

Requirements Gathering Plan and User Story Set

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Project Overview

Kingdom of Loathing (KoL) has a large number of combat items with a wide range of effects. The current problem is that the existing methods to find information about these items are inefficient, overwhelming, and time consuming. KoLmafia has tools such as Modifier Maximizer that help players choose other items, such as equipment, potions, and buffs, but there is not a comparable database for evaluating combat items. My proposed system is an independent combat-item database that organizes information such as item effects, effect categories, inventory quantity, and current Mall prices. The main users would be KoL players, KoLmafia users and script authors, KoLmafia maintainers, and community members who help document and verify item behavior.

Stakeholder Groups

KoLmafia Users

KoL Players who use Mafia are an important stakeholder group because they are the people who would use the database to make decisions during combat. Their input could identify what information is actually useful when deciding whether to use an item. They could provide information about common problems with finding or comparing combat items, as well as which filters or categories would make the system easier to use. Their main priorities would likely be finding information quickly, understanding what an item does, and being able to decide if using an item is worth the cost.

KoL Wiki Maintainers

The KoL Wiki community is another important stakeholder group because it documents item behavior and helps determine how unusual or complicated game mechanics work. Not only would their involvement in the project be helpful in verifying the information in the database for accuracy, the database could eventually be used to validate the accuracy of the wiki. The information is usually correct on the wiki, however it is frequently incomplete when it comes to items being added to any given category. If the wiki were better maintained because of the creation of this database, that would help non-Mafia players as well. Their main concerns would be accuracy, making sure unusual item behavior is captured in a usable way, and that the way information is returned is easily translated to updating the wiki.

KoLmafia Script Authors

KoLmafia script authors would be especially useful stakeholders because they are already familiar with structured game data and automated decision-making. If they are able to see how this information would be beneficial to their own scripting, they'd be

more likely to become involved in the project and could give valuable feedback on writing a tool that is used to access the data once it is populated. Their priorities would include consistent data, searchable properties, and information that can eventually be used by automation.

Planned Elicitation Techniques

Interviews

Because the very active player base is pretty small, I would conduct interviews with a few key Mafia users, script authors, and wiki updaters. These interviews would focus on how they currently find information about combat items and what information they would want available in a structured database. Interviews are appropriate because experienced users may have specific needs that would be difficult to discover through a general survey. They could also explain why certain item properties are important for making combat decisions.

Document Review

Document review would be used to examine existing KoL Wiki combat-item information, current KoLmafia data, and other existing documentation. This is particularly important because the project is not starting with completely unknown data. We can pretty easily start with a known list of items, and even fill in some of the categorization content with the existing data on the Wiki. This project is about filling in the gaps and presenting the content in an easier to use process, so by using the resources we have that can cut down on a lot of work.

Prototype Review

After gathering the initial requirements, I would create a simple prototype of the database and ask users to review it. The prototype could show an item list with filters for combat effects, item details, inventory quantity, and Mall price. Users could then give feedback on how useful they find that information, and suggestions on how that information can be returned as a useful utility script. This would be useful because users may have a hard time understanding why it is useful until they see the information it can return.

Stakeholder Questions

1. How often do you use items in combat, and what is the reason for that frequency?
2. How comfortable are you with using combat items?
3. When you use combat items, do you use a wide variety of items or do you frequently use the same 2-3 items over and over?
4. What information do you usually need before deciding whether a combat item is useful?
5. How do you currently find information about a combat item before deciding whether to use it?
6. Would seeing your current inventory quantity be useful when evaluating an item?
7. Which combat effects should be searchable or filterable in the database?
8. How should the system categorize items that have multiple combat effects?
9. How would you like to see this accessible via a custom combat script?
10. How should unusual or conditional item behaviors be represented?
11. What would make this database useful for updating the KoL Wiki?

User Story Set

1. As a KoL player, I want to search for combat items by element so that I can quickly find items that cause specific elemental damage.
2. As a KoL player, I want to view the relative strength of any combat item compared to my inventory stock/mall price when determining what item to use.
3. As a KoL player, I want to know my best HP and MP healing options that are usable in combat in case I get into trouble
4. As a KoL player, I want to know that any combat item I use is not going to have unforeseen circumstances like accidentally banishing a particular monster.
5. As a KoL player, I want to know what items might be recommended for a particular zone.
6. As a KoLmafia script author, I want combat items to have structured categories so that scripts can make decisions based on understanding all of an item's behaviors.
7. As a KoLmafia script author, I want item properties to use consistent data fields so that the information is easily ingested into custom combat scripts.
8. .As a KoLmafia script author, I want an easy way to exclude unwanted behaviors and be warned about something that has a hard to catalog behavior so I can decide what to do with it.
9. As a Wiki editor, I want to be able to return lists of items by category in a way that is easy to compare to existing wiki data as well as to quickly update the Wiki.

Acceptance Criteria

As a KoL player, I want to search for combat items by element so that I can quickly find items that cause specific elemental damage.

- The system allows the user to select an elemental damage type.
- The system returns combat items that cause the selected elemental damage.
- Items with multiple elemental effects can be returned for each applicable element.

As a KoL player, I want to know that any combat item I use is not going to have unforeseen circumstances like accidentally banishing a particular monster.

- The system identifies known secondary effects associated with a combat item.
- Users are able to exclude matching behaviors as well as include, with common exclusions included with built-in flags set to exclude by default
- Mafia displays relevant warnings when an exclusion might have been missed
- Items with unknown, conditional, or difficult-to-categorize behaviors are flagged for review.

As a KoLmafia script author, I want combat items to have structured categories so that scripts can make decisions based on understanding all of an item's behaviors.

- Each combat item has structured fields for its relevant behaviors.
- Categories use consistent definitions across the catalog.
- Scripts can retrieve an item's categorized behaviors in a structured format.

As a KoLmafia script author, I want an easy way to exclude unwanted behaviors and be warned about something that has a hard to catalog behavior so I can decide what to do with it. The system allows the user to exclude combat behaviors from results.

- Items with unusual or difficult-to-categorize behaviors are flagged.
- The system identifies the behavior that caused an item to be flagged via the descriptive note.
- The system does not silently assign uncertain behaviors to an inaccurate category.

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