/\*

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Date :- 14/8/2022

Description :- Project **Steganography (decode.h)**

**\*/**

#ifndef DECODE\_H

#define DECODE\_H

#include "types.h" // Contains user defined types

/\*

\* Structure to store information required for

\* decoding secret file to source Image

\* Info about output and intermediate data is

\* also stored

\*/

#define MAX\_SECRET\_BUF\_SIZE 1

#define MAX\_IMAGE\_BUF\_SIZE (MAX\_SECRET\_BUF\_SIZE \* 8)

typedef struct \_DecodeInfo

{

/\* Stego image Info \*/

char \*d\_src\_image\_fname;

FILE \*fptr\_d\_src\_image;

char d\_image\_data[MAX\_IMAGE\_BUF\_SIZE];

char \*magic\_data;

char \*d\_extn\_secret\_file;

int size\_secret\_file;

FILE \*fptr\_d\_dest\_image;

char \*d\_secret\_fname;

FILE \*fptr\_d\_secret;

} DecodeInfo;

/\* Decoding Function Prototypes \*/

/\* Read and validate decode args from argv \*/

Status\_d read\_and\_validate\_decode\_args(char \*argv[], DecodeInfo \*decInfo);

/\* Perform the decoding \*/

Status\_d do\_decoding(DecodeInfo \*decInfo);

/\* Get File pointers for i/p and o/p files \*/

Status\_d open\_files\_dec(DecodeInfo \*decInfo);

/\* Decode Magic String \*/

Status\_d decode\_magic\_string(DecodeInfo \*decInfo);

/\* Decode data from image \*/

Status\_d decode\_data\_from\_image(int size, FILE \*fptr\_d\_src\_image,

DecodeInfo \*decInfo);

/\* Decode byte from lsb \*/

Status\_d decode\_byte\_from\_lsb(char \*data, char \*image\_buffer);

/\* Decode file extn size \*/

Status\_d decode\_file\_extn\_size (int size, FILE \*fptr\_d\_src\_image);

/\* Decode size from lsb \*/

Status\_d decode\_size\_from\_lsb (char \*buffer, int \*size);

/\* Decode secret file extn \*/

Status\_d decode\_secret\_file\_extn (char \*file\_ext, DecodeInfo \*decInfo) ;

/\* Decode extension data from image \*/

Status\_d decode\_extension\_data\_from\_image ( int size, FILE \*fptr\_d\_src\_image, DecodeInfo \*decInfo);

/\* Decode secret file size \*/

Status\_d decode\_secret\_file\_size (int file\_size, DecodeInfo \*decInfo);

/\* Decode secret file data \*/

Status\_d decode\_secret\_file\_data (DecodeInfo \*decInfo);

#endif