# WriteDown

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### Design

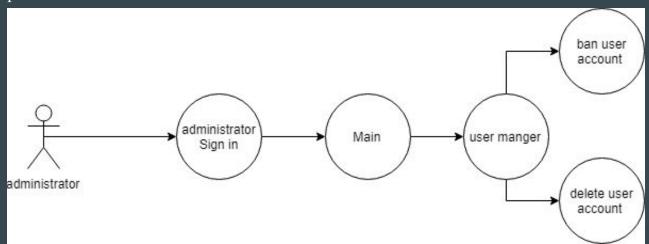
Use case 1: the administrator manages the user account.

Actor: The user, The administrator

Prerequisites: The administrator has an active administrator account.

Users have their own personal accounts

Use cases:



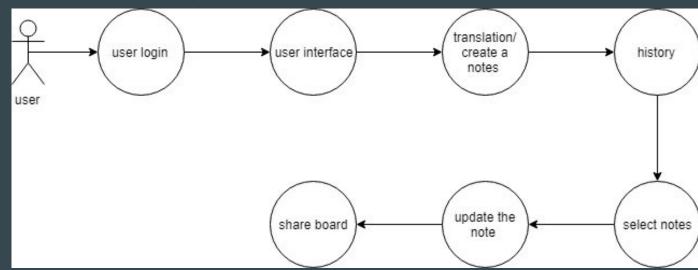
Use case 2: the user uploads an existing history translation note.

Actor:The user

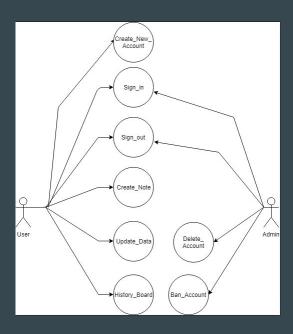
Prerequisites (one or more): The user has an active account.

There are translation notes in the user history

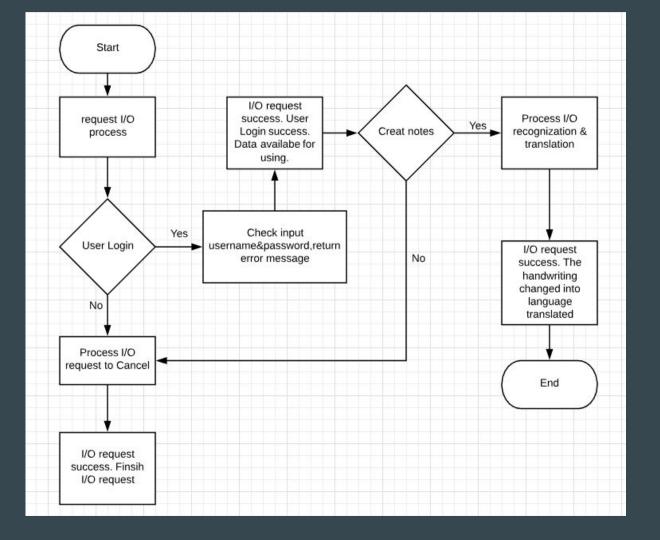
Use cases:



