Software Architecture Document

1. Introduction

This document provides an overview and explains the architecture of the PhoneBook application.

The document defines goals of the architecture, explaining the choices that were made to implement this application, the use cases supported by the system.

2. Goals of the architecture

The goal of the architecture is to provide the implementation of the application for storing contacts with name and phone number. The user should be able to perform the following functionalities: adding contact, deleting contact, listing all contacts and search for a contact.

3. Choices made during implementation

The application is implemented in Web using JavaScript and HTML for simplicity. UI interface is built using Bootswatch and FontAwesome for a nice and simple layout. Backend of the application is using pure JS, which is more than enough to cover all functionalities. The contacts data is stored in local storage of the web browser. The data persists even when the browser is closed and reopened. It stores data with no expiration date, and gets cleared only through JavaScript, or clearing the Browser cache/Locally Stored Data. It makes the application simple and makes it user specific, so each user sees the data stored only on their device.

Testing of the application is implemented in C# .NET using Selenium framework and NUnit framework. It provides the needed features to test functionalities of the application.

4. Use cases and additional functionalities

The use-case diagram is shown below to show the interactions between user and the application. User is able to add the contact with defined phone number pattern that is being checked after submitting the form. If an error occurs the alert message is displayed.

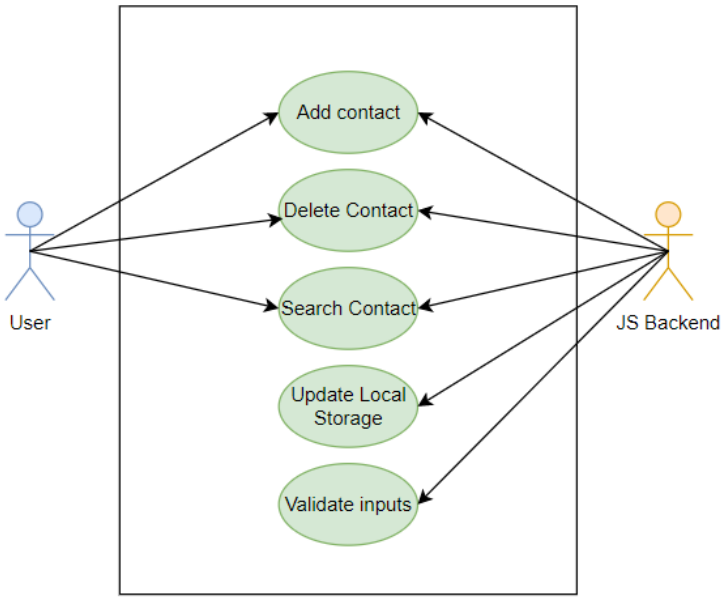

Figure 1Use-Case PhoneBook app