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| **Class** | Map |
| The class which holds all the information about the map, contains all the location classes. | |
| **Fields** |  |
| SelectedLocation | Field which stores the selected location that the player wants to travel to. Would be used as a parameter in the GetPathway Method and used to highlight on the in game map. |
| Town | Field which stores the town that the map is set in. |
| City | Field which stores the city that the map is set in |
| Country | Field which stores the country that the map is set in. |
| GameDesigner | Name of the Author of the map is stored here. |
|  | |
| **Methods** |  |
| getPathway() | Method which gets the pathway from one location to another |
| playerMovement() | Method which checks whether a player is in the boundaries of a location |

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| **Class** | Keystone |
| A Child class of the Item class. This class holds information about keystones, which are used to exit the game. | |
| **Fields** |  |
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| **Methods** |  |
| formKey() | Method which forms a key that can be used to exit the game at the exit location. |
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| **Class** | ExitLocation |
| Child class of Location. Inherits location fields and methods and adds its own which allow the player to exit the game. | |
| **Fields** |  |
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| **Methods** |  |
| displayDoor() | Method which displays the door which the player can finish the game. |
| checkKeyStoneCount() | Method which checks a Players Bag to see if they have enough keystones required to form a key. |

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| **Class** | Player |
| Player class which handles everything to do with the Player who is the main actor in the game. | |
| **Fields** |  |
| PlayerName | Field which stores the players username/in game name. |
| HealthLevel | Field which stores the players health level. |
|  | |
| **Methods** |  |
| getCurrentLocation() | Method which returns the players current location. makes use of the GoogleMapWebService boundary class. |
| useBag() | Method which allows Player to use their bag. |
| provideAnswer() | Method which allows Player to answer a question |
| useOracle() | Method which allows Player to use Oracle. |
| sendMessage() | Method which allows Player to send a message. |
| updateStatus() | Method which allows a player to update their facebook status. |

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| **Class** | Location |
| Abstract class for all locations. Contains the basic attributes and methods that all the child classes will inherit. | |
| **Fields** |  |
| Icon | Field which stores the image of the location which will be displayed on the map. |
| BoundaryCoordinates | Array which stores the boundary coordinates of the location. |
| LocationName | Field which stores the location name which will be shown on the in game map. |
| LocationDescription | Field which stores a description of the location. |
| Hint | Array which will store hints for the location. |
| CostOfHint | As each hint comes with a different cost this field contains the cost as a percentage |
| LocationID | Field which stores the specific ID of the location |
| LocationSetting | Field which contains the locations settings |
|  | |
| **Methods** |  |
| displayIcon() | Displays the visual icon on the Map landscape |
| getBoundaryCoordinates() | Returns the array of coordinates |
| displayLocationName() | Displays the name of the location on the Map landscape |
| displayLocationDescription() | Displays the short description of the location on the Map landscape |
| displayHint() | Displays hints of the location on the Map landscape which can be beneficial to the Player and come with a cost. |
| getLocationID() | Method which returns the location ID field value |
| getLocationSetting() | Method which returns the location Setting field value |

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| **Class** | Game |
| The game class handles launching a new game, searching for a game, and higher level tracking like if its the players turn. | |
| **Fields** |  |
| turn | boolean which keeps track if it is the Players turn |
| gameId | Field which contains the current games id. Used in messaging |
|  | |
| **Methods** |  |
| searchForGame() | Method which calls methods from the GameServer to find valid games. |
| displayGames() | Method which displays all valid games to the Player |
| startGame() | Method which starts a game. |

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| **Class** | Item |
| Item is an interface class which wildcard and keystone inherit. This allows bag to store items of many types. | |
| **Fields** |  |
| ItemID | Field which stores an Items ID. |
|  | |
| **Methods** |  |

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| **Class** | GameServer |
| Game server is a boundary class which is interacted with to download different maps and themes. | |
| **Fields** |  |
|  | |
| **Methods** |  |

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| **Class** | Question |
| Holds information about a question. Multiple questions would be created and held in the questionCollection in QuestionManager | |
| **Fields** |  |
| CorrectAnswer | Field which contains the correct answer to the question |
| QuestionToAsk | Field which contains the actual question which is asked to the user. |
| locationID | Field which is used for location specific questions |
|  | |
| **Methods** |  |
| getCorrectAnswer() | Method which gets the answer for the question |
| getQuestionToAsk() | Method which gets the question t |

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| **Class** | StartingLocation |
| Child class of location which is where the player starts the game | |
| **Fields** |  |
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| **Methods** |  |

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| **Class** | Bag |
| Class which represents the bag that the player can store items in. | |
| **Fields** |  |
| itemCount | Field which stores the amount of items in the bag |
| keyStoneCount | Field which stores the amount of keystones the user has acquired. |
|  | |
| **Methods** |  |
| addItem() | Method which is used to add an item to the bag |
| removeItem() | Method which is used to remove an item from the bag |
| useItem() | Method which uses the item in the bag. |

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| **Class** | NavigationalArrow |
| Class which represents the navigational arrow that points the player in the correct direction | |
| **Fields** |  |
|  | |
| **Methods** |  |
| displayArrow() | Method which displays which direction the arrow is pointing to the Player |
| updateArrow() | Updates the direction of arrow depending on the players location |

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| **Class** | GoogleMapWebService |
| Boundary class used to find position of player | |
| **Fields** |  |
|  | |
| **Methods** |  |

