

# Class Diagrams

These are the original class diagrams for the main components that make up the software.

The Main class has been kept relatively up to date as methods have been added, others have been left from their initial state and so reflect an older version of the software.

## Story Creation

These are the classes involved in story creation, they make and generate the story components.

There is potential for refactoring here. A lot more of the code in Main.php could be handled by the Main class to shorten the main.php file and increase clarity.

Main
+ setup(): KB_Data + getStoryData(String): StoryData + getCreativityRatings(): Array + getLikeToDislike(): Array + turnKBDataToArray(String): Array + echoParams(Array): String + rateLatestStory(String): String + getLatestStoryID(): String + getLevenshteinDistance(String,String,String): String

StoryData
+ random_event: String + markov_event: String + random_location: String + random_action: String + markov_action: String + cm_action: String + no_doppelgangers: Boolean + allow_doppelgangers: Boolean + ignore_death: Boolean + respect_death: Boolean

This class that stores the story data has changed significantly, to remove obvious redundancies (like the no\_doppelganger/allow\_doppelganger constructor params). It has been replaced in operation by the Story class which is made each time the getStory block is called in main.php

StoryMaker
+ makeCharacter(): Person + getCharacterByID(int): Person + getCharacteWholsnt(int): Person + returnCharacter(String): Person + getLocation(String): Location + getAction(String) Action + getEvent(String): Event + checkExists(String, String): Boolean

Story
+ story_id: int + event_sequence: String + location_sequence: String + action_sequence: String + rating: String + respect_death: int + allow_doppelgangers: Boolean + invert_cm: int + action_choice: String + location_choice: String + event_choice: String + n_gram_size: int
+ updateActionSeq(String) + updateEventSeq(String) + updateLocationSeq(String) + saveStory(): String + saveCharacter(Person): String

ReflectionCycle
+ reflectSM: StoryMaker
+ actionCycleCM(Person, Person): Action + actionCycleRandom(Person, Person): Action + getActionByID(int): Action + updateCharFromAction(Action, Person, Person) + pickRandomAction(): Action + pickRandomEvent(): Event + getLocationByID(int): Location + pickRandomLocation(): Location + getEventByID(int): Event

## Story Components

These are the classes that make up the story components. Their constructors generally map 1-1 to columns from the story components tables in the database.

Consequences are included in the Action/Event classes to aid simplicity. There are deprecated ActionCon and EventCon classes in the classes.php file.

Event
+ id: int + brief: String + longDesc: String + tone: String + consequence: String + conBrief: String + con_desc: String

Location
+ id: int + name: String + brief: String + longDesc: String

Person
+ isAlive: Boolean + id: int + firstname: String + lastname: String + gender: String + descID: int + age: int + temperment: String + emotional_state: int + es_desc: String + arc_es: String + arc_desc: String:
+ describe(): String + updateES(int, String) + kill()

Action
+ id: int + brief: String + longDesc: String + tone: String + consequence: String + conBrief: String + con_desc: String + c1_es: int + c2_es: int + c1_es_desc: String + c2_es_desc: String + is_dead: String + invert_c1_c2: int + solo_action: int + protagonist: String