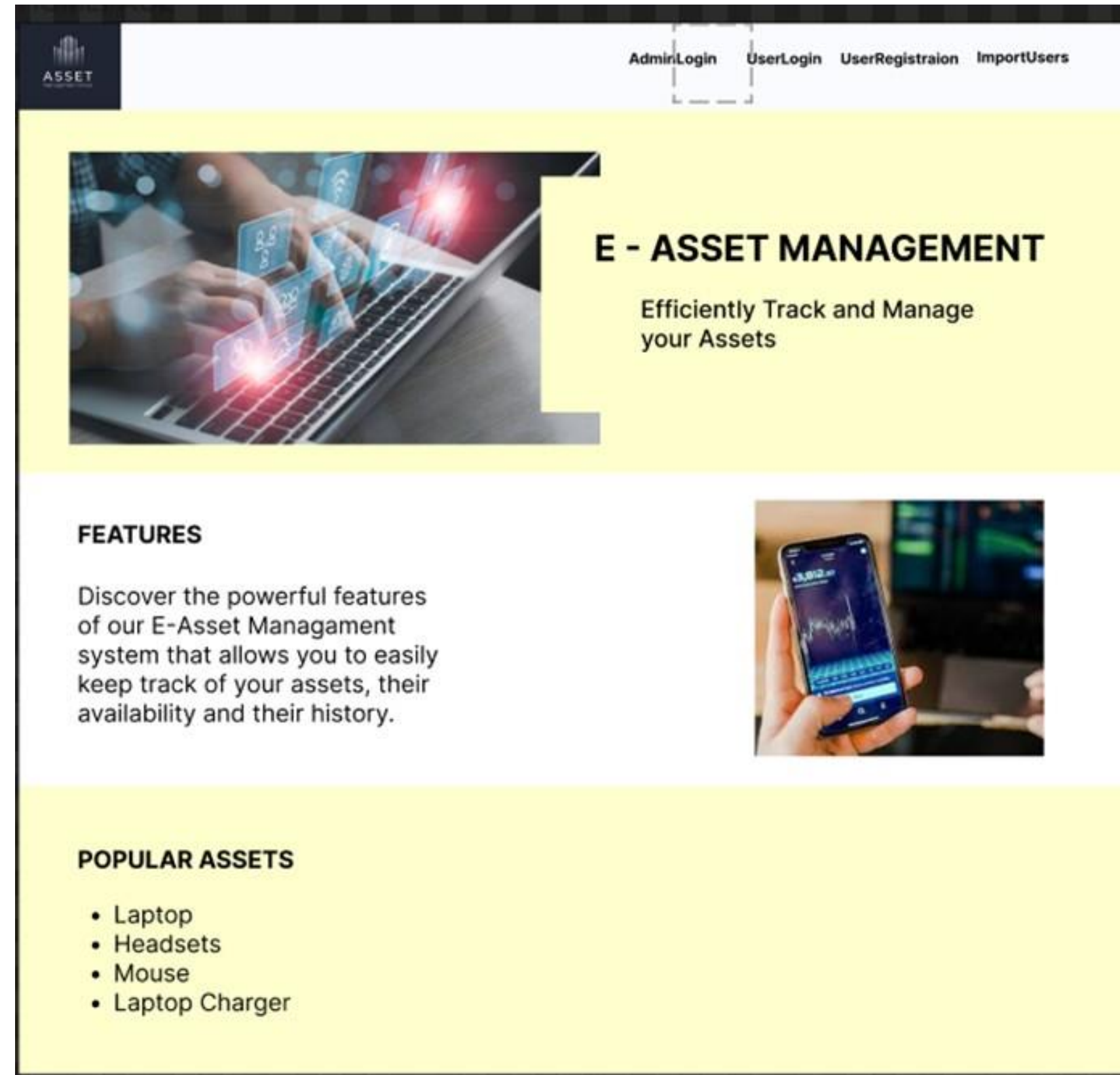
User and Asset checks will always be done on the basis of email(user) and asset(name) instead of user and asset ID because these ID's are autogenerated in the application and so they will always be unique. And hence won't be helpful in identifying the duplicate accounts.




**DEV\_OCTS**

# 4.UI Snapshots

## 1.Home Page



## 2. User Registration



### Create account

For business, brand or celebrity.

