

Overview

startUp (sU) is a small business development internet site with the goal of matching small businesses entrepreneurs with funding sources from capitalists. In addition to helping arrange financing, sU also offers services to assist entrepreneurs who might not have basic business skills in such areas as business planning, bookkeeping, and regulatory compliance. sU is researching a database that supports its relationships among small business clients and funders.

There are three categories of people involved in the operations of sU: sU has agents, small businesses may have entrepreneurs, and funding organizations may have capitalists. The following data fields are kept for all three person categories: personID, firstName, lastName, streetAddress, city, state, zipCode, telephone, and email. sU's staff of agents has experience starting and running small businesses. Some agents have general customer/project management skills. Others are specialists with certain business skills. All agents are sU employees, and sU keeps the following data fields for them: agentID, hireDate, endHireDate, agentSalary, and personID. All entrepreneurs are employees of small businesses that are or have been clients of sU. sU keeps the following data fields on entrepreneurs: entrepreneurID, entrepreneurYearsExperience, and personID. All capitalists are associated with funders that are registered with sU. sU keeps the following data fields on capitalists: capitalistID, capitalistYearsExperience, and personID.

Small businesses become clients of sU seeking assistance in finding funding for business projects and for business skills training. sU keeps the following data fields on clients: clientID, clientName, startDate, endDate, clientCapitalization, and homepageURL.

Funders come to sU for seeking interesting business opportunities in which to invest. sU keeps the following data fields on funders: funderID, businessName, funderCapitalization, and homepageURL.

When a small business becomes a client of sU, it opens a funding account. Funding accounts are the administrative mechanism for bringing clients and funders together with the ultimate goal of establishing an investment relationship(s). Depending on the state of a funding account, it may or may not be associated with an agent, entrepreneur, funder, and/or capitalist. sU agents, entrepreneurs, and capitalists may come and go from an account during its life, as appropriate and as needed. sU keeps the following data fields on funding accounts: fundingAccountID, fundingAccountStartDate, and fundingAccountEndDate.

A client may also contract with sU for business skills training. Skills training is tracked with training accounts. sU keeps the following data fields on training accounts: trainingAccountID, trainingAccountStartDate, trainingAccountEndDate, and cost.

sU management would like to develop a list of categories to identify the business interests of clients. Clients may be associated with no categories or multiple categories. sU plans to use this information to identify market segments and potential future business.

sU wishes to develop a database to track sU agents, entrepreneurs, capitalists, clients, funders, funding accounts, and training accounts to support the relationships above and the business rules below. sU has contracted your company to design and implement a database to meet its needs. The contract requires that you develop an understanding of sU's current needs and future plans, design and document your database solution, and implement and test your design with a proof-of-concept database.

Scope of Work

An initial description of the scope of work, developed by sU management follows:

The startUp database will manage data for sU, clients and funders. Specifically, it will track sU agents, entrepreneurs, capitalists, clients, funders, funding accounts, training accounts, and categories. Suggested major tables and fields include:

Personnel

Person: personID (PK), firstName, lastName, streetAddress, city, state, zipCode, telephone, and email.

Agents: all the above from Person plus agentID(PK), hireDate, endHireDate, and salary.

Entrepreneurs: all the above from Person plus entrepreneurID(PK) and yearsExperience.

Capitalists: all the above from Person plus capitalistID(PK), and yearsExperience.

Clients

clientID(PK), clientName, startDate, endDate, clientCapitalization, and homepageURL.

Funders

funderID, businessName, funderCapitalization, and homepageURL.

Funding Accounts

fundingAccountID(PK), fundingAccountStartDate, fundingAccountEndDate, and cost.

Training Accounts

trainingAccountID(PK), trainingAccountStartDate, and trainingAccountEndDate.

Category

Scientific, Financial, Medical, Transportation, Computer Hardware, Software, Agriculture, etc.