EA872 Dictionary

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Contents

Chapter 1

File Index

1.1 File List

Here is a list of all files with brief descriptions:

Chapter 2

File Documentation

2.1 src/header.c File Reference

```
#include "header.h"
#include <string.h>
#include <stdlib.h>
#include <stdio.h>
```
Include dependency graph for header.c:

2.2 src/logger.c File Reference

```
#include "logger.h"
#include "utils.h"
#include <stdlib.h>
```
Include dependency graph for logger.c:

Functions

- Logger loggerInit ()
- void logMessage (Logger logger, char *message)
- void logRequest (Logger logger, Request *request)
- void logResponse (Logger logger, Response *response)
- void logError (Logger logger, char *error)
- void loggerClose (Logger logger)

2.2.1 Function Documentation

2.2.1.1 logError()

```
void logError (
            Logger logger,
            char * error )
```

2.2.1.2 loggerClose()

```
void loggerClose (
            Logger logger )
```

2.2.1.3 loggerInit()

```
Logger loggerInit ( )
```

2.2.1.4 logMessage()

```
void logMessage (
            Logger logger,
            char * message )
```

2.2.1.5 logRequest()

```
void logRequest (
            Logger logger,
            Request * request )
```

2.2.1.6 logResponse()

```
void logResponse (
            Logger logger,
            Response * response )
```

2.3 src/main.c File Reference

```
#include <stdlib.h>
#include <string.h>
#include <sys/socket.h>
#include <sys/types.h>
#include <arpa/inet.h>
#include <unistd.h>
#include <signal.h>
#include "request.h"
#include "response.h"
#include "process.h"
#include "parser.h"
#include "logger.h"
```
Include dependency graph for main.c:

Functions

- void initServer (unsigned int port)
- void finishServer (int param)
- Request ∗ internalServerErrorRequest ()
- int main (int argc, char ∗∗argv)

Variables

- int socketDesc
- Logger logger
- int yydebug =1

2.3.1 Function Documentation

2.3.1.1 finishServer()

```
void finishServer (
            int param )
```

2.3.1.2 initServer()

```
void initServer (
            unsigned int port )
```

2.3.1.3 internalServerErrorRequest()

```
Request* internalServerErrorRequest ( )
```

2.3.1.4 main()

```
int main (
            int argc,
            char ** argv )
```

2.3.2 Variable Documentation

2.3.2.1 logger

```
Logger logger
```

2.3.2.2 socketDesc

```
int socketDesc
```

2.3.2.3 yydebug

```
int yydebug =1
```

2.4 src/parser.c File Reference

```
#include "parser.h"
#include "parserYacc.tab.h"
```
Include dependency graph for parser.c:

Typedefs

- typedef struct yy_buffer_state ∗ YY_BUFFER_STATE

Functions

- int yyparse ()
- YY_BUFFER_STATE yy_scan_string (char ∗str)
- void yy_delete_buffer (YY_BUFFER_STATE buffer)
- Request ∗ pickRequest ()
- Request ∗ parseRequest (char ∗message)

2.4.1 Typedef Documentation

2.4.1.1 YY_BUFFER_STATE

```
typedef struct yy_buffer_state* YY_BUFFER_STATE
```

2.4.2 Function Documentation

2.4.2.1 parseRequest()

```
Request* parseRequest (
            char * message )
```

2.4.2.2 pickRequest()

```
Request* pickRequest ( )
```

2.4.2.3 yy_delete_buffer()

```
void yy_delete_buffer (
            YY_BUFFER_STATE buffer )
```

2.4.2.4 yy_scan_string()

```
YY_BUFFER_STATE yy_scan_string (
            char * str )
```

2.4.2.5 yyparse()

```
int yyparse ( )
```

2.5 src/process.c File Reference

```
#include "process.h"
#include <fcntl.h>
#include <string.h>
#include <stdlib.h>
#include <stdio.h>
#include <sys/stat.h>
#include <unistd.h>
#include <time.h>
#include "utils.h"
```
Include dependency graph for process.c:

Functions

- Header ∗ responseHeader (Request ∗request, char ∗lastModified, unsigned int length)
- Response ∗ responseError (Request ∗request, unsigned int errorCode)
- Response ∗ traceRequest (Request ∗request)
- Response ∗ optionsRequest (Request ∗request)
- Response ∗ getRequest (char ∗path, Request ∗request, struct stat resourceStat)
- Response ∗ headRequest (char ∗path, Request ∗request, struct stat resourceStat)
- Response ∗ processRequest (Request ∗request)