NAME

Username

Email or phone number

Role  
(Admin or borrower)

Password

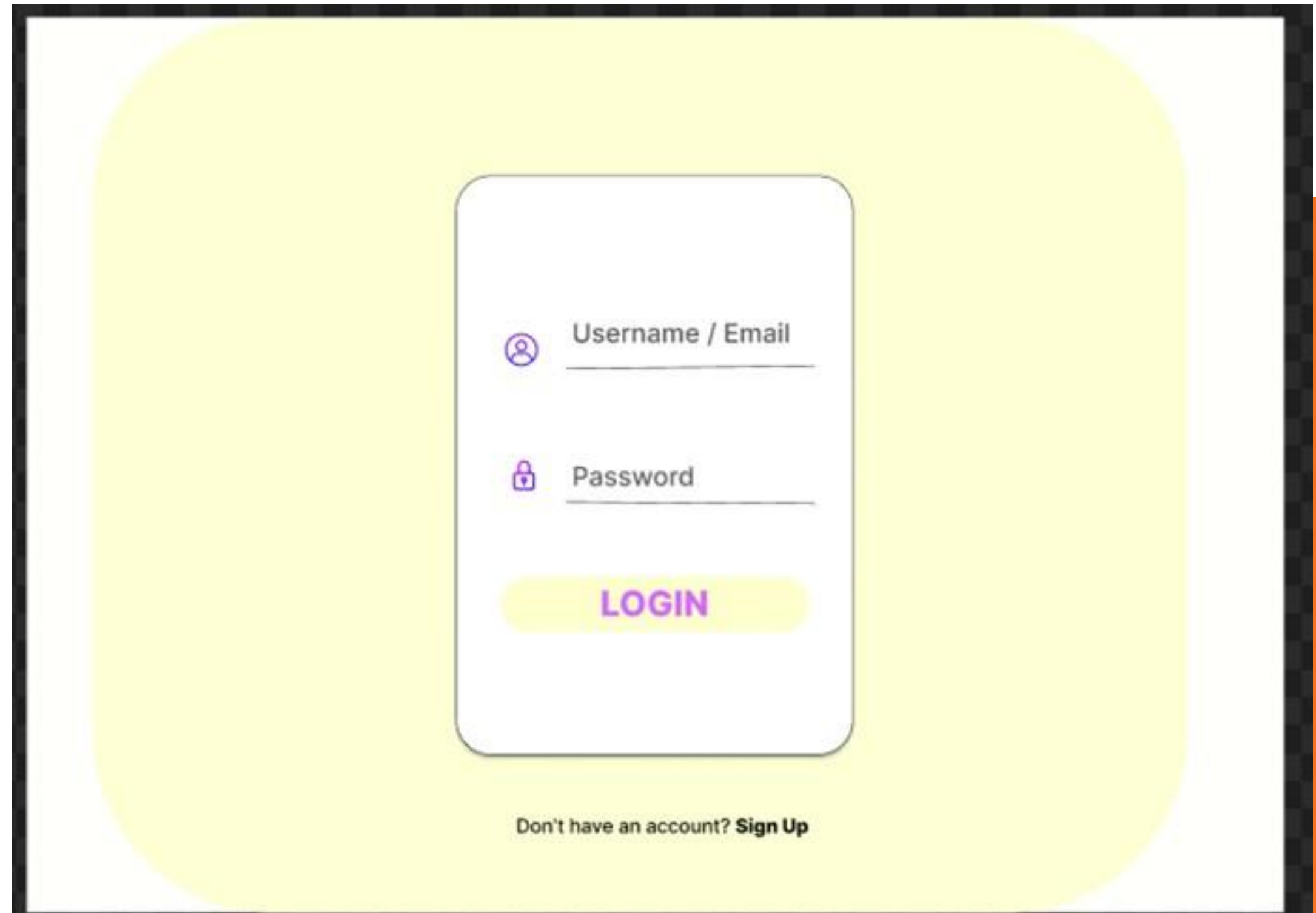
Confirm password

☐ Remember me

☐ I agree to all the [Terms and Privacy policy](#)

Create account

## 3. User Login



A user login form is displayed within a white rounded rectangle, centered on a light yellow background. The form contains two input fields: the first is labeled 'Username / Email' with a person icon, and the second is labeled 'Password' with a lock icon. Below these fields is a yellow button with the text 'LOGIN' in purple. At the bottom of the form, there is a link that says 'Don't have an account? Sign Up'.


