# ChipLand

## Team 1

- 王广　120090011
- 颜钰劼 120090410
- 郭好　120090843
- 乔雨柔 120090644
- 宫燕亮 120090327
- 谭金镇 120090543

Dec 28, 2022

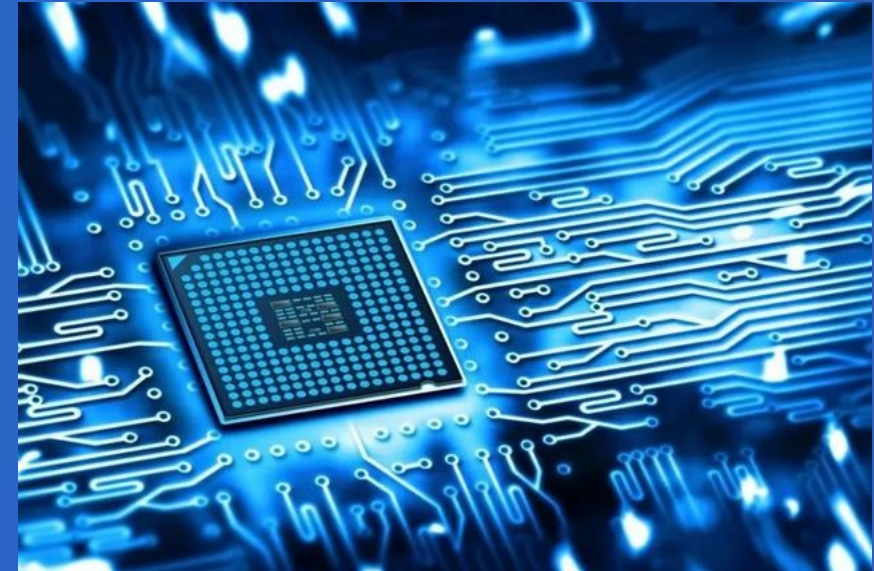# Outline

