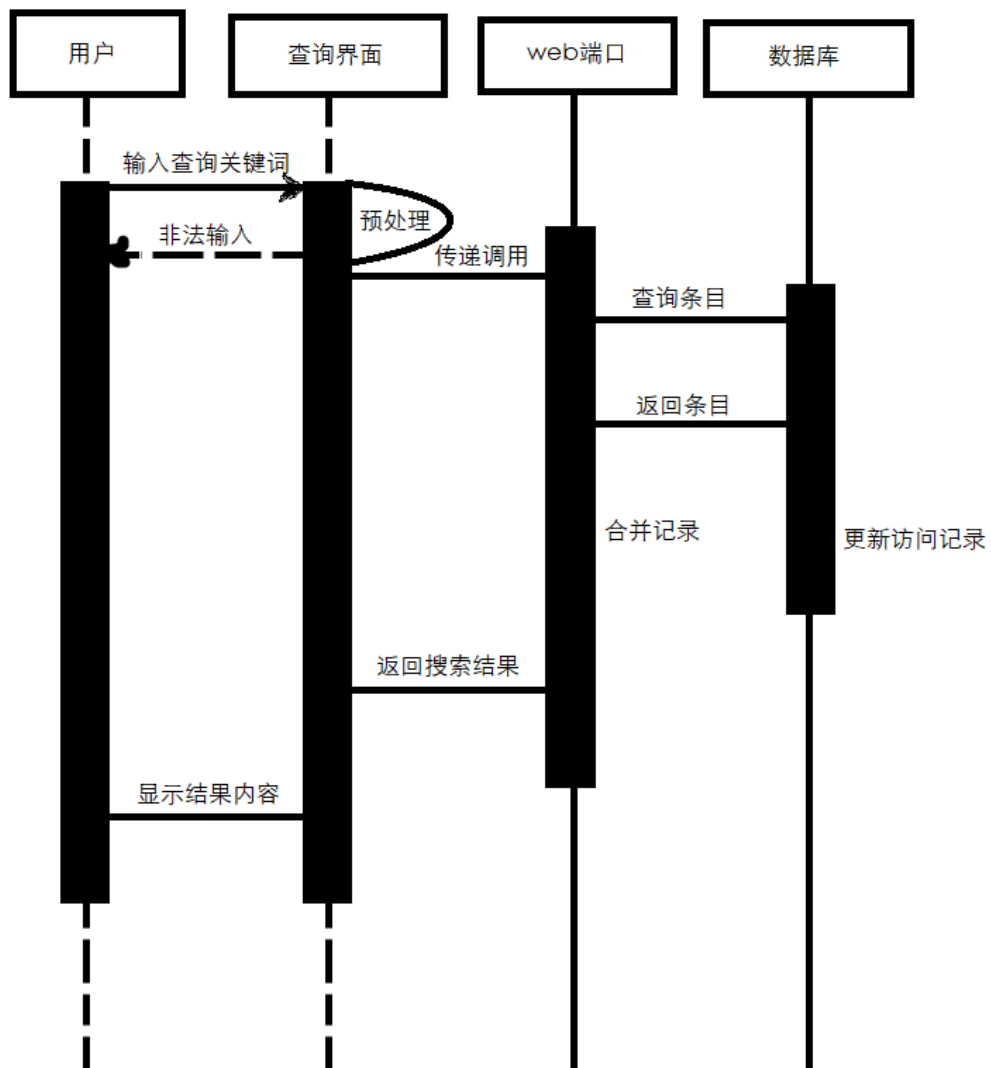1)CONCEPT

Responsibility Description	Type	Concept Name
Coordinate actions of all concepts associated with a use case, a logical grouping of use cases, or the entire system and delegate the work to other concepts	D	Controller
Retrieves the page containing the input keyword	K	Search Engine
Container for the collection of valid input associated with users	K	Input Checker
Display the information on the itempage	K	Database
web page jumps to the web page of the item	D	web turn
Log all interactions with the system in storage.	D	Logger

2) Sequence diagram

用户　　　查询界面　　　web端口　　　数据库

输入查询关键词

预处理

非法输入

传递调用

查询条目

返回条目

合并记录

更新访问记录

返回搜索结果

显示结果内容

3)

```
Web
+ text = string
```

contains

```
Search Engine
search ( ) ;
```

uses

```
DB .
+ storage page ( ).
manils.
```

```
Controller
- organized pages ( )
```

```
Logger
+ log trans ( S . log a.tag )
```

check

```
Input checker
+ check input; warm
- valid. input .
```