Username / Email

Password

LOGIN

Don't have an account? [Sign Up](#)

## 4.Home Page (Admin)



USER INFORMATION

Name - Amit Sinha  
Email - amitsinha09@gmail.com  
Last loggedon-6th september'23  
Time - 13:39 p.m

- ADD ASSET
- OVER-DUE ASSET MANAGEMENT

USER INFORMATION

Name - Amit Sinha  
Email - amitsinha09@gmail.com  
Last loggedon-6th september'23  
Time - 13:39 p.m


- ADD ASSET
- OVER-DUE ASSET MANAGEMENT

USER INFORMATION

Name - Amit Sinha  
Email - amitsinha09@gmail.com  
Last loggedon-6th september'23  
Time - 13:39 p.m

- ADD ASSET
- OVER-DUE ASSET MANAGEMENT


## 4.Home Page (Employee)

ASSET

### HOME PAGE (Employee)

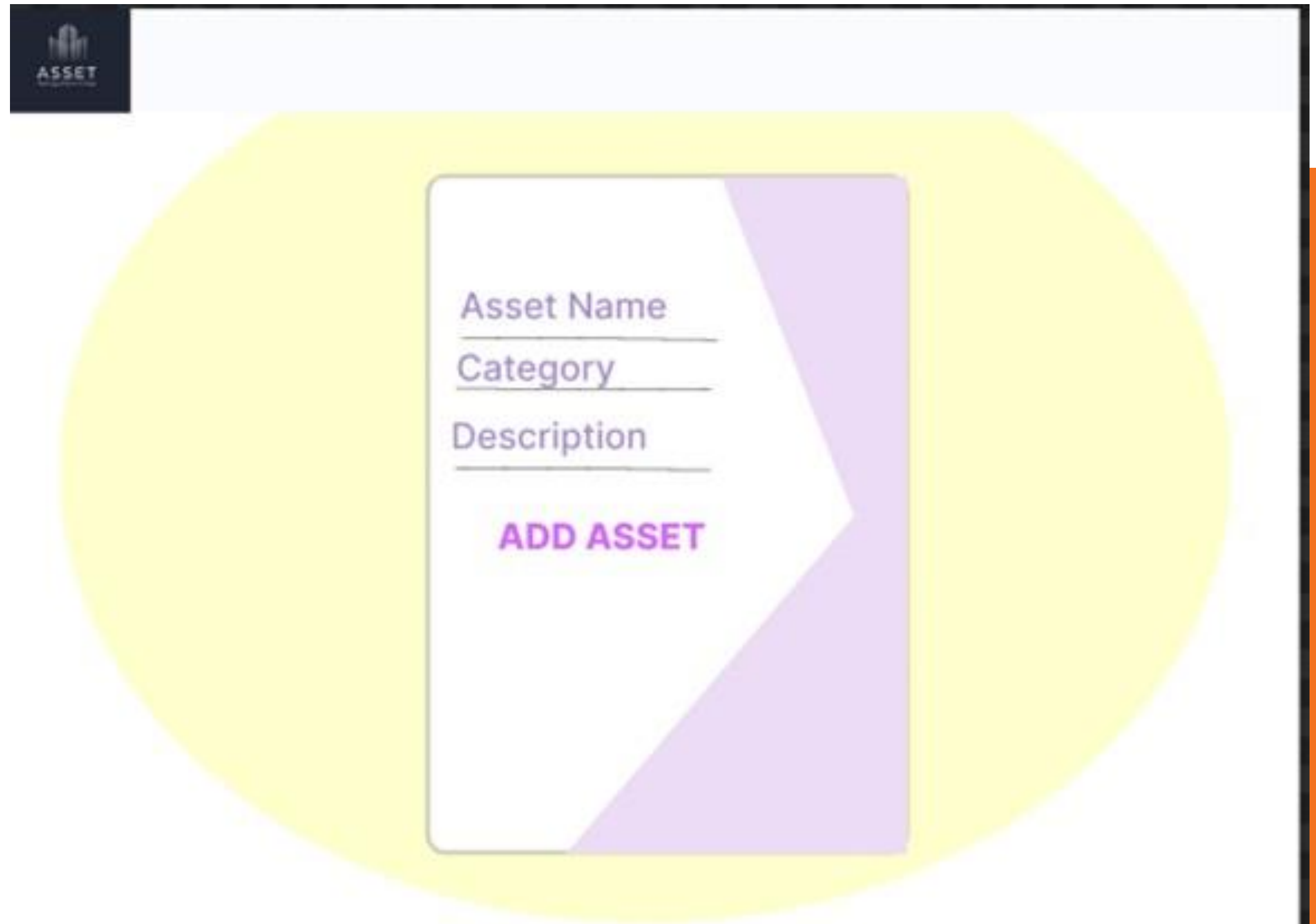
Borrowed Items	Details	Due Date

**Employee Details**  
ID:  
Name:  
Email:

Chat with Admin 



## 5. Add Asset



The screenshot shows a web application interface for adding an asset. In the top-left corner, there is a dark blue header bar with the 'ASSET' logo, which consists of a stylized building icon above the word 'ASSET'. The main content area has a light gray background. A large, semi-transparent yellow circle is centered on the page, containing a white rectangular form. The form has a purple triangular decorative element on its right side. Inside the form, there are three input fields: 'Asset Name', 'Category', and 'Description', each followed by a horizontal line for text entry. Below these fields is a purple button with the text 'ADD ASSET' in white, uppercase letters.

