# ENTITY RELATIONSHIP DIAGRAM (ERD)

The database is required to restore as default for marking purposes.
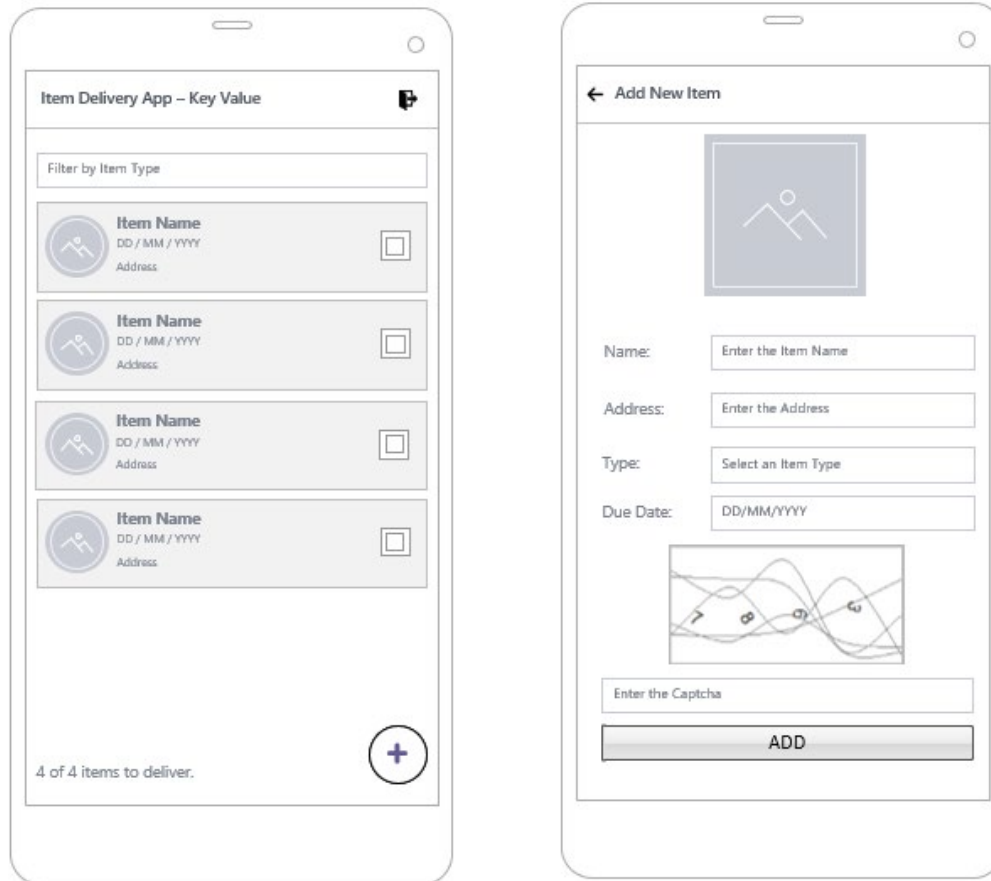
| users | |
|---|---|
| PK | id |
| | username |
| | password |
| | salt |

| items | |
|---|---|
| PK | id |
| | name |
| | type |
| | address |
| | image |
| | status |
| | expiry_date |
| FK | userId |

| dimdates | |
|---|---|
| PK | id |
| | day |
| | color |
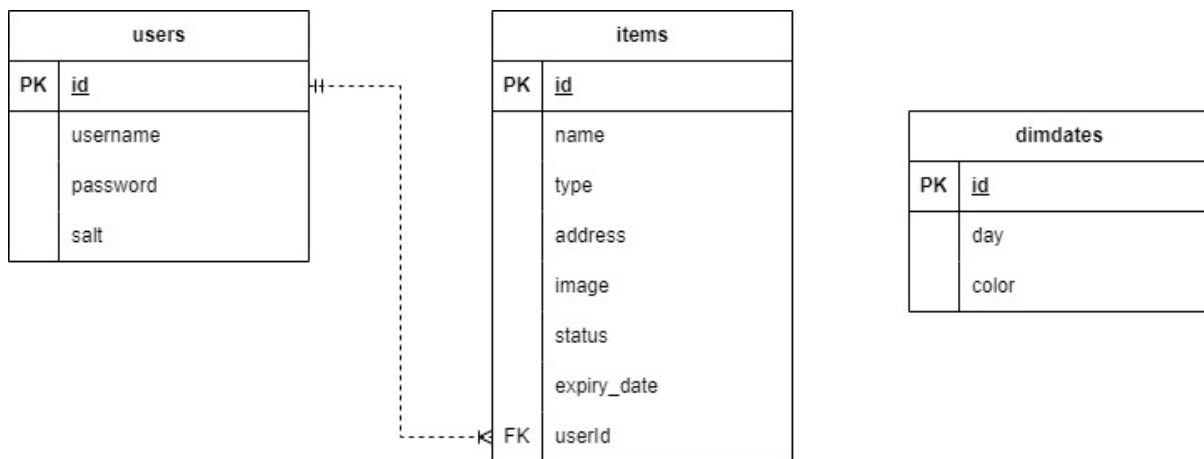
## CONTENTS

This Test Project proposal consists of the following documentation/files:

**script.sql, Logis-API.zip, Logis-API-specfication.pdf, data.txt**

## DELIVERABLES



## Login Page

Design a login page that includes a header with title "Login Page" and fields for entering a username and password. Upon clicking the login button, the user should be redirected to the item list page. The system should also incorporate a 'remember login' feature for user convenience.

## Item List Page

Design an Item List Page that retrieves all items for delivery assigned to the currently logged-in user. The header should include the title "Item Delivery App", the current login key value displayed as an integer, and a logout button. The key value is fetched from the Logis-API.

Include a combo box for item types to filter items based on their type, retrieved from the GetItemTypes Logis-API. Add an additional option, "All Item Types" at the first option, to fetch all items. The list of items should display the item's image in a circular shape, its name,

date in the format dd/mm/yyyy, address limited to two lines, and its status. If the address exceeds two lines, truncate it with an ellipsis ("…"). Users should not be able to update the status of items that have already been delivered.

Display a text showing the number of items to deliver in the format "{list number} of {total item number} items to deliver." Include an 'Add' button that redirects the page to the 'Add New Item Page'.

The item's background color should reflect its status. Items that have expired should be displayed in red, and items with a status of 'completed' should be displayed in purple. The color for other statuses should be determined according to the dimdates table. Items with the closest due date should be displayed first, followed by items with a status of 'complete'. (assume today date is 27 February 2024)

All the data including the item types is encrypted using the caesar cipher method. You should be able to decrypt them using the current login user's key.


## Add New Item Page

Design an 'Add New Item' page for item storage. The user is required to input the item's image, name, address, type, and delivery due date. To add an image, the user can click on the image container and choose to either upload a file from their device or capture a new picture using the camera. The item type is retrieved from the GetItemTypes Logis-API. The delivery date should be set for at least one day in the future. All fields are compulsory.

Before the item can be added, the user must validate a captcha. The captcha should mirror the characteristics of the displayed image, consisting of four random digits separated by gaps. Each digit should be rotated 30 degrees, creating an expanding effect. The captcha should also include five irregular curved lines. If the captcha input is incorrect, it should refresh automatically. The data should be encrypted using the current login user's key before being stored in the database.


## Unit Test

Write a unit test to verify the contents of the "data.txt" file. Log in as the user "yung huey". The file contains both original and encrypted text. Validate whether the original text matches the decrypted version of the encrypted text. The output should display the key of user, total number of matched and unmatched test cases.