Oregon State University
Ecampus

CS361: Life Generator Project Requirements
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Hello! Thanks for helping us think through ideas. Now we've got a better idea of how to describe the software we want: A general-purpose personal possessions data microservice based on real data. We want this so our company can produce realistic datasets about Americans. The datasets will help us test our products and software, and will inform and enhance our research.

Also, now that we've seen your ideas, we realize there are many different ways this service could be helpful to many people! This is exciting to us because contributing to the common good is part of our strategic plan.

Following your lead, below we've formatted the feature requirements as user stories and organized the quality requirements by quality attribute. Please contact me (via Piazza is best) if you need more details, see something you don't think will work out, have questions/suggestions, etc. I look forward to talking with you throughout the development process!

General Requirements

- Python
- Cross-platform
- Desktop app (not a web app)
- Database optional
- Communication protocol not yet known
- Must have a GUI

Functional Requirements

1. As a clueless giftgiver, I want to see gift ideas so I know what to give my nephew.
    - Inputs: Year OR decade, number to generate
    - Outputs: Possession types of most popular non-essential purchases for given timeframe

2. As a bookseller, I want to see the most popular books for people in my city so I can stock and promote those book.
    - Inputs: Possession type, city/state OR zip code OR state, number to generate
    - Output: List of the given length of possessions of the given possession type, source of data
3. As a charity drive organizer, I want to know the most popular kids toys so I can suggest what people should donate.
    - Inputs: Possession type, one demographic category (e.g., age range), location (optional), number to generate
    - Outputs: Same as previous user story
4. As an AI researcher, I want a collection of images so I can refine my detection and identification algorithms.
    - Inputs: One or more possessions, number to generate
    - Outputs: List of image URLs
5. As a data scientist, I want to export the results in CSV format so I can import it into my database as a test dataset for training my machine learning models.
    - Input: Data
    - Output: CSV file with header and one row per line

Non-Functional Requirements

- Portability: The software must be able to run on the following platforms:
    - Windows 10
    - MacOS 10 or newer
    - Ubuntu 20 LTS or newer
- Performance: Display the results within 15 seconds after submitting input
- Usability: An independent evaluator must determine the GUI reflects at least 2/3rds of the Cognitive Style Heuristics at the "satisfactory" level or higher

Questions?

Please ask via Piazza so that others can benefit from the answers.