

# Assignment 01

## EPPS 6354 Information Management

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UTD Spring 2025

# 1. Applications that use a database system for its data.

## 1. Spotify

- a. Spotify employs both relational (e.g., PostgreSQL) and NoSQL (e.g., Cassandra) databases to manage diverse data types

## 2. Slack

- a. database clustering system, to horizontally scale MySQL databases, accommodating massive data growth of messages, images, groups, users ect

## 3. Voice Dream Reader

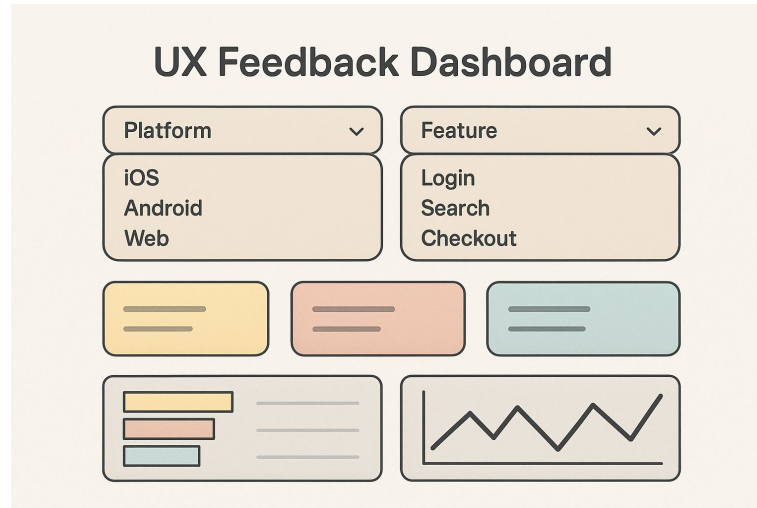
- a. Voice Dream Reader manages a local database to organize user libraries, reading progress, and settings



## 2.1 Applications in UX Research / Design proposal

### UX Feedback Analyzer

- a. **Purpose:** Extract user pain points from app reviews
- b. **Functions:** Sentiment analysis, feature request clustering
- c. Simple Interface Design:



## 2.2 Applications in UX Research / Design proposal

### UX Research Repository Manager

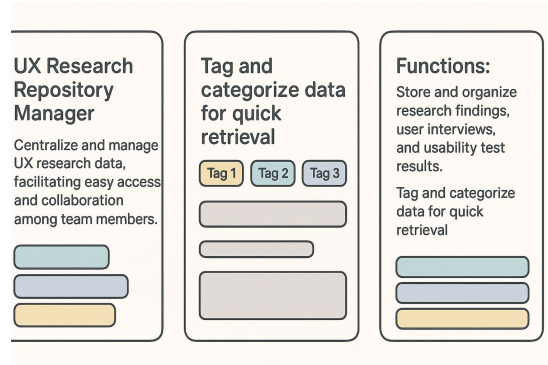
- a. **Purpose:** Centralize and manage UX research data, facilitating easy access and collaboration among team members.
- b. **Functions:** Store and organize research findings, user interviews, and usability test results. Tag and categorize data for quick retrieval.
- c. Simple Interface Design:

UX Research Repository Manager	
<b>Participant Recruitment Platform</b> Streamline the process of recruiting participants for UX studies, ensuring a diverse and representative user base.	<b>Schedule Study</b> Date <input type="text" value="▼"/> Time <input type="text"/> <input type="button" value="Send Invitation"/>

## 2.3 Applications in UX Research / Design proposal

### Participant Recruitment Platform

- a. **Purpose:** Streamline the process of recruiting participants for UX studies, ensuring a diverse and representative user base.
- b. **Functions:** Create and manage participant profiles with demographic and behavioral information. Schedule and send invitations for upcoming studies.
- c. Simple Interface Design:



## 4. Why did NoSQL systems emerge in the 2000s?

NoSQL is a super flexible schema model that can be used in many ways, and with the rise of smartphones in the early 2000s, devices that generate all kinds of data, it became the perfect solution for managing that complexity. Social media platforms add even more layers, with data ranging from text to images and interactions. In contrast, relational databases are much more rigid, requiring predefined structures and relationships. While they're great for maintaining data integrity and handling structured queries, their lack of flexibility can make it harder to scale or adapt quickly, which today's mobile and dynamic applications really need.

## 6. Social network tables

Users
user_id
name
email
password
age

Posts
post_id
user_id
content
Timestamp
description

Comments
interaction_id
user_id
post_id
timestamp
comment