



# Lab 3



# Outline

- 1. ER diagram design**
- 2. Example**
- 3. Assignment3**



# ER Diagram Design For Application



# **1. Some of the considerations**

**1.1 Design a schema logically based on business requirements.**

**1.2 Reduces redundant data.**

**1.3 Ensures data accuracy and integrity..**

**1.4 Define and use the appropriate naming conventions**



## **2. Design Process**

**2.1 Define the purpose of the application.**

**2.2 Gather Data, Organize in tables and Specify the Primary Keys.**

**2.3 Create Relationships among Tables.**

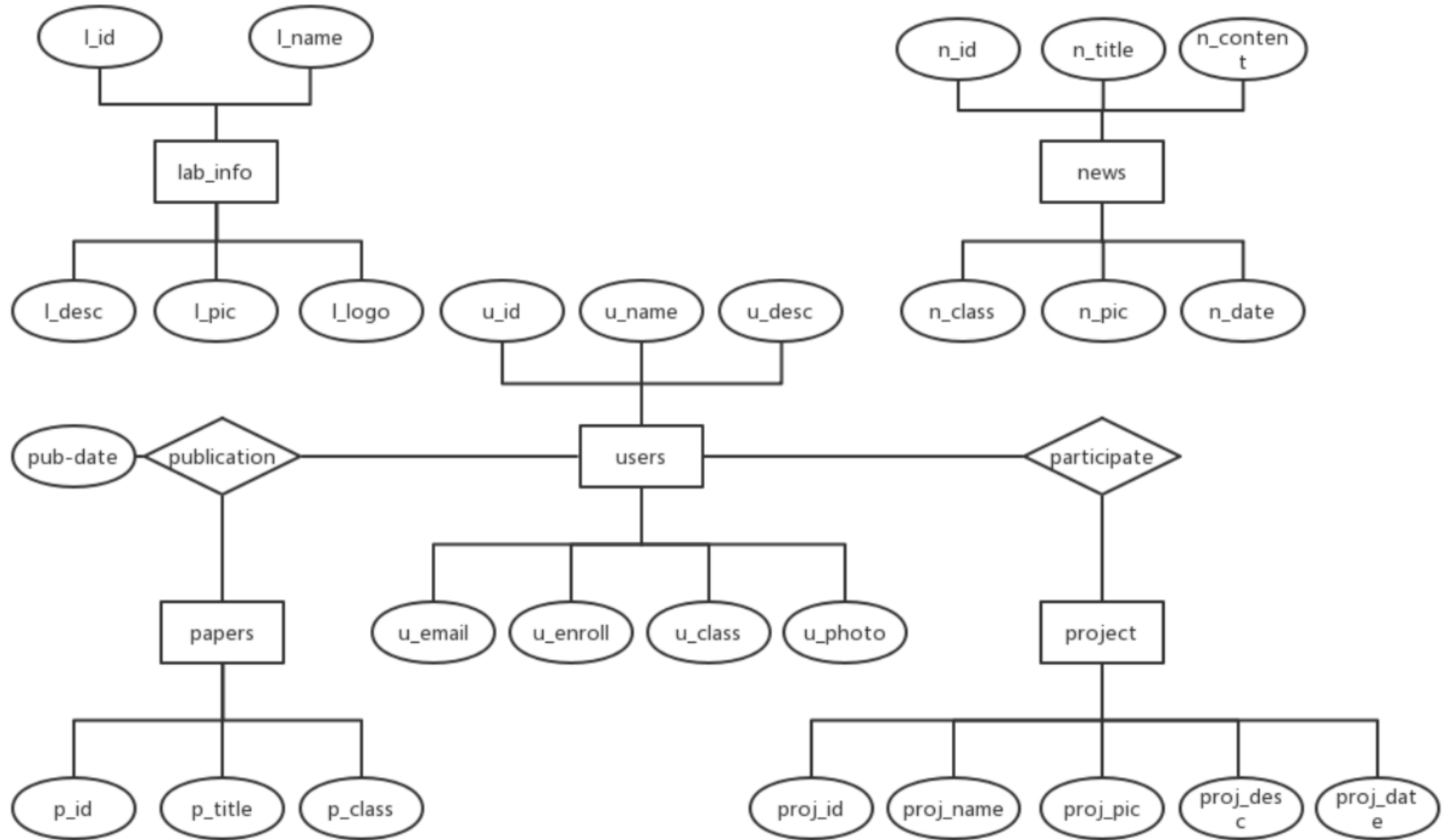
**2.4 Refine & Normalize the Design.**



# Example



# 实验室主页







# Assignment3



# Content

- ✓ **For example, very simple application based on university database (without programming)**
  - A student grade management
  - Involving at least 3~4 tables in university database
  - Can design an application background by yourselves
- ✓ **Use the tools offered by Access directly to implement the interface, queries, report, etc**



# Demands

- ✓ **Hand in a report about the assignment**
  - Main contents
  - E-R diagram design
  - Function design(describe what function you want to design)
  - Database query(not too simple)
- ✓ **Hand in your .mdb database**



# Submission

- File name format:

StudentNumber\_A3.zip

including:

report\_A3.doc/ report\_A3.docx

university\_A3.mdb/university\_A3.accdb

**Deadline: Beijing time, November 19th, 00:00:00**