

# Magic Item Creator

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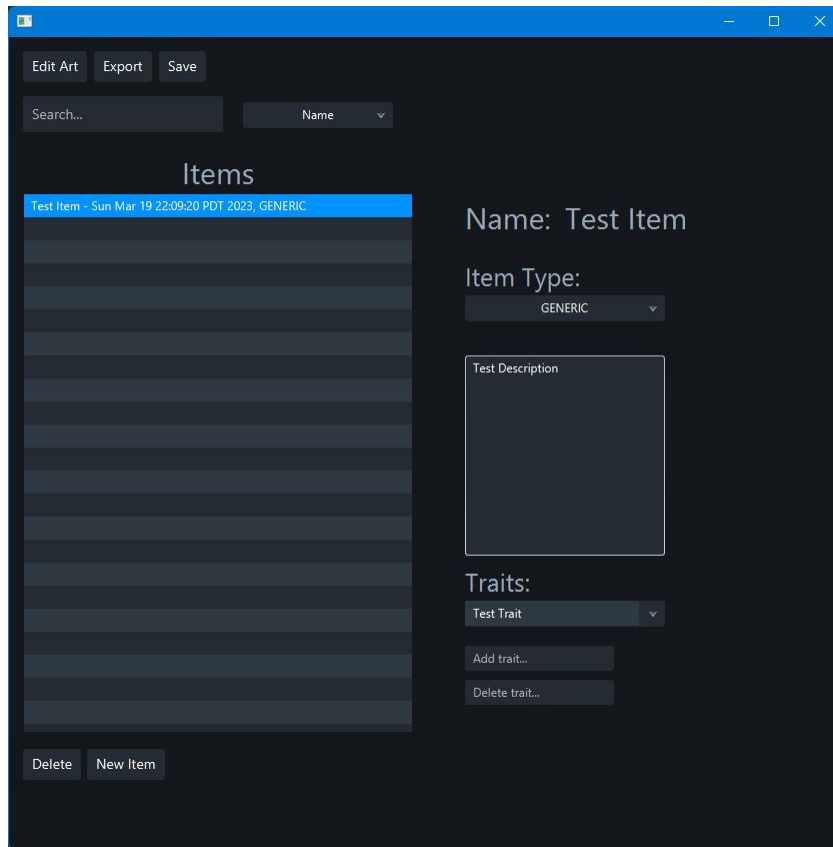
# The Vision

- TTRPG/Worldbuilding magic item creation tool for everyone
- Original vision - pixel art
- Anyone can pick it up
- Flexible and broad features



# The Goals

- List of created items
  - Saves to local machine
  - Loads from existing files
- Items have various properties
  - Name, description, etc.
  - Flexibility in how properties are used
- Navigation
  - Easy to pick up UI
  - Ability to search
  - Full control of user-created content
  - Verify saving before exiting
- Visual aids
  - Creation, editing, exporting of pixel art
  - PDF exporting



# The Process

Three main phases of development

- Making it **work** - Building the backend functionality
- Making it **usable** - Creating the UI and linking the backend to it
- Making it work (**again**) - Addressing various bugs, unintended interactions, and more

# Making it work

Building the **backend**

- Magic Item Object
    - Stores name, description, art, traits for each individual item
    - Can be individually manipulated
  - Magic Item Helper
    - Manages collection of user's items (list, searching, sorting)
    - Interfaces between UI and database
    - Responsible for reading/writing local machine files into/from the program
  - PDF Export
    - Leverages PDFBox for fetching data from item objects and rendering PDF
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# Making it work

Building the **backend**

- Art Editing Window
    - Tile System
    - Placing and Deleting
    - Key Handling
  - JavaFX
    - Easy to learn application platform for UI development with Java
    - Hooking up backend into eventual frontend with JavaFX
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# Making it usable

Creating the **UI**

- PDF Export
    - Fairly straightforward, linking UI elements to backend functions
  - Art Editor Controls
    - Game Window
    - Grid Manipulation
    - Saving and Loading
  - UI
    - Linking backend to frontend
    - Creating an easy-to-use UI with user-friendly navigation
    - CSS styling
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# Making it work (again)

Bug fixes, bug fixes, bug fixes

- Initial problems with Maven
  - Lots of null checking in the UI itself
  - Navigating around unexpected UI interactions
    - Many times fixing one UI issue led to another related issue
    - UI Listeners were really touchy about handling changes in lists and boxes
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Demo Video!

Questions?