

History Log

HistoryLog is the main class, which holds a list of log entries (HistoryEntry class).

The instance of HistoryLog is created once for the game in the GameStatus class.

The **HistoryEntry** class is general so it allows you to add any data while in the game to the log.

Each entry contains a title (data on the current phase) and the entry itself (any object and other data of the game).

To add to any data to the history log within the game:

1. Create a history entry
 - 1.1. Create a new Hashtable<String, Object>.
 - 1.2. Add this hashtable any data (as an Object) that you would like to save to the log.
 - 1.3. You can add as many entries as you need to this hashtable and choose any string for the key.
 - 1.4. The key “type” is used to describe the type of the entry.
2. Create an instance of HistoryEntry class using the new hashtable.
3. Add the new instance of HistoryEntry to the HistoryLog (using method addHistoryItem).

Print History Log:

The experimenter can print the history log anytime within the game by write the next line in the admin client shell:

```
$ print log <game id> > <file>
```

Example

In this example we want to save player related details (id, position, score, chipset) in specific event.

In order to do that we need to create a log entry for the **player status** data in PlayerStatus class and add this entry during the event.

1. create a method toHistoryEntry in PlayerStatus class that would handle the representation of player status data that we want log:

```
public HistoryEntry toHistoryEntry(String phaseName, int phaseNum,
                                   int secondsIntoPhase) {
    Hashtable<String, Object> entry = new Hashtable<String, Object>();
    entry.put("type", "playerStatus");
    entry.put("PerGameId", perGameId);
    entry.put("Position", getPosition().toHash());
    entry.put("Score", score);
    entry.put("ChipSet", chips.toHash());

    return new HistoryEntry(phaseName, phaseNum,
                           secondsIntoPhase, entry);
}
```

2. In the GameStatus class we created an instance of the HistoryLog:

```
HistoryLog log = new HistoryLog();
```

3. Within the progress of the game when we want to add a history entry about the player status in a specific time or event, we use this code:

```
// for each player add data to the log
for (PlayerStatus p : players) {
    log.addHistoryItem(p.toHistoryEntry(
        phases.getCurrentPhase(),
        phases.getPhasesElapsed(),
        phases.getCurrentSecsElapsed()));
}
```