**CHARACTER CRUSH SAGA**

**DOCUMENTATION**

**Overview**

The Character Saga game is a console-based game implemented in C++. It offers three difficulty levels: Easy, Medium, and Hard. The game involves replacing characters on the game board to achieve specific objectives and score points. Players can choose their preferred difficulty level and play accordingly.

**File Structure**

* **main.cpp**: Contains the main game logic, user interface, and function calls.
* **user.txt**: An output file storing user information such as name, age, and email.

**Dependencies**

The game uses standard C++ libraries for basic functionalities. It includes **iostream** for input/output, **cstdlib** for random number generation, **ctime** for time-related functions, **conio.h** for keyboard input, and **fstream** for file operations.

**Functions**

1. **rand\_char()**
   * Generates a random character for populating the game boards.
2. **easy\_initial\_board(char easy[6][6])**
   * Displays the initial state of the Easy mode game board.
3. **med\_initial\_board(char med[8][8])**
   * Displays the initial state of the Medium mode game board.
4. **hard\_initial\_board(char hard[10][10])**
   * Displays the initial state of the Hard mode game board.
5. **easy\_player\_turn(char easy[6][6])**
   * Handles the player's turn for the Easy mode.
6. **med\_player\_turn(char med[8][8])**
   * Handles the player's turn for the Medium mode.
7. **hard\_player\_turn(char hard[10][10])**
   * Handles the player's turn for the Hard mode.
8. **easy\_update\_board(char easy[6][6], ...)**
   * Updates and displays the Easy mode game board.
9. **med\_update\_board(char med[8][8], ...)**
   * Updates and displays the Medium mode game board.
10. **hard\_update\_board(char hard[10][10], ...)**
    * Updates and displays the Hard mode game board.
11. **mode\_selection(char easy[6][6], char med[8][8], char hard[10][10])**
    * Allows the user to choose the game mode (Easy, Medium, or Hard).
12. **main\_menu(char easy[6][6], char med[8][8], char hard[10][10])**
    * Displays the main menu with options to choose game modes, view the game manual, see developers' information, or exit the game.

**Gameplay**

1. **Game Modes**
   * The player can choose between Easy, Medium, and Hard modes.
   * Each mode has different board sizes and difficulty levels.
2. **Player Turn**
   * Players make a move by selecting characters on the board to replace.
   * Validity checks are performed to ensure a legal move.
3. **Scoring**
   * Players earn points based on the difficulty level and specific objectives.
   * The game has three levels, and the player's score accumulates with each successful move.
4. **Winning and Losing**
   * The game continues until the player completes all levels or runs out of moves.
   * Players are rewarded based on their final score.

**User Information**

* Player information such as name, age, and email is stored in the **user.txt** file.
* Terms and conditions must be agreed upon before starting the game.

**Additional Features**

* The game offers a game manual, playing technique guide, and information about the developers.
* A colorful console interface enhances the user experience.

**How to Play**

1. Run the program and enter your name, age, and email.
2. Agree to the terms and conditions.
3. Choose a game mode (Easy, Medium, Hard) from the main menu.
4. Follow the on-screen instructions for making moves and progressing through levels.
5. View the game manual for additional guidance.

**Exiting the Game**

To exit the game, select the "Exit" option from the main menu.

**Developers**

The "Developers" section provides information about the creators of the game.

**Playing Technique**

The "Playing Technique" section offers guidance on making effective moves during gameplay.

**Game Manual**

The "Game Manual" section provides detailed instructions on how to play the game.

This documentation provides an overview of the Character Saga game, including its structure, functions, gameplay, and additional features. Players can refer to the game manual for detailed instructions and enjoy the challenging experience across different difficulty levels.

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