Variables

- char basePath [ ] = "bin/data"

2.5.1   Function Documentation

2.5.1.1   getRequest()

```
Response* getRequest (
          char * path,
          Request * request,
          struct stat resourceStat )
```

2.5.1.2   headRequest()

```
Response* headRequest (
          char * path,
          Request * request,
          struct stat resourceStat )
```

2.5.1.3   optionsRequest()

```
Response* optionsRequest (
          Request * request )
```

2.5.1.4   processRequest()

```
Response* processRequest (
          Request * request )
```

2.5.1.5 responseError()

```
Response* responseError (
            Request * request,
            unsigned int errorCode )
```

2.5.1.6 responseHeader()

```
Header* responseHeader (
            Request * request,
            char * lastModified,
            unsigned int length )
```

2.5.1.7 traceRequest()

```
Response* traceRequest (
            Request * request )
```

2.5.2 Variable Documentation

2.5.2.1 basePath

```
char basePath[] = "bin/data"
```

2.6 src/request.c File Reference

```
#include "request.h"
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
```
Include dependency graph for request.c:

Functions

- Request ∗ createRequest (char ∗type, char ∗resource, char ∗httpVersion)
- Request ∗ addHeaders2Request (Request ∗request, Header ∗headersList)
- void freeRequest (Request ∗request)
- char ∗ getRequestType (Request ∗request)
- char ∗ printRequest (Request ∗request)
- char ∗ findConnection (Request ∗request)
- Request ∗ addPayload2Request (Request ∗request, char ∗payload)

2.6.1 Function Documentation

2.6.1.1 addHeaders2Request()

```
Request* addHeaders2Request (
            Request * request,
            Header * headersList )
```

2.6.1.2 addPayload2Request()

```
Request* addPayload2Request (
            Request * request,
            char * payload )
```

2.6.1.3 createRequest()

```
Request* createRequest (
            char * type,
            char * resource,
            char * httpVersion )
```

2.6.1.4 findConnection()

```
char* findConnection (
            Request * request )
```

2.6.1.5 freeRequest()

```
void freeRequest (
            Request * request )
```

2.6.1.6 getRequestType()

```
char* getRequestType (
            Request * request )
```

2.6.1.7 printRequest()

```
char* printRequest (
            Request * request )
```

2.7 src/response.c File Reference

```
#include "response.h"
#include <stdlib.h>
#include <stdio.h>
#include <string.h>
```
Include dependency graph for response.c:

Functions

- Response ∗ createResponse (char ∗httpVersion, unsigned int httpCode, char ∗codeText)
- Response ∗ addHeaders2Response (Response ∗response, Header ∗headersList)
- Response ∗ addPayload2Response (Response ∗response, char ∗payload)
- void freeResponse (Response ∗response)
- char ∗ printResponse (Response ∗response)
- char ∗ getContentLength (Response ∗response)

2.7.1 Function Documentation

2.7.1.1 addHeaders2Response()

```
Response* addHeaders2Response (
            Response * response,
            Header * headersList )
```

2.7.1.2 addPayload2Response()

```
Response* addPayload2Response (
            Response * response,
            char * payload )
```

2.7.1.3 createResponse()

```
Response* createResponse (
            char * httpVersion,
            unsigned int httpCode,
            char * codeText )
```

2.7.1.4 freeResponse()

```
void freeResponse (
            Response * response )
```

2.7.1.5 getContentLength()

```
char* getContentLength (
            Response * response )
```

2.7.1.6 printResponse()

```
char* printResponse (
            Response * response )
```

2.8 src/utils.c File Reference

```
#include "utils.h"
#include <stdio.h>
#include <string.h>
```
Include dependency graph for utils.c:

Functions

- char ∗ getDate (char ∗fmt)
- char ∗ getLoggerFileDate ()
- char ∗ getLoggerDate ()
- char ∗ getHTTPDate ()

2.8.1 Function Documentation

2.8.1.1 getDate()

```
char* getDate (
            char * fmt )
```

2.8.1.2 getHTTPDate()

```
char* getHTTPDate ( )
```

2.8.1.3 getLoggerDate()

```
char* getLoggerDate ( )
```

2.8.1.4 getLoggerFileDate()

```
char* getLoggerFileDate ( )
```