**1** Introduction

**2** Database Design

**3** Implemented Functions

**4** Code Review

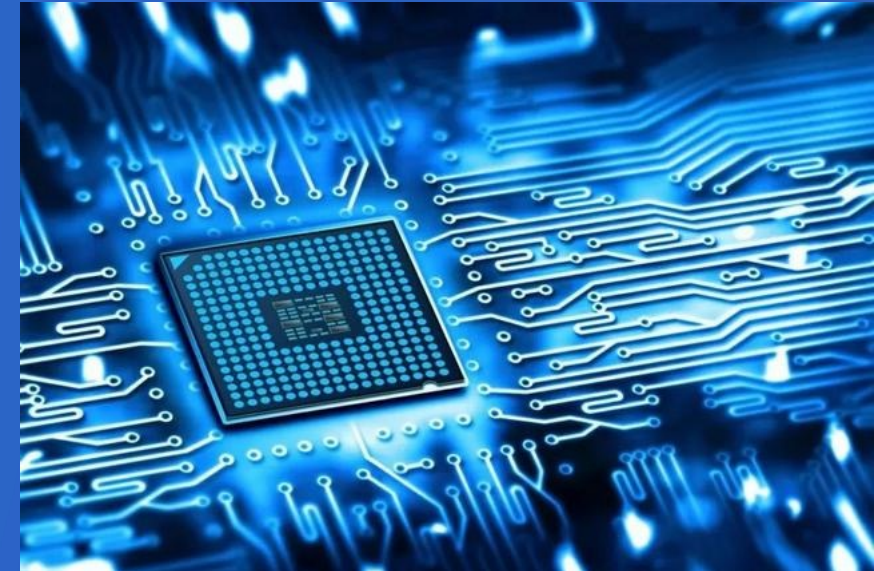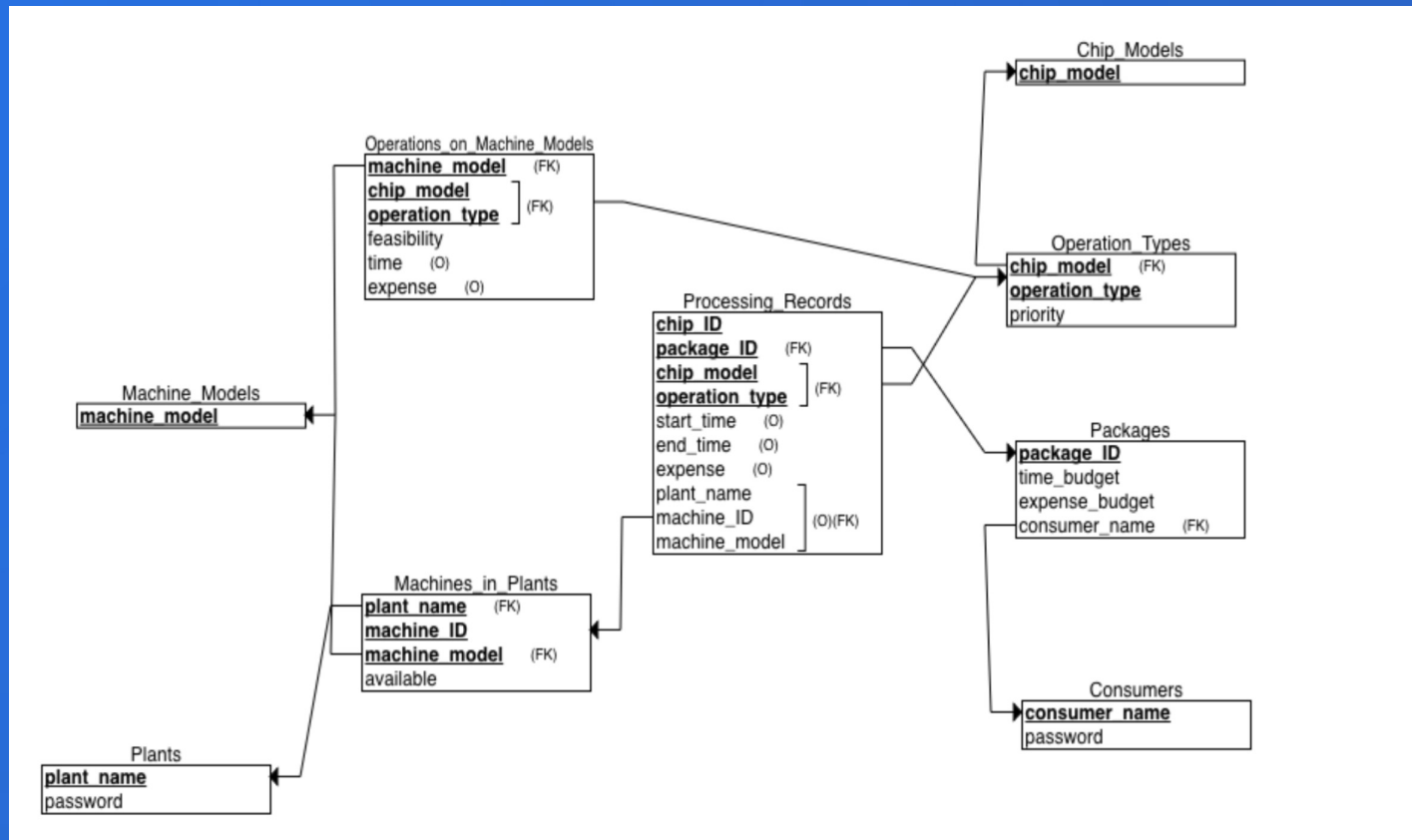# 1 Introduction

