“计算机组成原理”实验系统网站设计-网页设计

摘 要：《计算机组成原理》实验是加深理解计算机基本组成和基本工作原理的重要实践课。计算机组成原理实验电路极其复杂，实验内容繁多。建立组员实验网站不仅方便学生学习，也能方便教师对实验过程进行有效管理。

本设计使用MVVM开发模式，以主流的Vue框架，webpack构建打包工具，elementUI组件作前端，使用NodeJs做后端设计并完成“计算机组成原理”实验系统网站。网站采用图文并茂的方式详细介绍了实验计算机的基本组成，并对计算机三大核心部件运算器、控制器、存储器的电路组成、控制方法、实验内容、实验方法进行了介绍，又设置实验信息的上传与下载、师生留言互动、实验签到、实验报告上传与批阅、实验成绩录入与统计等功能对实验过程进行有效管理。

关键词：计算机组成原理；Vue.js；NodeJs；组成原理实验网站

Website Design of "Computer Composition Principle" Experimental System

**Abstract:** The "Computer Composition Principles" experiment is an important practical lesson to deepen understanding of the basic composition and basic working principles of computers. The experimental circuit of the computer composition principle is extremely complicated and has many experimental contents. Establishing a group member experiment website not only facilitates student learning, but also facilitates the teacher to effectively manage the experimental process.

This design uses the MVVM development model, with the mainstream Vue framework, webpack build package tool, elementUI component as the front end, use NodeJs to do the backend design and complete the "computer composition principle" experimental system website. The website introduces the basic composition of the experimental computer in detail, and introduces the circuit components, control methods, experimental content and experimental methods of the three core components of the computer, controller, memory, and uploads the experimental information. The experiment process is effectively managed with functions such as downloading, teacher-student interaction, experiment sign-in, experiment report uploading and reviewing, experiment score entry and statistics.

**Keywords:** Computer composition principle; Vue.js; NodeJs; sign-in sign-off