ASSET

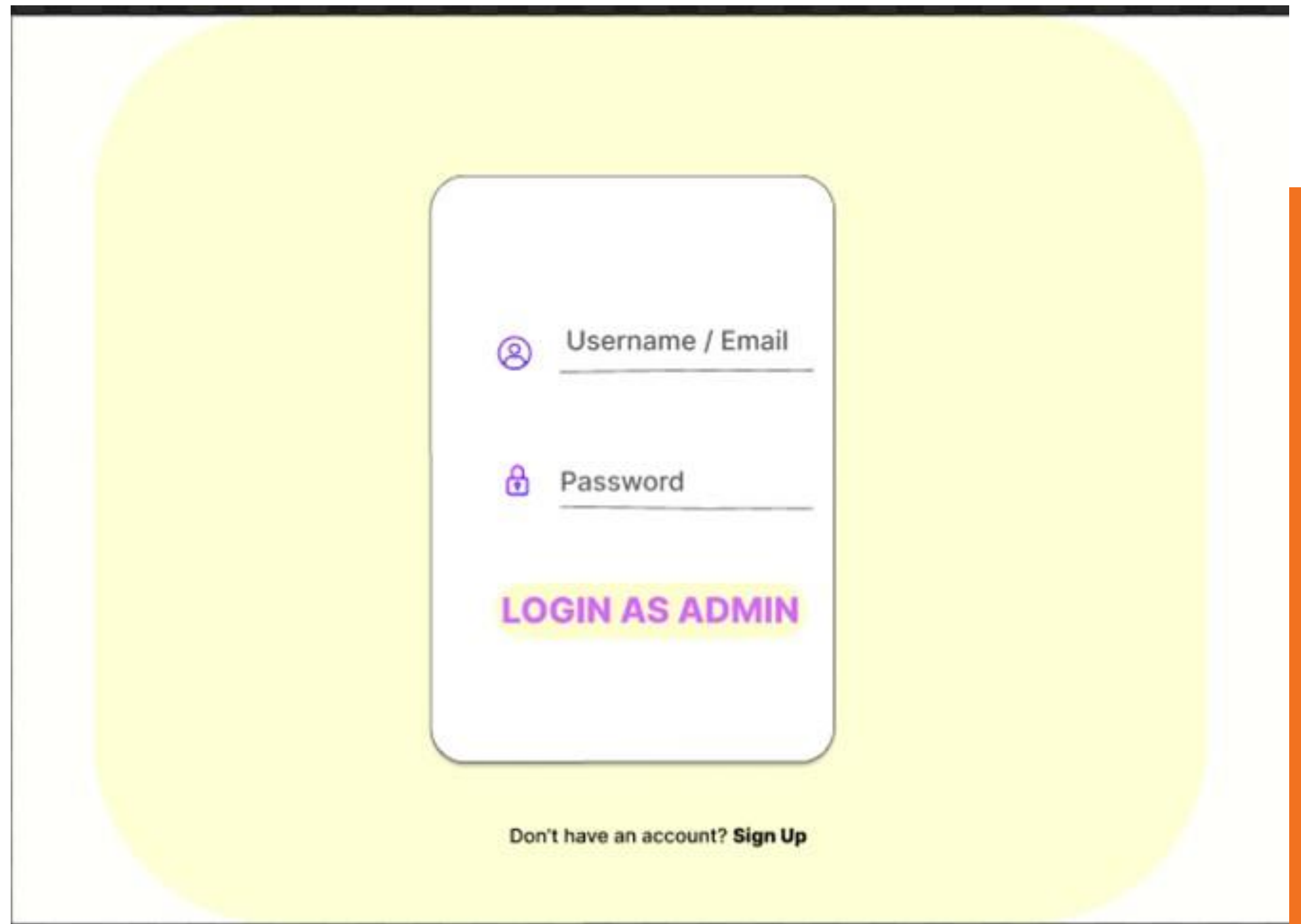
Asset Name

Category

Description

ADD ASSET

## 6. Admin Login



The image shows a login form for an admin user. The form is centered on a light yellow background with rounded corners. It contains two input fields: 'Username / Email' and 'Password', each with a corresponding icon (a person for the first, a lock for the second). Below these fields is a purple button labeled 'LOGIN AS ADMIN'. At the bottom of the form, there is a link that says 'Don't have an account? Sign Up'.

Username / Email

Password

**LOGIN AS ADMIN**

Don't have an account? [Sign Up](#)



# 5.Designing

## Attachments -

**Data Flow Diagram - DFD**

**Class Diagram - UML**

**Entity Relationship Diagram -  
ERD**

**Use Case Diagram**

**RDBMS Table Structures**



# 6.Challenges

**AS A TEAM WHEN WE ALL  
STRIVED TO COMPLETE THE  
PROJECT, WE FACED SOME  
CHALLENGES BUT ALSO  
MANAGED TO OVERCOME THEM  
AND GOT SOME GREAT  
EXPERIENCE**

**ILLUSION OF  
AGREEMENT** - Over  
using visual  
representation of  
work such as  
diagrams and  
models

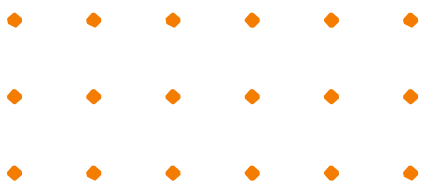
**TESTING AND  
DEBUGGING** -  
established a  
testing plan,  
understand the  
system you are  
working on

**RIGID ARCHITECTURE**  
- overcome by iterative  
architecture which  
allowed us for  
continuous  
improvement and  
adaptation

**DIFFICULTY  
ESTIMATING TIME  
AND RESOURCES-**  
Enhancing  
features, bug fixing  
overcome using  
fragmenting the  
tasks into small  
chunks



