

Software Design Specification (SDS)

Revision History:

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Mar 24	Yang, Zhu	First version

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1. Introduction

1.1 Intended Audience and Purpose

The document is intended to help the customer understand the system design, and serves as the basis of task division and inter-module communication, providing design information for developers and testers.

1.2 How to use the document

The document is organized as follows:

- show the system design of embedded system module
- show the detailed design of modules

2. System Design

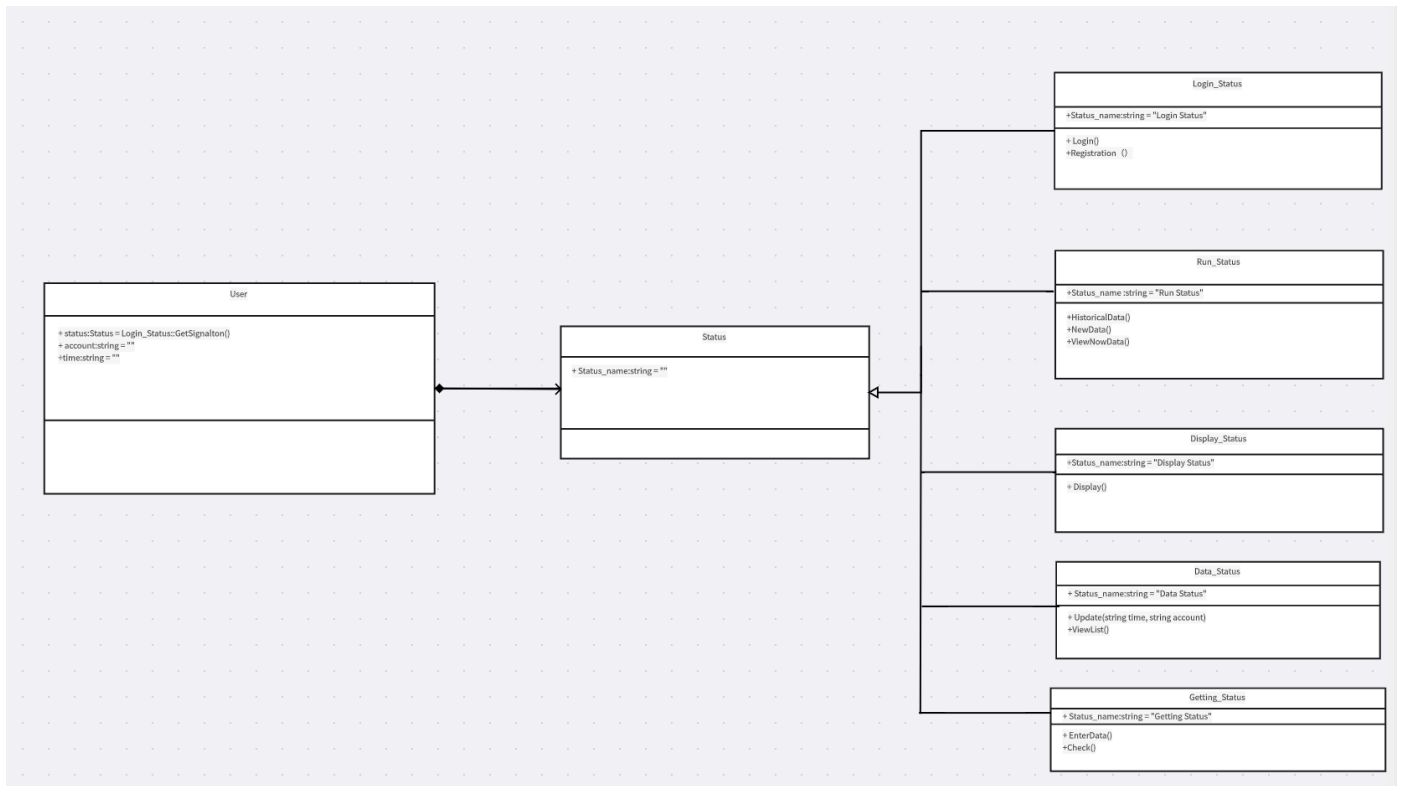
2.1 Context

- The software system module is divided into three parts. The first part is the router, which is used to send requests to the server as well as to respond to requests from the server. The second part is the server part. The router calls them to fulfill the request. The last part is the data collector. It is the medium with which the router gets the information.
- The software system is planned to develop with C# and C++