- Option 1, Branch 1, and Normal difficulty.
- Consumers can configure packages of chips and appoint plants.
- Plant owners can publish new machines and accept appointments.
- Plant information, processing records, and information in a responsive table or Gantt Chart.
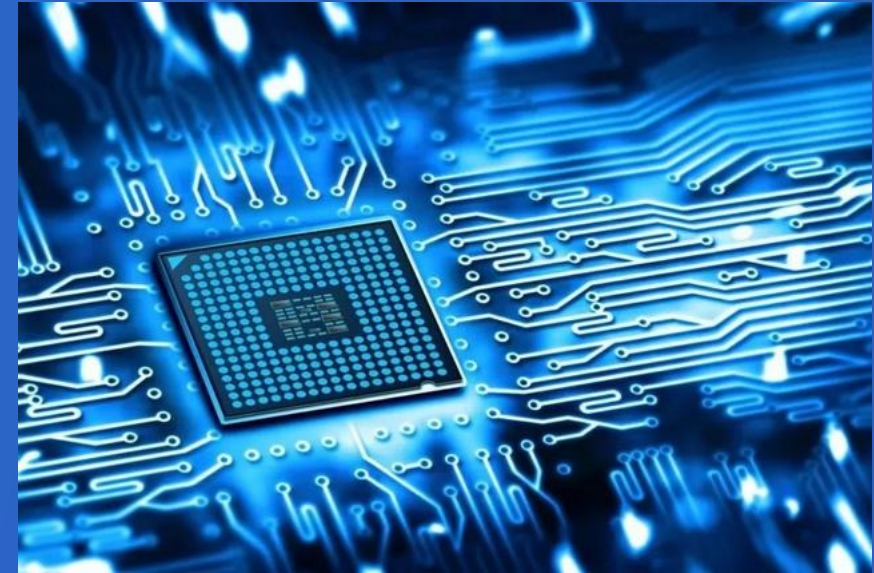
# 2 Database Design and Initialization

## 2.1 Normalization

# 2 Database Design and Initialization

## 2.2 Why No More Normalization: Expensive Joins

Since data is not duplicated, table joins are required. This makes queries more complicated, and thus read times are slower.
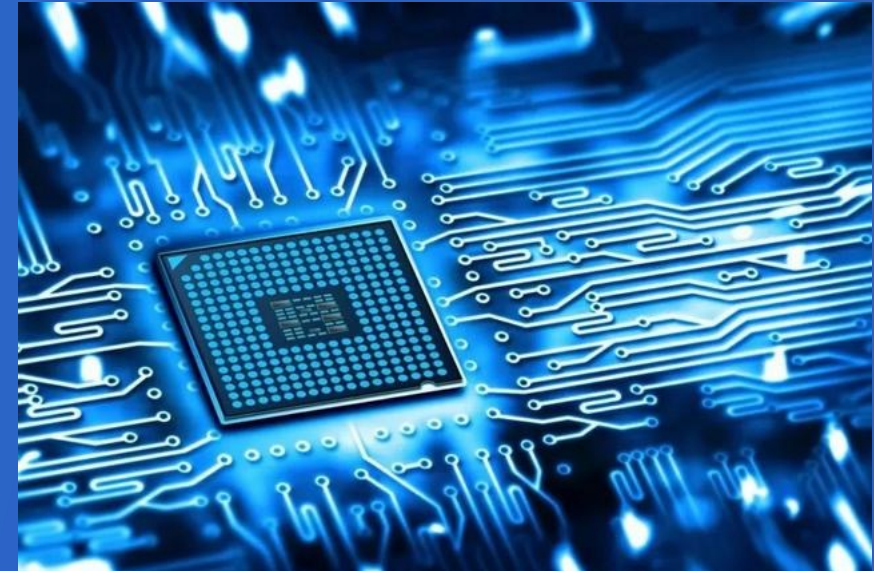
# 2 Database Design and Initialization

## 2.3 Why No Indexing: Affecting Writes

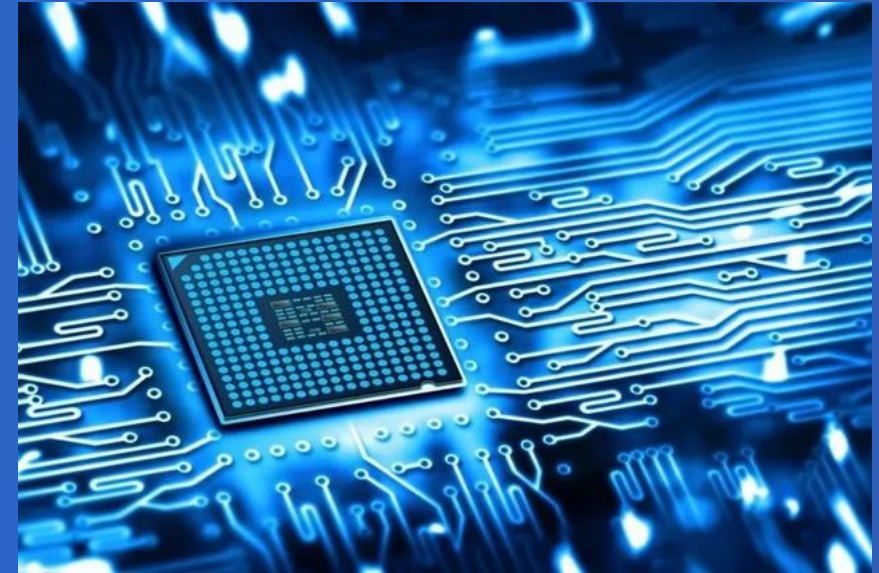The downside to adding indexes to a table is that they affect the performance of writes.

