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Project Proposal

An interactive transaction-based web application that connects gardeners with patrons that can contribute (monetarily) to their garden in exchange for a share of the produce. A gardener is defined as someone who owns any amount of yard space or land. Instead of letting that space remain unused, they can use it to grow food and to make a profit. A gardener posts a proposal on the platform, complete with diagrams and other layout specifications. Sponsors visit the platform and can view a list of potential investment opportunities. After investing in a garden, a sponsor becomes a stakeholder and the money raised is used to maximize the garden's potential and returns. As time passes, gardeners provide their patrons with updates through the platform. At harvest, all patrons are rewarded with their share of the produce. If at any time a patron decides that they don't want to own a share of a garden anymore, they may sell their shares in a market where other patrons can buy or sell shares after the initial offering.

The web platform constructed in the Django framework using Python, PostgreSQL, HTML/CSS, Javascript will feature two different types of users that can interact via overlapping portals. The gardener portal will feature a space to plan gardens, estimate costs, and present updates. It also provides a way for gardeners to keep track of their crops and resources, such as water levels and usage, sunlight received, pH levels, and other sensors. The patron portal will feature a place for users to contribute to projects, manage their investments, and view updates from the garden. There will also be a marketplace where a patron can sell their shares to other patrons. The website will be deployed remotely on a Linux webserver.

This webtool advances the real-life concept of a "community garden" to a virtual level where all people can contribute, regardless of location. It borrows the concept of crowdfunding as a means of investing in projects in exchange for a tangible return, in this case, fresh produce. Whereas other similar ideas take on a nonprofit nature, relying on grants and donations, this idea is completely for-profit.