2.2 Architecture

2.2.1 Workflow Diagram

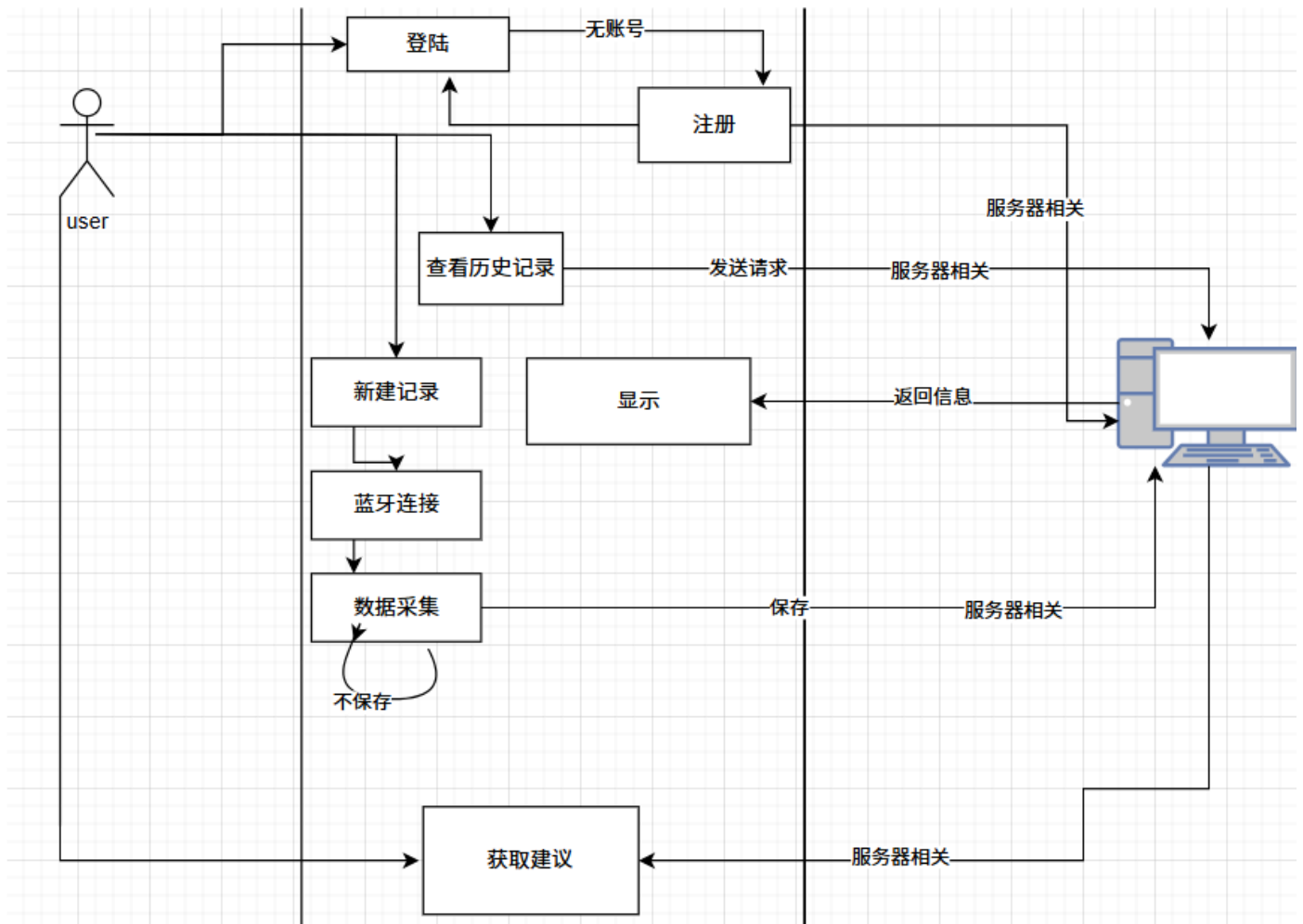
- version 1.0



3. Detailed Design

3.1 Usecase Diagram

version 1.0



3.2 Class Design

3.2.1 User

Attribute

status:class Status

account:string

time:string

Operation

3.2.2 Status

Attribute

Status_name:string

Operation

3.2.2.1 Login_Status

Attribute

Status_name:string=Login_Statue

Operation

Login()

Registration()

3.2.2.2 Run_Status

Attribute

Status_name:string=Run_Status

Operation

```
HistoricalData()
```

```
NewData()
```

```
ViewNewData()
```

3.2.2.3 Display_Status

Attribute

```
Status_name:string=Display_Status
```

Operation

```
Display()
```

3.2.2.4 Data_Status

Attribute

```
Status_name:string=Data_Status
```

Operation

```
Update(string time,string account)
```

```
ViewList()
```

3.2.2.5 Getting_Status

Attribute

Status_name:string=Getting_Status

Operation

EnterData()

check()