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| **Class** | UserInterface |
| User interface class which the player initially interacts with. Interacts with Game and GamePack. | |
| **Fields** |  |
|  | |
| **Methods** |  |
| PlayGame() | Method which would create a game. |
| buyGamePack() | Method which would allow the player to buy a gamepack |
| exitGame() | Method used to exit the game. |

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| **Class** | IntermediateLocation |
| Child Class of Location. Nothing happens at this location. | |
| **Fields** |  |
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| **Methods** |  |

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| **Class** | QuestionLocation |
| Child class of Location. In this location a Player is asked a question. | |
| **Fields** |  |
| isLocationSpecific | Boolean value that determines whether all the questions in this location are location specific |
|  | |
| **Methods** |  |
| displayQuestion() | Method which displays a question to the Player. |

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| **Class** | KeystoneLocation |
| Child class of Location where a Player has the chance of obtaining a KeyStone. | |
| **Fields** |  |
| isLocationSpecific | Boolean value that determines whether all the questions in this location are location specific |
|  | |
| **Methods** |  |
| addKeyStone() | Adds a keystone to the Players Bag. |
| displayQuestion() | Method which displays a question to the Player. |

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| **Class** | WildcardLocation |
| Child class of Location. Where a Player can obtain a wildcard. | |
| **Fields** |  |
| wildCardCollection | An array of wildcard objects. Can be randomly picked from to decide which wildcard a Player gets. |
|  | |
| **Methods** |  |
| picksRandomWildcard() | Method which picks a random wildcard from wildCardCollection. |

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| **Class** | RegenerationLocation |
| Child class of Location. This location heals the players health. | |
| **Fields** |  |
|  | |
| **Methods** |  |
| healPlayer() | Method which heals Player when they have entered the boundaries of the location. |

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| **Class** | WildCard |
| Parent class of all the different wildcards. Inherits from Item. | |
| **Fields** |  |
|  | |
| **Methods** |  |
| useWildCard() | Empty method that all the different wildcards implement to suit their function. |

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| **Class** | EnergyBoostWildCard |
| WildCard which gives the player more energy when used | |
| **Fields** |  |
|  | |
| **Methods** |  |
| useWildCard() | Method which adds 10% health to the Player. |

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| **Class** | QuestionImmunitySpellWildCard |
| WildCard which allows the user to be immune to a question. | |
| **Fields** |  |
|  | |
| **Methods** |  |
| useWildCard() | Method which a Player can call to not have to answer a question. |

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| **Class** | GiveItUpWildCard |
| WildCard which makes a Player have to give up an item from their bag | |
| **Fields** |  |
|  | |
| **Methods** |  |
| useWildCard() | Method which makes a Player have to remove an item from their bag. |

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| **Class** | Message |
| Class which is used to allow a Player to send and receive messages | |
| **Fields** |  |
| messageText | Contains what the Player has written |
|  | |
| **Methods** |  |
| sendMessage() | Method which sends what the player has written to the GameServer for processing. |
| requestMessage() | Method which requests all messages from the GameServer. |

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| **Class** | Status |
| Class which is used to allow the Player to interact with Facebook. | |
| **Fields** |  |
| statusToPost | Field which stores what the Player wants to post. |
|  | |
| **Methods** |  |
| postStatus() | Method which posts a Players status to facebook by using the facebookAPI |

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| **Class** | GamePack |
| GamePack class stores a Players payment information and allows a Player to buy different game packs. | |
| **Fields** |  |
| purchasedGamePacks | Array of previously purchased game packs. |
| paymentDetails | Array which contains all of the Players payment information that gets sent to the paymentServer. |
|  | |
| **Methods** |  |
| buyGamePack() | Method which allows a Player to buy a gamePack. |
| viewGamePacks() | Method which allows a Player to view all game packs that are available to buy. |
| getPaymentDetails() | Method which gets the Players payment details from the field |
| setPaymentDetails() | Method which allows the Player to set the payment details in the field. |

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| **Class** | PaymentServer |
| Boundary class which handles payments for GamePacks. | |
| **Fields** |  |
|  | |
| **Methods** |  |

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| **Class** | Oracle |
| Class which handles the Oracle, a device that the player shakes and which determines where the player can go. | |
| **Fields** |  |
|  | |
| **Methods** |  |
| NumberShape() | Makes the connection between finding Pathways. Displays and returns a random number which is the maximum number of path lengths the user can make in their next turn. |
| Shake() | Displays the Oracle and allows the user to shake a virtual cup. After the cup is shaken NumberShape() is called. |

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| **Class** | QuestionManager |
| QuestionManager is the class that handles all the questions in the game. Every location that asks a question uses this class as it contains all the questions. | |
| **Fields** |  |
| questionCollection() | Array of Question Objects that holds all the possible questions that can be asked. |
|  | |
| **Methods** |  |
| pickRandomQuestion() | Method which picks a random question from the question collection and returns it to the method that called it. |
| answerQuestion() | Method which gets the answer of the question from the Question object that the function that called it is searching for. |
| repeatQuestion() | Method which repeats the question to the Player. |
| skipQuestion() | Method which skips the current question and gets another question for the Player. |
| useImmunitySpell() | Method which is called when the player has an Immunity WildCard that they have chosen to use to get past a question. |
| pickLocationSpecificQuestion() | Method which is called when a locations setting is location specific and not random. |