NAME

gth_start_game, gth_make_move, gth_get_move, gth_winner, gth_time_controls, gth_white_time_control, gth_black_time_control, gth_my_time, gth_opp_time – C interface to Gothello game daemon

SYNOPSIS

#include "gthgame.h"

int gth_start_game(enum gth_who *side***, char ***host**, int** *server***)**

enum gth_state gth_make_move(char ***pos)**

enum gth_state gth_get_move(char ***pos)**

enum gth_who gth_winner

int gth_time_controls

int gth_white_time_control

int gth_black_time_control

int gth_my_time

int gth_opp_time

DESCRIPTION

The **gth_start_game()** function attempts to connect to the Gothello server with the given *server* number on the given *host*, and start a game as side *side* as described by the enumeration **enum gth_who**. **gth_start_game()** will not return until the client side's first opportunity to move in the set-up game.

The **gth_make_move()** function attempts to make the given move on the Gothello server, where *pos* is a two-character lowercase algebraic coordinate strings on the Gothello board (in the range **a1**...**e5**), or the string ".p" indicating a pass. It returns an **enum gth_state** indicating whether the game is over, and if so, which side has won.

The **gth_get_move()** function attempts to retrieve an opponent move from the Gothello server, where *pos* is the algebraic coordinate of the resulting move, or pass as above. The *pos* argument must be pointers to two-character strings (i.e. 3 character area), whose contents will be filled in by the call. **gth_get_move()** returns an **enum gth_state** indicating whether the game is over, and if so, which side has won.

A number of globally accessible variables are side-effected by the functions, and contain useful state information about the game in progress.

```
enum gth_who gth_winner;          /* winning side at game end */
int gth_time_controls;            /* 1 if game is time-controlled */
int gth_white_time_control;       /* total time in secs */
int gth_black_time_control;
int gth_my_time;                  /* secs remaining */
int gth_opp_time;
```

The **gth_who** enum is defined in **"libgame.h"** as follows:

```
GTH_WHO_NONE=0,                   /* nobody */
GTH_WHO_WHITE=1,                  /* white player */
GTH_WHO_BLACK=2,                  /* black player */
GTH_WHO_OTHER=3,                  /* some other player */
```

The **gth_state** enum is defined in **"libgame.h"** as follows:

```
GTH_STATE_ERROR=-1,          /* something is wrong */
GTH_STATE_CONTINUE=0,        /* game continues */
GTH_STATE_DONE=1,            /* game over */
```

ERRORS

The **gth_start_game()** function returns 0 on success, and -1 on error. The **gth_make_move()** and **gth_get_move()** functions return **GTH_STATE_ERROR** if an error is discovered in the arguments or the interaction with the server is unsuccessful.