Design Decisions

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This document provides detail on design decisions made on the project SocialSim and reason each decision was made. The project is currently separated into 4 main sections:

* Simulation
* Document
* Consumer/Producer
* Searching

# Consumer/Producer

We decided to have the Producer inherit from the Consumer class because the producer behaves as a Consumer with a few additional tasks. The only additional task a Producer has over a consumer is producing documents and storing documents it created. In addition, the producer has a different method for calculating producer.

# Document

The Document class represent a document. It includes data to be used as metrics for the simulation. The Document is a representation of real documents but only include relevant simulation data.

# Simulation

The simulation currently keeps track of all documents, consumers, producer and searching methods. Since Producer inherits from Consumer they share a single list to allow grabbing individuals to be truly random. It is the central hub of the emulation software. It currently keeps track of all documents and the simulation state. The user interaction is handled by simulation and provides a command line interface.

# Searching

Searching interface is using the strategy design paradigm to use different methods of selecting documents to discover what searching method is the most beneficial to the consumer and the producer.