# 7.Learnings



**Such type of Team Projects provides valuable opportunities to learn and grow in various aspects of tools, concept understanding, and collaboration with teamwork.**

## TOOLS

- Tool Proficiency
- Version Control
- IDEs and Text Editors
- Testing, Debugging Tools
- Documentation Tools

## CONCEPTS UNDERSTANDING

- Technical Concepts
- Problem Solving
- Algorithm and Data Structures
- Architecture and Design Patterns
- Domain Knowledge

## COLLABORATION

- Communication Skills
- Project Planning
- Peer Code Review
- Remote Collaboration
- Domain Knowledge



# 8. Acknowledgement

**Dear LEADS,**

**We “DEV\_OCTS” wanted to take a moment to express our heartfelt gratitude for the valuable learning experiences you've provided through the CODEFURY CONTEST (team projects) during our training.**

**These projects have been instrumental in enhancing not only our technical skills but also overall growth as a learner . They have allowed us to put into practice the theoretical knowledge we've gained during these training days, bridging the gap between theory and real-world application.**

**Your guidance, mentorship, and belief in our abilities have been pivotal in making these projects a success.**

**The experience of working collaboratively with our Collogues has been both challenging and rewarding, and I believe it will serve as a strong foundation for our future endeavors.**

**We really genuinely appreciate the effort and dedication you've put into making our learning journey meaningful and practical.**

**Warm regards, Team “DEV\_OCTS”**





# THANKYOU



**Presented By:**  
**DEV\_OCTS**