Class Documentation:

| Class: | Game System |  |  |
| --- | --- | --- | --- |
| The base class that the whole game is ran through, the “main” class |  |  |  |
| Fields: |  |  |  |
| GameKey: int |  |  |  |
| CustomerName: String | Self explanatory, the customer’s name |  |  |
| Address: String | Game’s ip address |  |  |
| Phone:int | The phone the game is being played on |  |  |
| Methods: |  |  |  |
| Start() | Method to begin the game |  |  |
| Load() | Method to load a previous game |  |  |
|  |  |  |  |

| Class: | GameBoard |  |  |
| --- | --- | --- | --- |
| This class contains all the fields and methods required to play on the game board |  |  |  |
| Fields: |  |  |  |
| Id: int | General game ID |  |  |
| PlayerID: int | The ID of the player |  |  |
| Methods: |  |  |  |
| MakeMove() | Method to move the player character |  |  |
| MakeGuess(String Guess) | Method for the player to make a guess |  |  |
| MakeAccusation(String Guess) | Method for the player to make an accusation |  |  |
| ValidateGuess(STring Guess) | Method for the game to validate whether the guess is possible |  |  |
| ValidateMove() | Method for the game to validate if a move is possible |  |  |
|  |  |  |  |

| Class | AI |  |  |
| --- | --- | --- | --- |
| Methods required for the computer to play against the user |  |  |  |
| Fields: |  |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| GenGuess() | Method to generate a guess for the computer to make |  |  |

| Class: | Admin |  |  |
| --- | --- | --- | --- |
| Information about the “admin” user |  |  |  |
| Fields: |  |  |  |
| ID: int | The admin’s user ID |  |  |
| Username: String | The admin's username |  |  |
| Password: String | The admin's password |  |  |
| Wallet: Float |  |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| Update() | method to allow an update of the game |  |  |
| CheckStore() | method to check store for game details |  |  |
| AddFunds() | method to add money to the wallet |  |  |
| Settings() | Method for the settings of the game |  |  |

| Class: | GameStore |  |  |
| --- | --- | --- | --- |
| Information about the online store |  |  |  |
| Fields: |  |  |  |
| ID: int | Player’s ID |  |  |
| AdminID: int | The admin’s id |  |  |
| Basket: vector<int> | a container for the user to add items to |  |  |
| OrderDate: DateTime | The date the order was made |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| AddItem() | Method to add item to the basket |  |  |
| EditBasket() | Method to edit the contents of the basket |  |  |
| Checkout(int ProductID) | Method to perform checkout tasks on the basket |  |  |
|  |  |  |  |

| Class: | Player |  |  |
| --- | --- | --- | --- |
| Information about the user and their attributes |  |  |  |
| Fields: |  |  |  |
| ID: int | player’s ID |  |  |
| Username: String | User’s username |  |  |
| Move: int | information on the move the player is making |  |  |
| Guess: String | information on the guess the player is making |  |  |
| GuessorAccusation(Boolean) | Information on whether the player is making a guess or accusation |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| GenMove() | Method to generate the move |  |  |
| FindGuess() | Method to determine the guess |  |  |
| GuessOrAccusation(int ProductID) | method to determine whether it is a guess or an accusation |  |  |
| Save() | method for the player to save the current game state |  |  |
|  |  |  |  |

| Class: | DetectiveNotepad |  |  |
| --- | --- | --- | --- |
| Class for the notepad the player adds info to |  |  |  |
| Fields: |  |  |  |
| NotePadID: int | ID for the notepad itself |  |  |
| PlayerID: int | Player id to correspond with that of the notepad |  |  |
| Notes: vector<String> | The notes put on the notepad |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| EditNote() | method to edit notes on the pad |  |  |
| ViewNotes() | method to view the notes without editing |  |  |

| Class: | SocialMedia |  |  |
| --- | --- | --- | --- |
| Information and methods for the user to integrate social media |  |  |  |
| Fields: |  |  |  |
| Username:String | player’s username on social media |  |  |
| ShopNo: int | The number of the online shop |  |  |
| AccountID: int | The id corresponding to a user’s account |  |  |
|  |  |  |  |
| Methods: |  |  |  |
| MakePost() | method to make a post on a social media from the app |  |  |
| SendMessage( int ProductID) | method to send a message on social media |  |  |
| Login(String Username) | Method to login to social media |  |  |