

Programming Assignment Lecture I

Introduction

Xie

xiemhemail@gmail.com

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Basic Info

- ▶ 课程内容
 - ▶ PA1-PA??
- ▶ 上课时间
 - ▶ ???
- ▶ 考核方式
 - ▶ 日常按阶段提交工程 + 实验报告
 - ▶ 请在阶段 deadline 前提交工程
- ▶ 教程网站
 - ▶ <https://nju-ics.gitbooks.io/ics2017-programming-assignment/>
 - ▶ 请大家每天至少关注一次页面中的“最新消息”

Teacher and T.A.s

emmmmm

Programming Assignment Lecture I

1 ICS,PA and Computer System

2 The Story of Computer

3 Brand new PA

Why we need learn ICS? – yzh

Motivation

Question

```
int main()
{
    printf("Hello World");
    return 0;
}
```

What the computer are doing when you execute the program above ?

Tip

This may appear in exam.

System Stack

Application
Algorithm
Programming Language
Operating System/Virtual Machines
Instruction Set Architecture
Micro-architecture
Register-Transfer Level
Gates
Circuits
Devices
Physics

Aims of PA

- Aims**
- ▶ **Systems thinking**
 - ▶ Understand how program run on a computer
 - ▶ Enhance **coding** ability
 - ▶ Prepared for later courses (OS,Compiling)
- Way** Complete a tiny but entire computer system and run program on it.
- PA** **NEMU** (*i.e. NJU Emulator*)

Resources

Platform and tools IA-32 + GNU/Linux + gcc + C

Guidebook <https://nju-ics.gitbooks.io/ics2017-programming-assignment/>

Skeleton <https://github.com/NJU-ProjectN/ics-pa>

Tip

You can download the PDF or epub version of guide in github.

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DLC

1. We all have completed the Digital Logic Circuit Course.(Taught by 张泽生吴海军)
 - 1.1 summator
 - 1.2 register
 - 1.3 multiplexer
 - 1.4 *etc.*
- 2.

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The End