Moreover, improperly created indexes can even adversely affect SELECT queries.
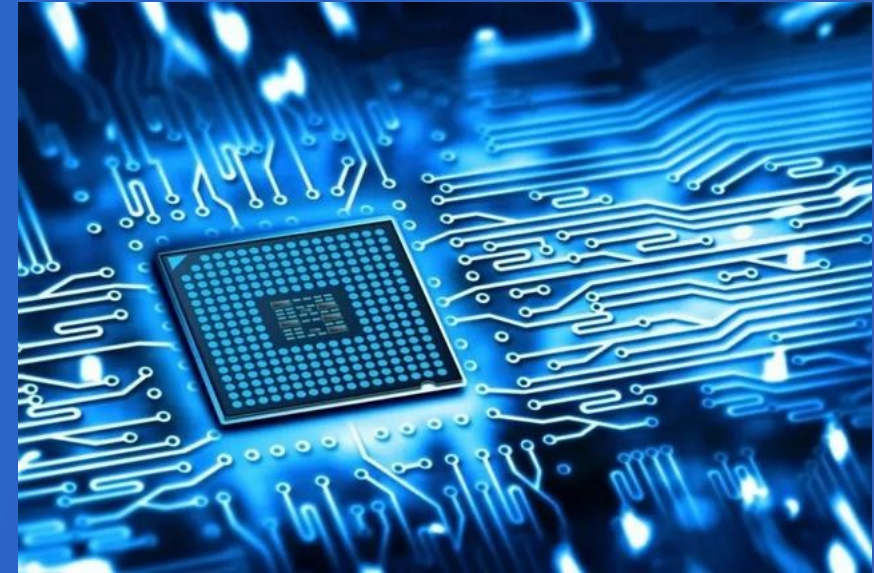
# **2 Database Design and Initialization**

## **2.4 Database Initialization: Out of the Box!**

When you use our website for the first time, the program will automatically create and populate a database in your computer, completely out of the box, which means you need to do nothing.
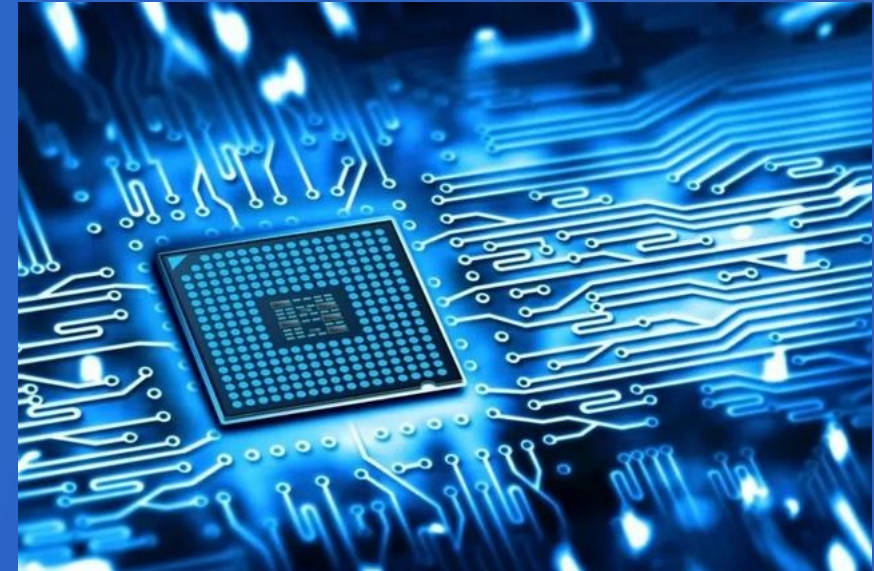
# 3 Implemented Functions

