Interface Specification

<Web Page>

# Introduction

This file is mainly used to specify the method call between web page and server. Prepare for the later system integration.

# Services

## Services Provided

|  |  |  |
| --- | --- | --- |
| Service | Provided By | Tested By |
| User can sign up and sign in. | SignUpServlet, LoginServlet | T1 |
| Patients can Upload the single picture and get result. | GetAndDisplayImage | T2 |
| Patients can browse the history | DisplayHistoryImage | T3 |
| Doctors can Upload the picture and get result. | DoctorSubmitSinglePic | T4 |
| Doctors can Upload the multiple pictures. | UploadZipServlet | T5 |
| Doctors can edit the lines on pic. | function()<javascript> | T6 |
| Doctors can evaluate the detect result. | function()<javascript> | T7 |

## Access Method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Servlets or Fuctions** | **Access Method** | **Parameter name** | **Description** | **Map to services** |
| SignUpServlet | service | Request, response | Achieve the goals of control and show by HTTP protocol | 1 |
| LoginServlet | service | Request, response | Achieve the goals of control and show by HTTP protocol | 1 |
| GetAndDisplayImage | service | Request, response | Achieve the goals of control and show by HTTP protocol | 2 |
| DisplayHistoryImage | service | Request, response | Achieve the goals of control and show by HTTP protocol | 3 |
| DoctorSubmitSinglePic | service | Request, response | Achieve the goals of control and show by HTTP protocol | 4 |
| UploadZipServlet | service | Request, response | Achieve the goals of control and show by HTTP protocol | 5 |
| UploadEvaluateDetectServlet | service | Request, response | Upload evaluate detect result | 6 |
| function()<javascript> |  |  | Use JavaScript to implement the function. | 7 |

## Access Method Effects

|  |  |  |
| --- | --- | --- |
| **Servlets or Fuctions** | **Access Method** | **Description** |
| SignUpServlet | service | Gain the username and pwd and call the server’s function |
| LoginServlet | service | Gain the username and pwd and call the server’s function |
| GetAndDisplayImage | service | Gain the picture, call the server’s function to get result and show it. |
| DisplayHistoryImage | service | Call the server’s fuction and gain the records and show the record |
| DoctorSubmitSinglePic | service | Gain the data, call the server’s function to get result and show it. |
| UploadZipServlet | service | Upload the data to the server |
| function()<javascript> |  | Use the canvas’s functions to implement the edition |

## Services Required

|  |  |
| --- | --- |
| Service | Provided By |
| Verify that if the account exists | server |
| Gain train’s result | server |
| Gain account’s history | server |

# Local Types

|  |  |
| --- | --- |
| **Type** | **Value Space** |
| Username&pwd | String |
| Picture(transporting) | String |
| Codd | Double |

# Interface Design Issues

1. Ajax failed

Using servlets to replace it. By servlets, browser can load data and fresh the pages.

1. Line editing

We have a seriously lack of essential line info like the position and so on. There is no replacement scheme.

3. The style is not gorgeous enough

# Test Cases

<Characterize the expected value of the outputs over sets calls to the module.>

### T1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | service of SignUpServlet | Username and pwd | Determine if the account exists |  | 1 |
| 2 | service of LoginServlet | Username and pwd | Determine if the account exists |  | 2 |

### T2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | service of GetAndDisplayImage | Picture and username | Get codd and info of lines |  | 1 |

### T3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | service of DisplayHistoryImage | Username | Pictures, info of lines and codds |  | 1 |

### T4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | service of DoctorSubmitSinglePic | Username and pwd | Get codd and info of lines |  | 1 |

### T5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | service of UploadZipServlet | ZIP/RAR of pictures |  |  | 1 |

### T6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | Service of UploadEvaluateDetectServlet |  |  |  | 1 |

### T7

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **Description** | **Input Type/Value** | **Expected Results** | **Service** | **Preamble** |
| 1 | function()<javascript> | The operation of mouse click | Real time line editing results |  | 1 |