

Spring MVC Tutorial – Contact List Application

Step 00: Initial Design



SOFTWARE-GUILD

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Step 00: Initial Design

Overview

Our Contact List application will meet the following basic design requirements:

1. Each section of the application should have its own landing page.
2. All pages must contain a common navigation bar.
3. After initial page load, all interactions with the server will be via Ajax calls to RESTful endpoints.

Model

Before we can begin to build our application we must (at the very least) decide what information we want to track for our contacts. This decision will drive the design of the user interface and the database, and will determine our model objects (in both Java and JavaScript).

We'll keep track of the following:

1. First name
2. Last name
3. Company
4. Email
5. Phone

User Interface

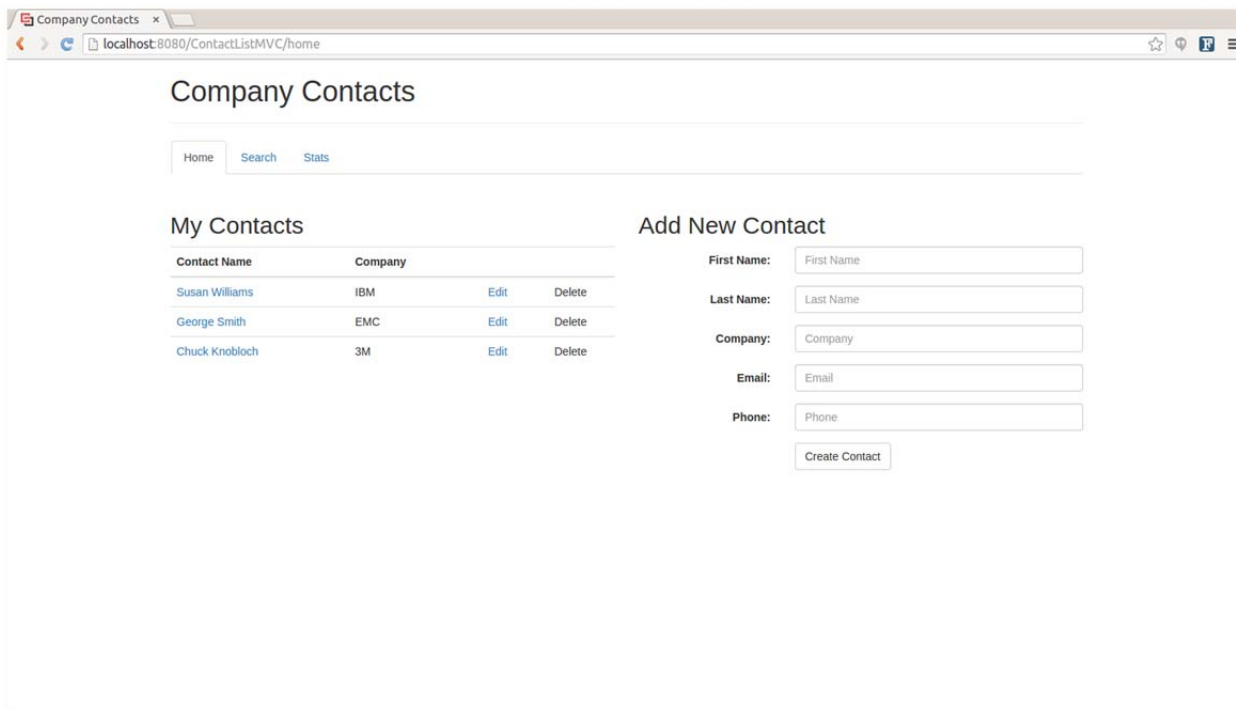
In accordance with the requirements listed in the Overview section, our application will consist of three main sections:

1. The Home screen (main functionality)
2. The Search screen
3. The Stats screen

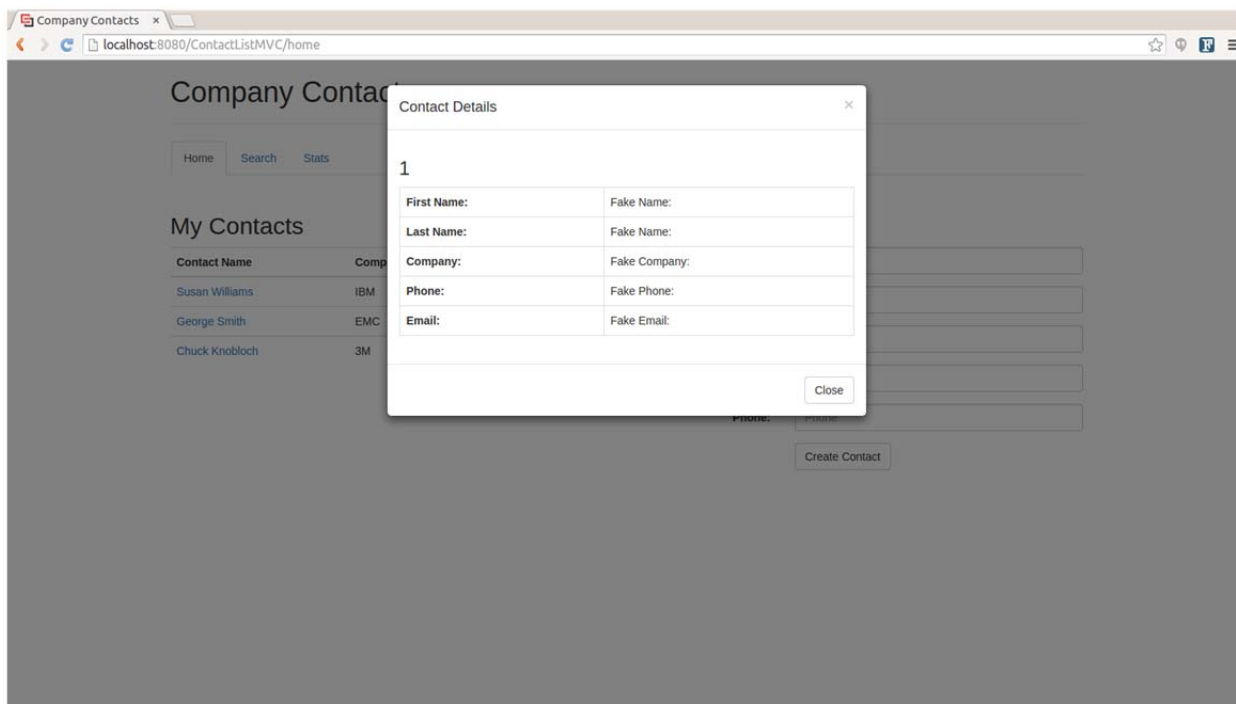
The pages will use the Bootstrap tabbed navigation bar and will use jQuery behind the scenes to process Ajax calls to the server.

Home Screen

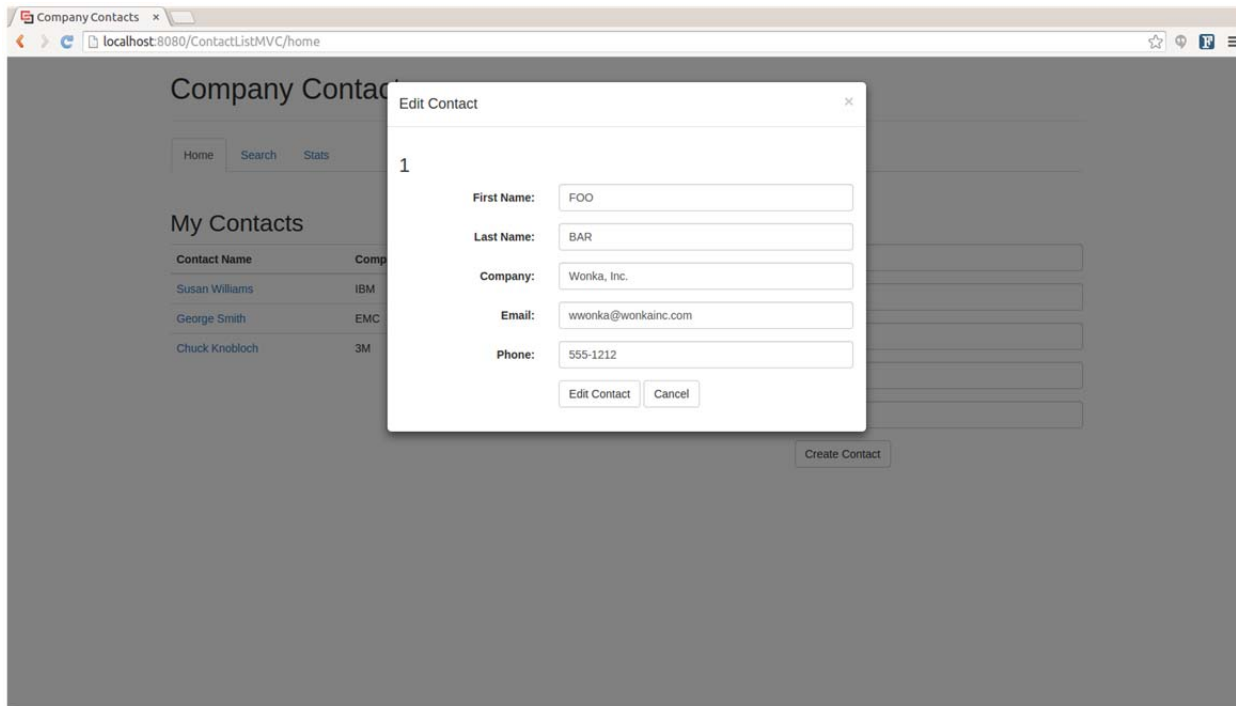
The Home Screen contains the create, read, update, and delete (CRUD) functionality for contacts. Upon initial page load, the Home Screen will display a summary of each contact in the database. Details for any contact can be viewed in a Bootstrap modal dialog by clicking on the contact name. Similarly, any contact can be edited in a Bootstrap modal dialog by clicking on the Edit link associated with the contact, and any contact can be deleted from the system by clicking on the Delete link associated with that contact. Finally, new contacts can be added to the system via the Add New Contact form. Newly-added contacts will immediately appear in the contact list summary table.