## Website Demonstration
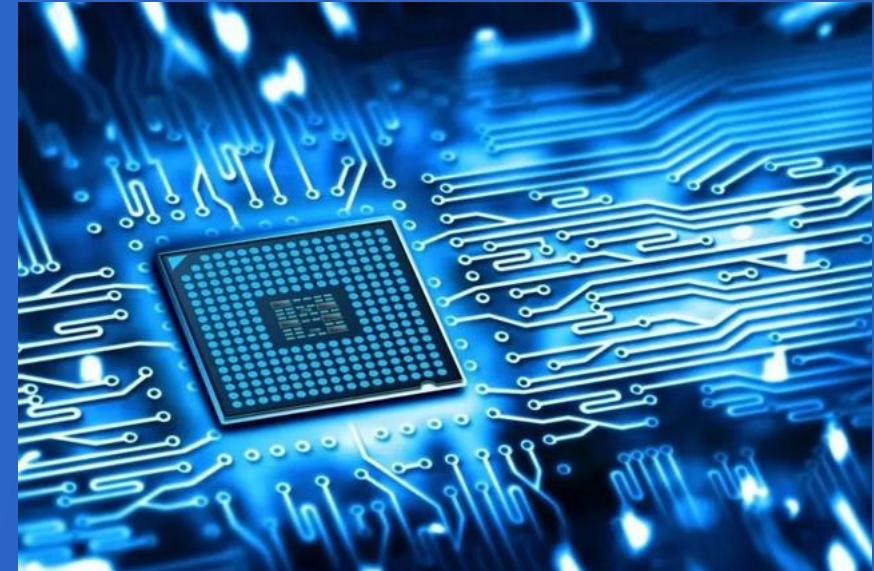
# 4 Code Review

## 4.1 File Classification

The PHP files:

- Webpage part (root directory): PHP files here directly serve as webpages. Most of the code is backend.

- Frontend part (frontend directory): Those here don't directly serve as the webpages. Most of the code is frontend. They indirectly serve as webpages by being required by the PHP files in the root directory.

# 4 Code Review

## 4.2 Why Classifying in This Way

- Making us quicker to know which files are in which directory.

- More importantly, distinguishing frontend and backend makes us easier to divide the work to each person and collaborate more efficiently.
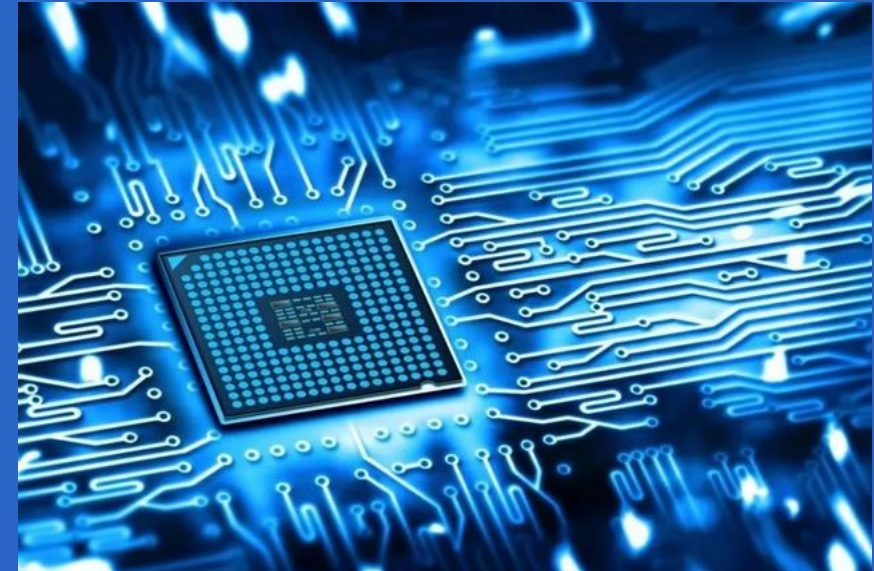
# 4 Code Review

## 4.3 The Whole Directory Structure

Other code like JavaScript and SQL is also necessary.

We have contained a more detailed code review, Implemented Functions and Directory Structure Explanation, in our repository.

# Thank You!