Term Project Proposal

Tableletop Role Playing Game Information Manager

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I. Problem statement

In the course of running a Tabletop Role Playing Game(TTRPG) the creation, managing and updating of various pieces of information is one of the primary tasks of the Game Master(GM). In particular the cast of characters that the players interact with called NPCS. Having a tool that can present this data and allow its quick lookup would make the seamless running of the game and story more easily possible.

II. Description of users/audience

This tool would be mostly helpful for those who want to run a TTRPG game. Typically this person is called the Game Master who will use the program to record and create new NPCS. Adding the use of local LLMS allows for giving name and image creation suggestions.

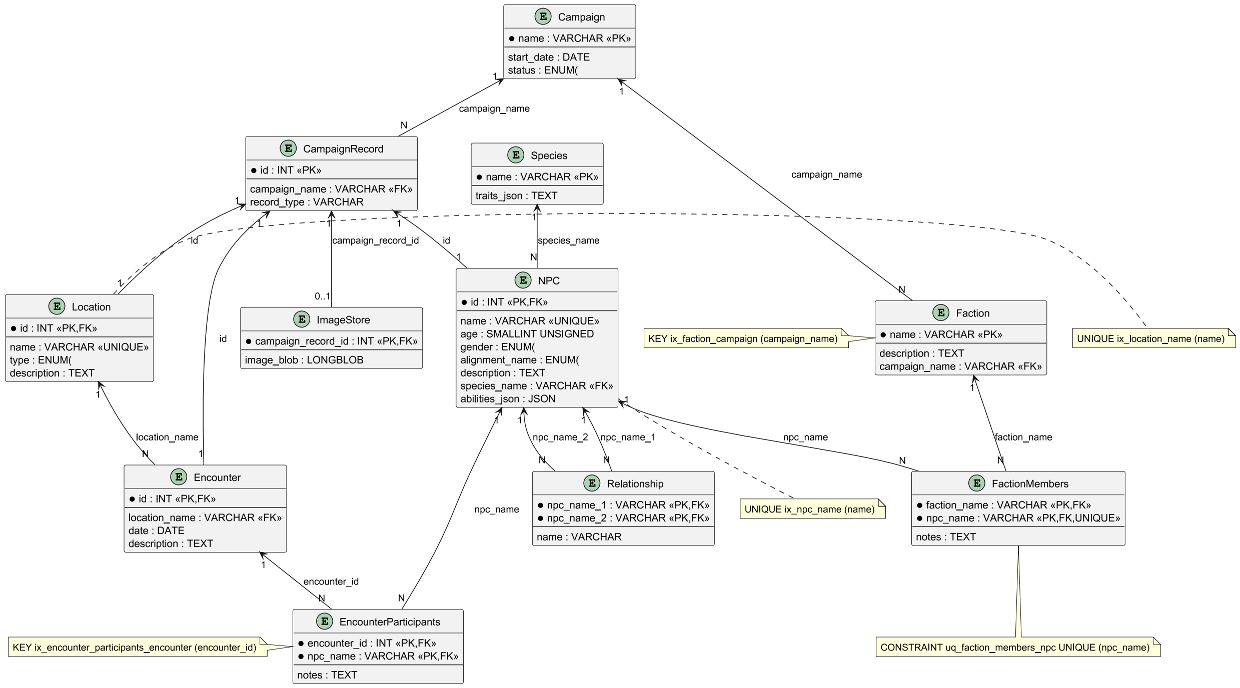
Another audience could be used for those who need to manage characters such as writers, they could use it as a tool to map characters in a story and hold notes about them.

III. Core features

- – **C** The ability to create new NPCS.
  - Connection to local LLM via llamafile to generate data suggestions, such as names
  - Ability to add images such as profile image,
    - Giving the ability to generate with local LLM Stable Diffusion.
- – **R** Search existing NPCS read the data and find via various fields such as name or faction.
- – **U** Update NPC information as needed.
- – **D** Delete NPCS from the database.
- Utilize python and the customtkinter GUI library to create a desktop application.

IV. Preliminary ERD

Figure 1: ERD



V. Source of Data and Design Overview

The project will be a python program utilizing the CUSTOMTKINTER library to create a GUI. It will follow best practices when it comes to development such as having test code using PYTEST and will be fully typed and will use both the realtime typechecking library BEARTYPE as well as the static type checker MYPY. It will follow PEP-8 code conventions and will use the RUFF linter to confirm it follows it. It will be an installable package using HATCH-BUILD and pyproject.toml. It will have menus and forms to facilitate the various operations listed in the Core Features. I will provide a sample data set that will be loaded on initial opening of the program from csv files. This example data will show off the various capabilities of the program as well as provide examples of its use.