Home Screen Layout



Contact Details Modal Dialog



Edit Contact Modal Dialog

Search Screen

The Search screen consists of two sections: a Search form and a Search Results table. The system will perform an AND search with any search terms typed into the form. If no terms are typed in, the system will return a list of all contacts. Like the Home screen, the user can view contact details and/or edit contact information by clicking on the appropriate links.

The screenshot shows a web browser window titled "Company Contacts" with the URL "localhost:8080/ContactListMVC/search". The page has a navigation bar with "Home", "Search", and "Stats" links. The main content area is divided into two sections: "Search Results" and "Search for Contact".

Search Results

Contact Name	Company		
John Doe	Oracle	Edit	Delete
Steve Smith	Apple	Edit	Delete
Sally Jones	Sun	Edit	Delete

Search for Contact

Enter one or more fields and click 'Search' to perform an AND search using all entered fields. Submitting an empty search form will retrieve all contacts.

First Name:

Last Name:

Company:

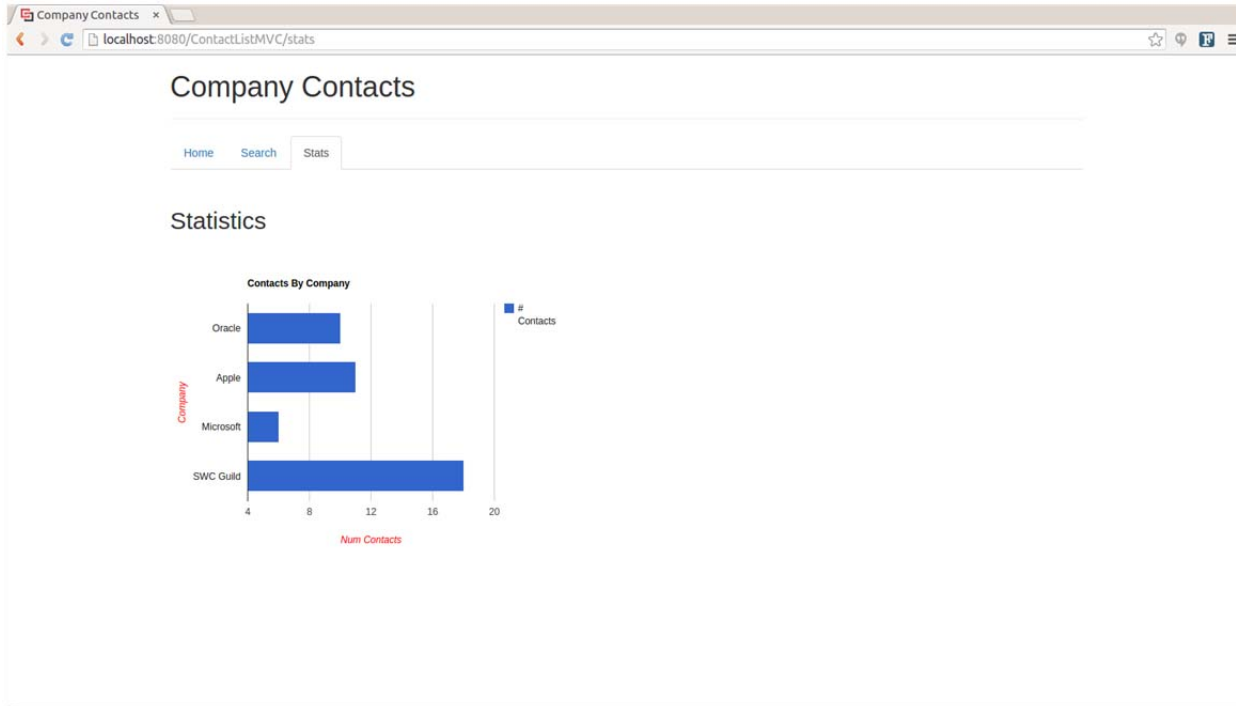
Email:

Phone:

Search Screen Layout

Stats Screen

The Stats screen is simple, consisting of just one chart that shows number of contacts by company. This screen is included mainly to show how Google Charts components can be used in a Spring MVC application.



Stats Screen Layout