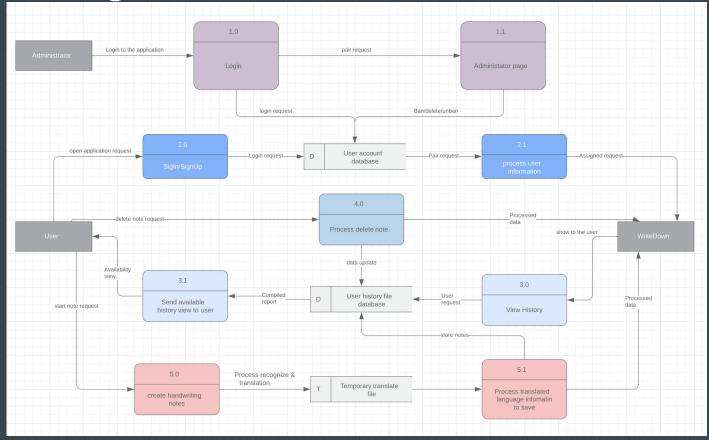
### **Overall Use Case**



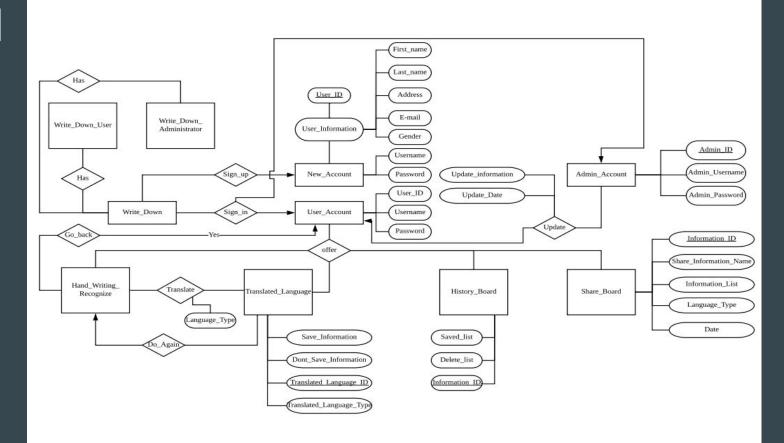
# I/O Diagram



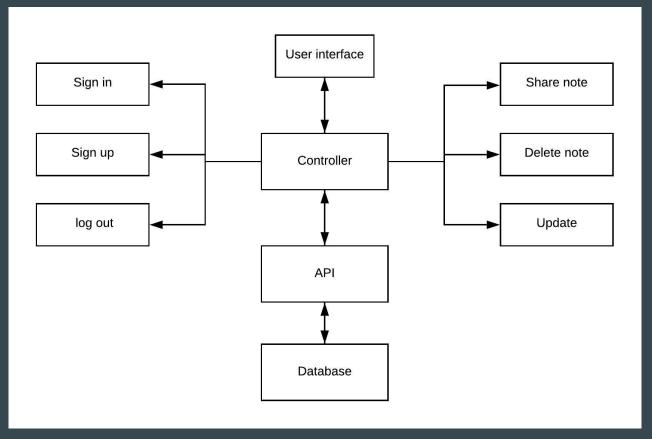
# Data Flow Diagram



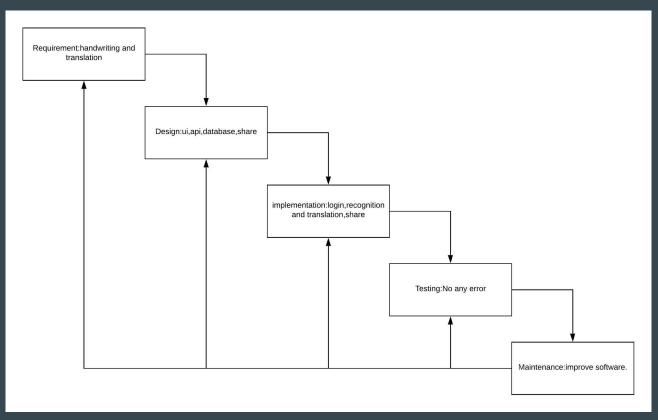
#### **ER-Model**



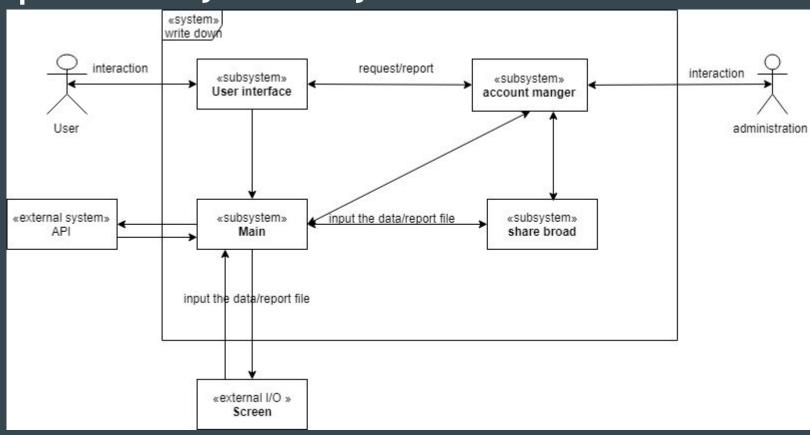
# System model



## **Process Model**



# Simplified Sub-system to System interaction



# Data dictionary

Column Name	DataType	Description
Uuid	VARCHAR()	Unique Id Key with random value, PK, UN
LastName	VARCHAR()	User lastname
FirstName	VARCHAR()	User firstname
Gender	INT()	0- For male 1- For female
Address	VARCHAR()	(optional)
Username	VARCHAR()	Input username with characters ,symbols and interages,UN
Password	VARCHAR()	Input password with characters, symbols and interages
Usertype	INT()	0 for the normal user 1 for the administrator
Email	VARCHAR()	Input Email by correct email address, UN
Banned	INT()	1- for banning user account 0- for normal user account use
Img	VARCHAR()	Img update for user setting
History	VARCHAR()	Store data to the database from user account

#### Running time

- Application operation O(1)
- Login/Logout O(1)
- API/OCR loading  $O(\log(n))$
- Database(B-tree search) O(log(n))
- Handwriting O(1)
- Overall running time O(N)

### Thank You!

Any questions?